

<u>Dow Number</u>	<u>Date</u>	<u>Author</u>	<u>Recipient</u>
1766772*	000000	Dow	
1766773- 1766784*	340905	Prescott, RF	
1766824- 1766825*	000000	Dow	
1766944- 1766948*	000000	Dow	
1768247- 1768249*	650317	REA	
1770187- 1770195*	661104	Widiger, A Johnson, RL Dugan, GF	

1770705-
1770709*

700525

Brady, P

14056

Distributees

General Subject Matter

TCP Process Flow Sheet

Manufacture of 245 Trichlorophenol
from 1245 Trichlorobenzol

Dichlorophenol and trichlorophenol
process flow sheet

245 Trichlorophenol operations
804 Building

Trichlorophenol Reactor Cycle

Widiger, A
Johnson, RL
Dugan, GF
Coulter, KE
Thurston, D
Haberstroh, WH
Sauers, RC
Wolf, RR
Poffenberger, N
Goergen, GG
Bender, S
Louck, A
Bailey, CZ
Putnam, MS
Nielson, WH
Staehling, EC

Phenol 245 - Trichloro study of
chloracne problem preparation of
245-Trichlorophenol from
Trichlorobenzene, PL 2064-13

Schmidtke, DJ
Haberstroh, WH

Manufacture of Phenoxy Herbicides

Dow Number

Date

Author

Recipient

14057

Distributees

Williams, L
Vogelsang, P
Chase, FI
Kensicki, RF

General Subject Matter

<u>Dow Number</u>	<u>Date</u>	<u>Author</u>	<u>Recipient</u>
0088347- 0088348*	701217	Dow Hoyle, HR Norris, JM	
0088349- 0088350*	701217	Dow Norris, JM	
0088649- 0088650*	590122	Dow Hoyle, HR McCollister, DD Wolf, MA	
0088651 *	590500	Dow	
0088911- 0088913*	660506	Dow Hoyle, HR McCollister, DD Olson, KJ	
0088914- 0088916*	771001	Dow	
0088930- 0088962*	661209	Dow	
0088969- 0088972*	670316	Dow Hoyle, HR Olson, KJ Oyen, F	
0088973- 0089003*	690515	Buerge, TE Dow	

Distributees

General Subject Matter

M-3592 (Data sheet of properties, health hazards, and precautions for safe handling of materials)

M-32592 (Medical information)

Forron Brush Killer (Data sheet of properties health hazards and precautions for safe handling of materials)

Forron Brush Killer M-1368, Safety data sheet

M-2993 (Data sheet of properties, health hazards, and precautions for safe handling of materials)

Tordon 155 Mixture Brush Killer (Material safety data sheet)

2M0-3083-1 (Request for screening or application testing)

Tordon 105 Mixture (Data sheet of properties, health hazards, and precautions for safe handling of materials)

Toxicological properties and industrial handling hazards of

<u>Dow Number</u>	<u>Date</u>	<u>Author</u>	<u>Recipient</u>
		Norris, JM Torkelson	
0091173- 0091176*	670316	Buerge, TE Dow Lynn, GE Olson, K Oyen, F	
0091177- 0091178*	670227	Dow Hoyle, HR Olson, KJ Oyen, F	

14059

Distributees

Boundy, RH
Dean, P
Dow
Elshere, D
Holder, BB
Jones, GD
Kagy, JF
Killian, DJ
Luce, EN
Lynn, GE
McIntyre, HH
Moss, RD
Sheetz, DP
Shrader, SA
Wilson, AW
Wright, N

Boundy, RH
Dean, P
Dow
Elshere, D
Holder, BB
Jones, GD
Kagy, JF
Killian, DJ
Luce, EN
Lynn, GE
McIntyre, HH
Moss, RD
Sheetz, DP

General Subject Matter

Tordon 225 Mixture herbicide
(M-3199X)

Toxicological properties and
industrial handling hazards of
Tordon 105 Mixture
(T2.M031-3132-1) (CRI 123032)

Tordon 105 Mixture data sheet of
properties, health hazards, and
precautions for safe handling of
materials (T2.M0-3132-1)

<u>Dow Number</u>	<u>Date</u>	<u>Author</u>	<u>Recipient</u>
0201020- 0201021*	670213	Pletcher, DE	Barnes, EB
0201023 *	660428	Carlson, R Staehling, EC BJC 3 Illegible	
0201024 *	660800	Dow	
0201025 *	660425	Kennett, W	
0201026 *	660523	Bosscher, H	Key, M
0201027 *	660422	Anderson, RE Coppage, JS	
0201031 *	660422	Carlson, RG	Bosscher, H
0201032 *	660421	Beck, RH	Coppage, J
0201034- 0201035*	660425	REA Ford, FE	

14060

Distributees

Shrader, SA
Wilson, AW
Wright, N

Bosscher, H
Staehling, EC
Goergen, GG
Dixon, WR
Henske, JM
Gill

Streeter, LE

General Subject Matter

New Tetrachlorobenzene
facility

Cost of Tetrachlorobenzene
expansion

Tetrachlorobenzene cost capacity

Tetrachlorobenzene economic
summary

Tetrachlorobenzene expansion

Tetrachlorobenzene project
scope summary

Beginning Tetrachlorobenzene
expansion

Manpower request

Tetrachlorobenzene expansion cost
estimate

<u>Dow Number</u>	<u>Date</u>	<u>Author</u>	<u>Recipient</u>
0201038- 0201039	660315	Anderson, RE Comer, WL	
0201040 *	670529	Carlson, R Staehling, EC Bosscher, H EBB CBB BJC	
0201041 *	670529	Carlson, R Staehling, EC BJC	
0201042 *	670700	Dow	
0201043 *	670622	Woodward, EE	
0201044 *	670608	Bosscher, H	Barnes, EB
0201045 *	670608	Nummy, WR	Barnes, EB
0201046- 201048*	670526	Anderson, RE Baltusis, M	
0201049- 201050*	670531	Carlson, RG	Bosscher, H

14061

Distributees

General Subject Matter

Tetrachlorobenzene plot plan

Capital authorization for Tetrachlorobenzene expansion

Expense authorization for Tetrachlorobenzene expansion

Tetrachlorobenzene expansion

Economic summary for Tetrachlorobenzene expansion

Tetrachlorobenzene expansion

Tetrachlorobenzene expansion

Bosscher, H
Staehling, EC
Carlson, RG
Dixon, WR

Tetrachlorobenzene project
scope summary

Tetrachlorobenzene expansion

<u>Dow Number</u>	<u>Date</u>	<u>Author</u>	<u>Recipient</u>
0201051- 201052*	670531	Tacey, WJ	Carlson, RG
0201053 *	660421	Beck, RH	Coppage, J
0201054 *	670526	Brauer, AR Wappenhensch, O	
0201055- 201056*	670526	Brauer, AR Wappenhensch, O Anderson, RE	
0201057- 0201058	660315	Anderson, RE Comer, WL	
0201080 *	670000	Dow	
0201081 *	670418	Staehling, EC Goergen, GG Bosscher, H B.J.C.	
0201082 *	670501	Bosscher, H	Barnes, EB
0201083 *	670412	Lueck, AF	Bosscher, H
0201084 *	670320	Wehn, WE O.A.W.	

14062

Distributees

General Subject Matter

Streeter, LE

Tetrachlorobenzene capacity

Manpower request

Tetrachlorobenzene expansion cost estimate

Tetrachlorobenzene expansion expense estimate

Tetrachlorobenzene plot plan

245-Trichlorophenol (Board of Dir. agenda) (authorization request M-32063A)

245-Trichlorophenol 804-7 Bldgs. production facilities

245-Trichlorophenol plant return of funds (authorization M-32063A)

Staehling, EC
Putnam, MS
Goergen, GG

245-Trichlorophenol plant

Staehling, EC
Putnam, MS

245-Trichlorophenol plant 804-7 Bldg. cost estimate

<u>Dow Number</u>	<u>Date</u>	<u>Author</u>	<u>Recipient</u>
		Jacobs, CE	
0201085 *	670320	Wehn, WE Jacobs, CE O.A.W.	
0201086 *	000000	Dow	
0201087	650000	W.C.T.	
0201088 *	651006	Hutchenreuther, C Goergen, GG Bosscher, H M.K. B.J.C.	
0201089- 0201090*	651021	Bosscher, H	Timm, WC
0201091 *	651020	Dixon, WR	Key, M

14063

Distributees

General Subject Matter

Goergen, GG
Bosscher, H
Leuck, AF

Staehling, EC
Lueck, AF
Putnam, MS
Goergen, GG
Bosscher, H

Staehling, EC
Lueck, AF
Bosscher, H
Putnam, MS
Goergen, GG

245-Trichlorophenol plant 804-7
Bldg. cost estimate - changes and
alterations

245-Trichlorophenol authorized
spent differences capital

New 245-Trichlorophenol (Dow Bd.
of Dir. authorization request
M-32063)

245-Trichlorophenol additional
funds

Review of Trichlorophenol job

Bosscher, H
Henske, JM
Pletcher, DE

Position on the Midland division
Trichlorophenol plant

<u>Dow Number</u>	<u>Date</u>	<u>Author</u>	<u>Recipient</u>
0201092 *	651011	Bosscher, H	Key, M
0201093 *	651027	Goergen, G	
0201094- 0201097*	651027	Wehn, WE	
0201098 *	650707	Goergen, G	
0201099- 0201101*	651021	Bosscher, H	Branch, CB
0201102- 0201104*	650927	Delisle, NG Wappenhensch, OA Stuart, GA Goergen, GG	
0201105 *	651007	Goergen, GG	Bosscher, H
0201106- 0201107*	651004	Vanarsdale, JD	Timm, W Dimmick, D Doedens, J Hutchenreuther, Staehling, E Gill, W Perry, R Goergen, G Lundquist, J Saphier, L
0201108 *	651001	Vanarsdale, JD	Goergen, GG

14064

Distributees

General Subject Matter

New 245-Trichlorophenol plant
M-32063

245 Trichlorophenol plant

660000 Trichlorophenol plant cost
reduction

New Trichlorophenol plant

Key, M

Trichlorophenol authorization

New 245-Trichlorophenol plant
project scope summary (job 50175)

245-Trichlorophenol

245-Trichlorophenol expansion

C

Delisle, NG
Domick, D

Trichlorophenol requirements

<u>Dow Number</u>	<u>Date</u>	<u>Author</u>	<u>Recipient</u>
0201109 *	650929	Taylor, N	Delisle, NG
0201110- 0201111*	651012	Churchman, JW	Bosscher, H
0201112 *	651018	Churchman, JW	
0201113- 0201114*	651000	Wehn, WE Wappenhensch, O	
0201115 *	000000	H.A.S.	
0201116 *	650526	Churchman, JW	
0201117 *	650608	Bosscher, H	Branch, CB
0201118 *	650622	Henske, JM Doedens, JD	Branch, CB
0278385- 0278390*	540106	Dow Wolf, MA	
0278390- 0278392*	531230		

14005

Distributees

General Subject Matter

Hutchenreuther, C
Timm, WC
Goergen, GG
Mitchel, JE
Moore, HJ

Manning of new Trichlorophenol
plant

Overrun 245-Trichlorophenol new
facility

245-Trichlorophenol new facility
(economic summary 39458-65)

245-Trichlorophenol (cost
estimate)

245-Trichlorophenol new facility
(Dow Bd. of Dir. agenda)

245-Trichlorophenol new facility
economic summary

245-Trichlorophenol new
facilities

245-Trichlorophenol new
facilities

M-213 (Acute oral toxicity)

M-213 (Acute oral toxicity)

<u>Dow Number</u>	<u>Date</u>	<u>Author</u>	<u>Recipient</u>
0278393- 0278395*	540106		
0278396- 0278404*	540106		
0501285- 0501288*	701111	Hoerger, FD	USDA ARS
0501289- 0501291*	701110	Hoerger, FD	USDA ARS
0501292 *	700615	Gladstone, MM	Hoerger, FD
0501356- 501360*	651105	Dow	
0501415 *	660105	Dow	
0501418 *	660105	Dow	
0501659 *	691015	Turner, WF	
0501660- 0501668*	700629	Parsey, ES Van Horn, RL	
0502357- 502358*	650618	Sachs, SD	Downard, GM
0502631 *	660630	Dow	

14066

Distributees

General Subject Matter

M-213

M-213 (Skin irritation)

Brush Killer LV2-2

Brush killer LV2-2

Product registration

Brush killer LV 2-2 composition
statement

Brush killer X confidential state-
ment of formula

Brush killer X confidential
statement of formula

Registration of economic poisons

Butyl 400 evaluation

Rutherford, RE
Sunderland, WW
Hammer, OH

DMA-6 confidential ingredient
statement

Esteron brush killer OS complete
ingredient statement

<u>Dow Number</u>	<u>Date</u>	<u>Author</u>	<u>Recipient</u>
0502740 *	690108	Dow	
0503722 *	670111	Dow	
0503890 *	630910	Dow	
0503923 *	000000	Dow	
0504055 *	660721	Dow	
0504056 *	667021	Dow	
0504060 *	640422	White, LC, Jr. DeLong, HC Highhill, CA Hudberg, RN Loucks, MF Ouellette, FE Korsmeier, KB	

1007

Distributees

Alford, HG
McCollister, DD
Davidson, JH
McCoy, WJ
Sunderland, WW
Talcott, AT
Hammer, OH

General Subject Matter

Esteron 3-3 weed and brush killer
production specifications

Esteron 67-33 OS confidential
complete statement of ingredients
and sources of raw materials

Esteron 76BE production
specification

Esteron 76BE

Downard, GM
Sachs, SB
Hammer, OH
Sunderland, WW

Production specifications for
Esteron 76E and sources of
raw materials

Downard, GM
Sachs, SB
Hammer, OH
Sunderland, WW

Production specifications for
Esteron 76E and sources of
raw materials

Sheddel, RJ
Higgins, HS

Production specifications for
Esteron 76E

<u>Dow Number</u>	<u>Date</u>	<u>Author</u>	<u>Recipient</u>
0504090- 0504093*	000000	Dow	
0504094 *	620521	Holdeman, GE	Gildart, CM
0504438 *	700619		
0504439- 0504447*	700519	Van Horn, RL Parsey, ES	
0505582 *	000000		
0525660- 0525661*	660427	Dow	
0526601 *	671030	Dow	
0526602- 0526603*	671030	Dow	
0526604- 0526605*	671030	Dow	
0526606- 0526607*	671030	Dow	
0526608- 0526612*	671103	Dow	

14068

Distributees

General Subject Matter

Vanvalkenburg, JW

Information on inert ingredients
used in Dow pesticides

Carlisle base 5136
Carlisle chemical works

Esteron 99 concentrate, com-
position and raw materials

Esteron 99 concentrate - eva-
luation of revised formulation

Formula 40, ingredient statement

M-3060 specifications

Composition and raw materials
for Tordon 2S weed killer

Composition and raw materials for
Tordon 202 mixture

Composition and raw materials
for Tordon 212 mixture

Composition and raw materials
for Tordon 225 herbicide

Composition of formulations used
in experimental work for
registration

<u>Dow Number</u>	<u>Date</u>	<u>Author</u>	<u>Recipient</u>
0538171- 0538172*	710114	Dow	
0538173 *	710114	Dow	
0538174 *	710114	Dow	
0538175 *	710114	Dow	
0538176 *	710114	Dow	
0538177 *	710114	Dow	
0538178 *	710114	Dow	
0538179 *	710114	Dow	
0538180 *	710114	Dow	
0538181 *	710114	Dow	
0538182 *	710114	Dow	
0554125- 0554176*	680613	Seidel, M Brown, M. Highhill, C	

Distributees

General Subject Matter

Brush killer LV 4T specifications

Brush killer T specifications

Brush killer TX specifications

Esteron 3-3 specifications

Esteron 245 specifications

Esteron 245 specifications

Esteron brush killer specifications

Reddon specifications

Tippon 2-2 specifications

Tippon T6 specifications

Veon 245 specifications

Bleiweiss, J
Beauchamp, R
Crummett, W
Deline, D
DeLong, H
Dosser, R
Fernandez, J
Highhill, C
Hoff, D

A technological review of phenoxy
and Tordon formulation

<u>Dow Number</u>	<u>Date</u>	<u>Author</u>	<u>Recipient</u>
-------------------	-------------	---------------	------------------

0564850- 0564851*	000000	Dow Hoyle, HR JMN	
----------------------	--------	-------------------------	--

0706649- 0706659*	650518	Dow	
----------------------	--------	-----	--

0724839- 0724844*	000000	Dow	
----------------------	--------	-----	--

0724845- 0724872*	631104	Seidel, EM	
----------------------	--------	------------	--

0724873- 0724885*	640309	Seidel, EM	
----------------------	--------	------------	--

14070

Distributees

General Subject Matter

Seidel, M
Schwark, J
Snodgrass, B
Woodward, D

Tordon 225 herbicide (Data sheet
of properties, health hazards, and
precautions for safe handling of
materials)

245T plant operations course
P.O.C. 6020-Unit 13

General process description new
processes for 2,4-D, 2,4,5-T

Chase, FI
Seidel, EM
Dosser, RC
Amstutz, FC
Dylewski, SW
Deline, DD
Delisle, NG
Croese, WL
Fernandez, JB
Sculati, JJ
Seidel, EM

Preliminary economics in alter-
nate 245T ester process

Dosser, RC
Amstutz, FC
Dylewski, SW
Deline, DD
Delisle, NG

Economic evaluation of alternate
245T ester process

<u>Dow Number</u>	<u>Date</u>	<u>Author</u>	<u>Recipient</u>
0724886- 0724892*	640104	Seidel, EM	
0724963 *	000000	Dow	
0725072- 0725075*	000000	Dow	
0725076- 0725078*	000000	Dow	
0725107- 0725112*	000000	Dow	
0725134 *	000000	Chase, FI	
0725135- 0725136*	660608	Dow	
0725137- 0725144*	000000	Dow	
0725145 *	000000	Dow	
0725179- 0725184*	650615	Dow	

14071

Distributees

Grose, WL
Highhill, CA
Fernandez, JB
Sculati, JJ
Chase, FI

General Subject Matter

Analysis of two processes for
producing phenoxy esters

245T process block flow chart

Direct ester operating
instructions

Transfer of raw materials to H, E
& C

Procedures

Switching pumps, instructions

Column flush

Operating instructions

Instructions

Pulsafeeder test sheet hydroch-
loric acid

<u>Dow Number</u>	<u>Date</u>	<u>Author</u>	<u>Recipient</u>
0725190- 0725191*	000000	Dow	
0725218- 0725224*	000000	T.A.G.	
0725503 *	640810	White, LC, Jr. DeLong, HC Highhill, CA Amstutz, FC Hudberg, RN Loucks, MF McCoy, WJ Ouellette, FE Holdeman, GE	
0725504 *	640810	White, LC, Jr. DeLong, HC Highhill, CA Amstutz, FC Hudberg, RN Loucks, MF Corbin, WL Ouellette, FE Holdeman, GE	
0725505 *	601101	Dosser, RC Highhill, CA Luce, EN	

14072

Distributees

General Subject Matter

Instructions, procedures

Direct Ester reaction information
489 Bldg. Dichlorophenol Dowanol

White, LC, Jr.
Delong, HC
Highhill, CA
Amstutz, FC
Hudberg, RN
Loucks, MF
McCoy, WJ
Ouellette, FE
Holdeman, GE
Scheddel, RT
Higgins, HS

Product specification for Veon 245

White, LC, Jr.
Delong, HC
Highhill, CA
Amstutz, FC
Hudberg, RN
Loucks, MF
Corbin, WLN
Ouellette, FE
Holdeman, GE
Scheddel, RT
Higgins, HS

Product specification for Veon
brush killer

Dosser, RC
Highhill, CA
Luce, EN

Product specification for 245T
Amine weed killer

<u>Dow Number</u>	<u>Date</u>	<u>Author</u>	<u>Recipient</u>
		Loucks, MF Nyman, FA Smith, HL Ouellette, FE	
0725508 *	660406	Highhill, CA White, LC, Jr. DeLong, HC Amstutz, FC Hudberg, RN Loucks, MF McCoy, WJ Talcott, AT Holdeman, GE	
0725509 *	670413	Falkenstein, WJ Amstutz, FC Hudberg, RN Loucks, MF McCoy, WJ Talcott, AT Holdeman, GE	
0725510 *	690227	Matuska, RJ Murphy, RW Loucks, MF Fraser, JM	

14073

Distributees

General Subject Matter

Loucks, MF
Nyman, FA
Smith, HL
Ouellette, FE

Highhill, CA
White, LC, Jr.
DeLong, HC
Amstutz, FC
Loucks, MF
McCoy, WJ
Talcott, AT
Holdeman, GE
Scheddel, RP
Higgins, HS

Product specifications for weed
killer LV4

Falkenstein, WJ
Amstutz, FC
Hudberg, RN
Loucks, MF
McCoy, WJ
Talcott, AT
Holdeman, GE
Scheddel, RT
Higgins, HA
Richardson, HA
Skory, L
Brown, R

Product specification for Verton
T

Matuska, RJ
Murphy, RW
Loucks, MF
Fraser, JM

Product specification for Verton
4D

<u>Dow Number</u>	<u>Date</u>	<u>Author</u>	<u>Recipient</u>
		Hawley, HM Sheldon, HW Talcott, AT Holdeman, GE	
0725511 *	680416	White, LC Falkenstein, WJ Hawley, HM Corbin, WL Talcott, AT Holdeman, GE	
0725512 *	670708	Falkenstein, WJ Scoles, GW Amstutz, FC Hudberg, EN Scheddel, RT Luce, EN McCoy, WJ Talcott, AT Holdeman, GE	
0725513 *	730223	Blosser, KC Gill, HH Chase, FI Woodward, R	

14074

Distributees

General Subject Matter

Hawley, HM
Sheldon, HW
Talcott, AT
Holdeman, GE
McCoy, WJ

White, LC
Falkenstein, WJ
Hawley, HM
Corbin, WL
Talcott, AT
Holdeman, GE
Scheddel, RT
Reigler, PT

Product specification for Verton
2D

Falkenstein, WJ
Amstutz, FC
Hudberg, EN
Scheddel, RT
Luce, EN
McCoy, WJ
Talcott, AT
Holdeman, GE
Wiffin, EE
Richardson, HA
Skory, L
Brown, R
Butler, A

Product specification for Verton
CE

Blosser, KC
Gill, HH
Chase, FI
Woodward, R

Product specification for Dow
Butyl 400 24D weed killer

<u>Dow Number</u>	<u>Date</u>	<u>Author</u>	<u>Recipient</u>
		Hoff, RC Fraser, JM Seymour, KG Hanson, KY Flannery, RF Talcott, AT Holdeman, GE	
0725514 *	630507	White, LC, Jr. DeLong, HC Highhill, CA Amstutz, FC Niehoff, BR Loucks, MF Korsmeier, RB Ouellette, FE Holdeman, GE	
0725515 *	720316	Flannery, RF Seymour, KG Chase, FI Woodward, R Gill, HH Blosser, KC Hoff, RC Scoles, GW Talcott, AT Holdeman, GE	
0725516 *	630507	White, LC, Jr. DeLong, HC Highhill, CA Amstutz, FC	

14075

Distributees

General Subject Matter

Hoff, RC
Frazer, JM
Seymour, KG
Hanson, KY
Flannery, RF
Talcott, AT
Holdeman, GE

White, LC, Jr.
DeLong, HC
Highhill, CA
Amstutz, FC
Niehoff, BR
Loucks, MF
Ouellette, FE
Holdeman, GE

Product specification for Dow
Butyl 400

Flannery, RF
Seymour, KG
Chase, FT
Woodward, R
Gill, HH
Blosser, KC
Hoff, RC
Scoles, GW
Talcott, AT
Holdeman, GE

Product specification for lawn
weed killer

White, LC. Jr.
DeLong, HC
Highhill, CA
Amstutz, FC

Product specification for
Reddon

<u>Dow Number</u>	<u>Date</u>	<u>Author</u>	<u>Recipient</u>
		Niehoff, BR Loucks, MF Korsmeier, RB Ouellette, FE Holdeman, GE	
0725517 *	640213	White, LC, Jr. Delong, HC Highhill, CA Amstutz, FC Niehoff, BR Loucks, MF Korsmeier, RB Ouellette, FE Holdeman, GE	
0725518 *	630415	Highhill, CA Amstutz, FC White, LC, Jr. Niehoff, BR Loucks, MF Korsmeier, RB Ouellette, FE Holdeman, GE	
0725519 *	730822	Seymour, KG Blosser, KC Hodges, KL Chase, FI Woodward, R Hoff, RC Fraser, JM	

14078

Distributees

General Subject Matter

Niehoff, BR
Loucks, MF
Ouellette, FE
Holdeman, GE

White, LC, Jr.
DeLong, HC
Highhill, CA
Amstutz, FC
Niehoff, BR
Loucks, MF
Korsmeier, RB
Ouellette, FE
Holdeman, GE

Product specification for Tippon
2-2

Highhill, CA
Amstutz, FC
White, LC, Jr.
Niehoff, BR
Loucks, MF
Ouellette, FE
Holdeman, GE

Product specification for Tippon T4

Seymour, KG
Blosser, KC
Hodges, KL
Chase, FI
Woodward, R
Hoff, RC
Fraser, JM

Production specification for
Tippon T6 weed and brush killer

<u>Dow Number</u>	<u>Date</u>	<u>Author</u>	<u>Recipient</u>
		McCutchen, L Flannery, RF Talcott, AT Holdeman, GE	
0725522 *	690106	Dow	
0725523 *	690106	Dow	
0725524 *	660418	White, LC, Jr. DeLong, HC Amstutz, FC Hudberg, RN Loucks, MF McCoy, WJ Talcott, AT Holdeman, GE	
0725525 *	720218	Seymour, KG Chase, FI Flannery, MF Tait, SR Woodward, R Scoles, GW Hoff, RC Talcott, AT Flannery, RF Holdeman, GE	

Distributees

General Subject Matter

McCutchen, L
Flannery, RF
Talcott, AT
Holdeman, GE

Suggested product specification
for brush killer T 334

Suggested product specification
for brush killer 50-25

White, LC, Jr.
DeLong, HC
Amstutz, FC
Hudberg, RN
Loucks, MF
McCoy, WJ
Talcott, AT
Holdeman, GE
Scheddel, RT
Higgins, HS

Product specification for brush
killer LV 4T

Seymour, KG
Chase, FI
Flannery, MF
Tait, SR
Woodward, R
Scoles, GW
Hoff, RC
Talcott, AT
Flannery, RF
Holdeman, GE

Product specification for brush
killer LV 2-2

<u>Dow Number</u>	<u>Date</u>	<u>Author</u>	<u>Recipient</u>
0725526 *	660418	White, LC, Jr. Delong, HC Amstutz, FC Hudberg, RN Loucks, MF McCoy, WJ Talcott, AT Holdeman, GE	
0725527 *	651007	Dow	
0725528 *	630424	Delong, HC Highhill, CA Amstutz, FC White, LC, Jr. Hoff, RC Loucks, MF Korsmeier, RB Ouellette, FE	
0725529 *	721013	Flannery, RF Blosser, KC Gill, HH Chase, FI Woodward, R Hoff, RC Fraser, JM Talcott, AT Holdeman, GE	

14078

Distributees

General Subject Matter

White, LC, Jr.
DeLong, HC
Amstutz, FC
Hudberg, RN
Loucks, MF
McCoy, WJ
Talcott, AT
Holdeman, GE
Scheddel, RT
Higgins, HS

Product specification for brush
killer LV 2-2

Product specification for brush
killer Lv 2-2

DeLong, HC
Highhill, CA
Amstutz, FC
White, LC, Jr.
Hoff, RC
Loucks, MF
Ouellette, FE
Holdeman, FE

Product specification for Esteron
brush killer OS

Flannery, RF
Blosser, KC
Gill, HH
Chase, FI
Woodward, R
Hoff, RC
Fraser, JM
Talcott, AT
Holdeman, GE

Product specification for Reddon

<u>Dow Number</u>	<u>Date</u>	<u>Author</u>	<u>Recipient</u>
0725530 *	630424	DeLong, HC Highhill, CA Amstutz, FC White, LC, Jr. Hoff, RC Loucks, MF Korsmeier, RB Ouellette, FE	
0725531 *	720108	Flannery, RF Seymour, KG Loucks, MF Tait, SR Chase, FI Woodward, R. Hoff, RC Scoles, GW Talcott, AT Holdeman, GE	
0725532 *	601004	Dosser, RC DeLong, HC Loucks, MF Luce, EN Nyman, FA Smith, HL Ouellette, FE	
0725533 *	650125	Dow	
0725534 *	640612	White, LC, Jr. DeLong, HC	

14079

Distributees

DeLong, HC
Highhill, CA
Amstutz, FC
White, LC, Jr.
Hoff, RC
Loucks, MF
Ouellette, FE
Holdeman, GE

Flannery, RF
Seymour, KG
Loucks, MF
Tait, SR
Chase, FI
Woodward, R
Hoff, RC
Scoles, GW
Talcott, AT
Holdeman, GE

Dosser, RC
DeLong, HC
Loucks, MF
Luce, EN
Nyman, FA
Smith, HL
Ouellette, FE

White, LC, Jr.
DeLong, HC

General Subject Matter

Product specification for Esteron
Ten-Ten

Product specification for Esteron
44 weed killer

Product specification for Esteron
44

Suggested product specification
for Esteron 47

Product specification for Esteron
67-33 OS

<u>Dow Number</u>	<u>Date</u>	<u>Author</u>	<u>Recipient</u>
		Highhill, CA Amstutz, FC Hudberg, RN Loucks, MF Korsmeier, RB Ouellette, FE Holdeman, GE	
0725535 *	660721	White, LC, Jr. DeLong, HC Highhill, CA Deline, DD Hudberg, RN Loucks, MF McCoy, WJ Talcott, AT Holdeman, GE	
0725536 *	681118	Highhill, CA Woodward, RE Hawley, HM Loucks, MF McCoy, WJ Talcott, AT Holdeman, GE	
0725537 *	710317	Seymour, KG Chase, FI Loucks, MF	

14080

Distributees

General Subject Matter

Hudberg, RN
Loucks, MF
Korsmeier, RB
Ouellette, FE
Holdeman, GE
Higgins, HS
Scheddel, RT

White, LC, Jr.
DeLong, HC
Highhill, CA
Deline, DD
Hudberg, RN
Loucks, MF
McCoy, WJ
Talcott, AT
Holdeman, GE
Scheddel, RT
Higgins, HS

Product specification for Esteron
76E

Highhill, CA
Woodward, RE
Hawley, HM
Talcott, AT

Product specification for Esteron
76BE

Seymour, KG
Chase, FI
Loucks, MF

Product specification for Esteron
76E herbicide

<u>Dow Number</u>	<u>Date</u>	<u>Author</u>	<u>Recipient</u>
		Reigler, PF Woodward, R Hawley, HM Talcott, AT MacDonald, LA Holdeman, GE	
0725538 *	630424	DeLong, HC Highhill, CA Amstutz, FC White, LC, Jr. Hoff, RC Loucks, MF Korsmeier, RB Ouellette, FE Holdeman, FE	
0725539 *	670717	Highhill, CA White, LC Deline, DD Hudberg, RN Loucks, MF McCoy, WJ Talcott, AT Holdeman, GE	

14081

Distributees

General Subject Matter

Reigler, PF
Woodward, R
Hawley, HM
Talcott, AT
MacDonald, LA
Holdeman, GE

Product specification for Esteron 99

DeLong, HC
Highhill, CA
Amstutz, FC
White, LC, Jr.
Hoff, RC
Loucks, MF
Ouellette, FE
Holdeman, GE

Product specification for Esteron 99
concentrate

Highhill, CA
White, LC
Deline, DD
Hudberg, RN
Loucks, MF
McCoy, WJ
Talcott, AT
Holdeman, GE
Higgins, HS
Scheddel, RT
Wiffen, EE
Richardson, HA
Skory, LK
Brown, R
Butler, A

<u>Dow Number</u>	<u>Date</u>	<u>Author</u>	<u>Recipient</u>
0725540 *	670214	White, LC DeLong, HC Highhill, CA Deline, DD Hudberg, RN Loucks, MF McCoy, WJ Talcott, AT Holdeman, GE	
0725541 *	630507	White, LC, Jr. DeLong, HC Highhill, CA Amstutz, FC Niehoff, BR Loucks, MF Korsmeier, RB Ouellette, FE Holdeman, GE	
0725542	641019	White, LC, Jr. DeLong, HC Highhill, CA Amstutz, FC Hudberg, RN Loucks, MF	

14082

Distributees

White, LC
 Delong, HC
 Highhill, CA
 Deline, DD
 Hudberg, RN
 Loucks, MF
 McCoy, WJ
 Talcott, AT
 Holdeman, GE
 Higgins, HS
 Scheddel, RL
 Richardson, HA
 Skory, L
 Brown, R

White, LC, Jr.
 Delong, HC
 Highhill, CA
 Amstutz, FC
 Niehoff, BR
 Loucks, MF
 Ouellette, FE
 Holdeman, GE

White, LC, Jr.
 Delong, HC
 Highhill, CA
 Hudberg, RN
 Loucks, MF
 McCoy, WJ

General Subject Matter

Product specification for Esteron
 245 OS

Product specification for Esteron
 245 concentrate

Product specification for Esteron
 600

<u>Dow Number</u>	<u>Date</u>	<u>Author</u>	<u>Recipient</u>
		McCoy, WJ Ouellette, FE Holdeman, GE	
0725543 *	610906	Vanvalkenburg, W White, LC, Jr. DeLong, HC Luce, EN Loucks, MF Nyman, FA Smith, HL Ouellette, FE	
0725544 *	660121	White, LC, Jr. DeLong, HC Highhill, CA Amstutz, FC Hudberg, RN Loucks, MF McCoy, WJ Talcott, AT Holdeman, GE	
0725546 *	571226	Watson, G	
0725547 *	620104	Scoles, GW	
0725548 *	690219	Vanhorn, R	

14083

Distributees

General Subject Matter

Holdeman, FE
Scheddel, RT
Higgins, HS

Vanvalkenburg, W
White, LC, Jr.
DeLong, HC
Luce, EN
Loucks, MF
Nyman, FA
Smith, HL
Ouellette, FE

Product specification for Esteron
seventy

White, LC, Jr.
DeLong, HC
Highhill, CA
Amstutz, FC
Hudberg, RN
Loucks, MF
McCoy, WJ
Talcott, AT
Holdeman, GE
Scheddel, RT
Higgins, HS

Product specification for Esteron
6E

Production specification Brush
Killer 21

Production specification Brush
Killer 50-50

Brush Killer T production
specification

<u>Dow Number</u>	<u>Date</u>	<u>Author</u>	<u>Recipient</u>
0725549 *	620213	Scoles, G	
0725550 *	620213	Scoles, G	
0725551 *	650809	Vanhorn, R	
0725555 *	610928	Scoles, G	
0725558 *	661011	Vanhorn, R	
0725871- 0725881*	000000	Dow	
0725903 *	000000	Dow	
0725904 *	000000	Dow	
0725905 *	000000	Dow	
0725906 *	000000	Dow	
0725907 *	000000	Dow	
0725908 *	000000	Dow	

14084

Distributees

General Subject Matter

Brush Killer TX production
specification

Brush Killer X production
specification

Esteron T2 production specification

Clover Killer (discontinued) pro-
duction specification

Verton 2 (not released) production
specification

Safe work procedure Tordon 225E

Tordon production charges

Tordon 101 batch calculations and
adjustments

Tordon 212 batch calculations and
adjustments

Tordon 2696 batch calculations and
adjustments

Tordon K salt and Tordon 22K batch
calculations and adjustments

Tordon 155 batch calculations and
adjustments

<u>Dow Number</u>	<u>Date</u>	<u>Author</u>	<u>Recipient</u>
0725909 *	000000	Dow	
0725910 *	000000	Dow	
0725911 *	000000	Dow	
0725912 *	000000	Dow	
0725915 *	000000	Dow	
0725917- 0725920*	000000	Dow	
0725940 *	700414	Dow	
0725954- 0725960*	690612	Dow	
0725961- 0725963*	700921		
0725977	720218	Dow	
0726026- 0726036*	000000	Dow	
0726037 *	701020	Dow	
0746427- 0746472*	670109	Johnson, RL Widiger, AH	

14035

Distributees

General Subject Matter

Tordon 472 batch calculations and adjustments

Tordon 40 batch calculations and adjustments

Loading TIPA Tordon concentrate

Tordon formulations

Tordon formulations

Tordon 22K batch 810713

Tordon 225 product specification

Tordon 225 formulation

Description of process for production of Tordon 225

245T production specification

Formulating instructions for Tordon 472

Tordon brush killer 520 production and sales specifications

Johnson, RL
Widiger, H

Thermal decomposition of dry sodium salts of chlorinated phenates

Dow Number

Date

Author

Recipient

0746430-
0746447*

650804

Wagoner, EJ
Cobler, JG

Widiger, A
Johnson, RL

0747126-
0747128*

640730

Holmes, R

Hoyle, HR

0750332-
0750354*

571122

Dow
McCollister, DD
Olson, KJ

14086

Distributees

Bender, S
Bailey, C
Silverstein, L
Cobler, J
Haberstroh, W
Sauers, R

General Subject Matter

Differential thermal analysis of
various chlorophenols

Trichlorophenol manufacture

Allinson, RL
Athay, RN
Beshgetoor, AW
Boundy, RH
Colby, RW
Dosser, RC
Dow
Elshere, D
Gay, HH
Greene, LM
Hart, A
Hymas, TA
Jones, GD
Killian, DJ
Luce, EN
Martin, D
McIntyre, HH
Mussell, DR
Perkins, RP
Tisdale, WO

Results of range finding toxicolo-
gical tests on Brush Killer X,
Weed Killer X, and Brush Killer
TX

<u>Dow Number</u>	<u>Date</u>	<u>Author</u>	<u>Recipient</u>
0750465- 0750469*	501017	Adams, EM Dow McCollister, DD Rowe, VK	Allen, WW Alquist, FN Britton, JW Dossier, RC Dow Dutton, WC Irish, DD Kagy, JF Lynn, GE
0750470- 0750484*	530217	Dow RJE McCollister, DD Oyen, F	

14087

Distributees

General Subject Matter

White, LC
Wright, N

Results of skin irritation and
skin sensitization tests conducted
on human subjects with Esteron 245
(New Ester)

Allen, WW
Allinson, RL
Alquist, FN
Beshgetoor, AW
Boundy, RH
Britton, EC
Britton, JW
Collier, B
Davidson, JH
Dow
Dutton, WC
Gay, HH
Gibson, J
Greene, LN
Heath, SB
Johnson, JE
Kagy, JF
Kelly, JA
Kriner, RR

Results of range finding toxicolo-
gical tests on Esteron 245

Dow Number

Date

Author

Recipient

0750560-
0750587*

531030

Adams, EM
Oyen, F

14038

Distributees

General Subject Matter

Luce, EN
 Lynn, GE
 MacCutcheon
 Melass, VH
 Nation, HA
 Otis, CE
 Prendergast, DT
 Southwick, L
 Sunderland, WW
 Vanhorn, JC
 Walker, H
 White, LC
 Wright, P
 Zuhl, HH

Allen, WW
 Allinson, RL
 Alquist, FN
 Barrons, KC
 Beshgetoor, AW
 Boundy, RH
 Britton, EC
 Davidson, JH
 Dow
 Dutton, WC
 Gay, HH
 Greene, LM
 Kagy, JF
 Luce, EN
 Lynn, GE
 MacCutcheon, SM
 Prescott, RF
 Sunderland, WW

Results of range finding toxicological tests on Dow Brush Killer T

<u>Dow Number</u>	<u>Date</u>	<u>Author</u>	<u>Recipient</u>
-------------------	-------------	---------------	------------------

0750602-
0750633*

560501

Dow
McCollister, DD
Torkelson, TR

0750666-
0750693*

560409

Dow
McCollister, DD
Wolf, MA

14089

Distributees

White, L
Wright, P

Allinson, RL
Beshgetoor, AW
Boundy, RH
Britton, EC
Coulter, LL
Dow
Elshere, D
Gay, HH
Greene, LM
Hart, A
Kilian, DJ
Luce, EN
McCutcheon, SM
Martin, D
Scoles, G
Sunderland, WW
Wright, N

Allinson, RL
Beshgetoor, AW
Boundy, RH
Britton, EC
Colby, RW
Dow
Elshere, D
Gay, HH
Greene, LM
Hart, A
Kagy, JF

General Subject Matter

Results of range finding toxicological tests on M-631 (Esteron 245-Type Formulation)

Results of range finding toxicological tests on formulations of Reddon (M-640 and M-713)

Dow Number

Date

Author

Recipient

0750694-
0750714*

560702

Dow
McCollister, DD
Olson, KJ

0750719-
0750726*

570806

Dow
Hoyle, HR
Wolf, MA

14090

Distributees

General Subject Matter

Kelly, J
 Killian, DJ
 Luce, EN
 Lynn, GE
 MacCutcheon, SM
 Sunderland, WW
 Wright, N

Allinson, RL
 Alquist, FN
 Barrons, KC
 Beshgetoor, AW
 Boundy, RH
 Britton, EC
 Colby, RW
 Dow

Elshere, D
 Gay, HH
 Greene, LM

Hart, A
 Kagy, KF
 Kelly, JA
 Killian, DJ
 Luce, EN
 Lynn, GE
 MacCutcheon, SM
 Sunderland, WW
 Wright, N

Allinson, RL
 Athay, RM
 Beshgetoor, AW
 Boundy, RH

Results of range finding toxicological tests on Esteron Brush
 Killer O.S. (M-726)

Results of range finding toxicological tests on M-1085 (A 245T
 Triethylamine Liquid Formulation)

<u>Dow Number</u>	<u>Date</u>	<u>Author</u>	<u>Recipient</u>
-------------------	-------------	---------------	------------------

0750727- 0750736*	570510	Babcock, I Dow Dunn, EE KS MAW	Dow Wolf, MA
----------------------	--------	--	-----------------

0750739- 0750740*	570510	Dow Hoyle, HR McCollister, DD Wolf, MA	
----------------------	--------	---	--

0750741- 0750743*	000000	Dow Hoyle, HR McCollister, DD Wolf, MA	
----------------------	--------	---	--

14091

Distributees

General Subject Matter

Colby, RW
Dow
Elshere, D
Gay, HH
Greene, LM
Hart, A
Jones, GD
Kagy, JF
Killian, DJ
Luce, EN
Lynn, GE
McCollister, DD
McIntyre, HH
Mussell, DR
Perkins, RP
Scoles, GW
Tisdale, WL
Wright, N

Request for application testing
for M-1085 with eye and skin
contact tests attached

M-1085 data sheet of properties,
health hazards, and precautions
for safe handling of materials

M-1085 data sheet of properties,
health hazards, and precautions
for safe handling of materials

<u>Dow Number</u>	<u>Date</u>	<u>Author</u>	<u>Recipient</u>
0750744- 0750746*	580521	Dow McCollister, DD Olson, KJ	Coulter, LL Dow
0750747- 0750764*	580425	Dow Hoyle, HR McCollister, DD Olson, KJ	

14052

0750769-
0750790*

610316

Hoyle, HR
Olson, KJ
Oyen, F
Thompson, E

Distributees

General Subject Matter

Results of range finding toxicological tests on Weed Killer Formulation M-1094 containing a 245T Ester

M-1094 Weed Killer Formulation
Data sheet of properties, health hazards and precautions for safe handling of materials

Allinson, RL
Athay, RM
Beshgetoor, AW
Boundy, RH
Colby, RW
Coulter, LL
Dow
Elshere, D
Fletcher, FW
Gay, HH
Greene, LM
Hammer, OH
Hart, A
Jones, GD
Kagy, JF
Killian, DJ
Luce, EN
McIntyre, HH
Perkins, RP
Scoles, GW
Tisdale, WL
Vanvalkenburg, W
Wright, N

Barrons, KC
Boundy, RH
Colby, RW
Dow

Results of range finding toxicological tests on M-1123

<u>Dow Number</u>	<u>Date</u>	<u>Author</u>	<u>Recipient</u>
-------------------	-------------	---------------	------------------

0750791- 0750793*	000000	Hoyle, HR Olson, KJ Oyen, F	
----------------------	--------	-----------------------------------	--

0750795- 0750813*	600125	Dow Oyen, F Wolf, MA	
----------------------	--------	----------------------------	--

14093

Distributees

General Subject Matter

Elshere, D
Falkenstein, WJ
Gay, HH
Greene, LM
Hart, A
Jones, GD
Kagy, JF
Killian, DJ
Luce, EN
Lynn, GE
McIntyre, HH
Perkins, RP
Shrader, SA
Tisdale, WL
Vanvalkenburg, W
Wright, N

M-1123 data sheet of properties,
health hazards, and precautions
for safe handling of materials

Barrons, KC
Boundy, RH
Colby, RW
Dow
Elshere, D
Gay, HH
Greene, LM
Hammer, OH
Hart, A
Hymas, TA
Jones, GD
Kagy, JF

Results of range finding toxicolo-
gical tests on Esteron 245 OS
(M-1257)

Dow Number

Date

Author

Recipient

0750814-
0750827*

610601

Dow
Olson, KJ
Oyen, F

0750833-
0750854*

571122

Dow
McCollister, DD
Olson, KJ

14094

Distributees

Killian, DJ
Luce, EN
Lynn, GE
McIntyre, HH
Perkins, RP
Stenger, VA
Tisdale, WL
Wright, N

Barrons, KC
Boundy, RH
Colby, RW
Dow
Elshere, D
Falkenstein, WJ
Gay, HH
Greene, LM
Hart, A
Jones, GD
Kagy, JF
Killian, DJ
Luce, EN
Lynn, GE
McIntyre, HH
Perkins, RP
Shrader, SA
Tisdale, WL
White, LC, Jr.
Wright, N

Allinson, RL
Athay, RM
Beshgetoor, AW

General Subject Matter

Results of range finding toxicological tests on Esteron 245 OS
(Replacement for present
Formulation M-1257)

Results of range finding toxicological tests on Brush Killer X,
Weed Killer X, and Brush Killer

Dow Number

Date

Author

Recipient

0750855-
0750873*

590818

Olson, KJ
Oyen, F

14035

Distributees

Boundy, RH
 Colby, RW
 Dosser, RC
 Dow
 Elshere, D
 Gay, HH
 Greene, LM
 Hart, A
 Hymas, TA
 Jones, GD
 Kilian, DJ
 Luce, EN
 Martin, D
 McIntyre, HH
 Mussell, DR
 Perkins, RP
 Tisdale, WL
 White, LC
 Wright, N

Barrons, KC
 Boundy, RH
 Colby, RW
 Dow
 Elshere, D
 Gay, HH
 Gray, HE
 Greene, LM
 Hammer, OH
 Hart, A
 Hymas, TA
 Jones, GD
 Kagy, JF

General Subject Matter

TX

Results of range finding toxicological tests on M-1413 (Formulation of Dowanol Ester 245T) made for the Stull Chemical Company

<u>Dow Number</u>	<u>Date</u>	<u>Author</u>	<u>Recipient</u>
-------------------	-------------	---------------	------------------

0750874-
0750876*

590706

Dow
Hoyle, HR
Olson, KJ
Oyen, F

0750878-
0750903*

590506

Dow
McCollister, DD
Wolf, MA

14069

Distributees

General Subject Matter

Killian, DJ
Luce, EN
Lynn, GE
McIntyre, HH
Perkins, RP
Scoles, G
Stenger, VA
Tisdale, WL
Wright, N

M-1413 Formulation of K 7856
(Dowanol Ester 245T). Data sheet
of properties, health hazards and
precautions for safe handling of
materials

Barrons, KC
Boundy, RH
Colby, RW
Dow
Elshere, D
Gay, HH
Gray, HE
Greene, LM
Hammer, OH
Hart, A
Hymas, TA
Jones, GD
Kagy, JF
Killian, DJ
Luce, EN
Lynn, GE
McIntyre, HH

Results of range finding toxicolo-
gical tests on M-1447 and M-1443
Weed Killer Formulations (Similar
to Esteron 245 OS and Esteron
Brush Killer OS respectively)

Dow Number

Date

Author

Recipient

0750915-
0750940*

590506

Dow
McCollister, DD
Wolf, MA

0750951-
0750952*

591209

Dow
Wolf, MA

McIntyre, HH

14007

Distributees

General Subject Matter

Perkins, RP
Stenger, VA
Tisdale, WL
Vanvalkenburg, JW
Wright, N

Barrons, KC
Boundy, RH
Colby, RW
Dow

Elshere, D
Gay, HH
Gray, HE
Greene, LM
Hammer, OH
Hart, A

Hymas, TA
Jones, JD
Kagy, JF
Kilian, DJ

Luce, EN
Lynn, GE

McIntyre, HH

Perkins, RP
Stenger, VA
Tisdale, WL

Vanvalkenburg, JW
Wright, N

Results of range finding toxicological tests on M-1447 and M-1433 Weed Killer Formulations (Similar to Esteron 245 OS and Esteron Brush Killer OS respectively)

Dow
Wolf, MA

Toxicological information on Esteron 99 granules (M-1741) suitable for presentation to the USDA

<u>Dow Number</u>	<u>Date</u>	<u>Author</u>	<u>Recipient</u>
0750956- 0750974*	590903	Dow Olson, KJ Oyen, F	

0750975- 0750976*	590811	Dow HRH Olson, KJ Oyen, F
----------------------	--------	------------------------------------

0750977- 0550996*	600216	Dow Olson, K Oyen, F
----------------------	--------	----------------------------

14058

Distributees

Barrons, KC
 Boundy, RH
 Colby, RW
 Dow
 Elshere, D
 Gay, HH
 Greene, LM
 Hammer, OH
 Hart, A
 Hymas, TA
 Jones, GD
 Kagy, JF
 Killian, DJ
 Leasure, JK
 Luce, EN
 Lynn, GE
 McIntyre, HH
 Perkins, RP
 Scoles, G
 Stenger, VA
 Tisdale, WL
 Wright, N

General Subject Matter

Results of range finding toxicological tests on Agricultural Chemical Formulation M-1511 containing Dowanol 97B70 Ester 245T (K-7856)

M-1511 Data sheet of properties, health hazards and precautions for safe handling of materials

Barrons, KC
 Boundy, RH
 Colby, RW
 Dow

Results of range finding toxicological tests on Agricultural Chemical Formulation M-1683 (Esteron 245 Type)

Dow Number

Date

Author

Recipient

0750998-
0751016*

600223

Dw
Orson, KJ
Orem, F

14039

Distributees

General Subject Matter

Elshere, D
 Gay, HH
 Greene, LM
 Hammer, OH
 Hart, A
 Hymas, TA
 Jones, GD
 Kagy, JF
 Killian, DJ
 Luce, EN
 Lynn, GE
 McIntyre, HH
 Perkins, RP
 Scoles, GW
 Stenger, VA
 Tisdale, WL
 Wright, N

Barrons, KC
 Boundy, RH
 Colby, RW
 Dow
 Elshere, D
 Gay, HH
 Greene, LM
 Hammer, OH
 Hart, A
 Hymas, TA
 Jones, GD
 Kagy, JF
 Killian, DJ
 Luce, EN
 Lynn, GE

Results of range finding toxicological tests on Agricultural Chemical Formulation M-1684 (Esteron Brush Killer Type)

Dow Number

Date

Author

Recipient

0751056-
0751058*

611120

Dow
Olson, KJ
Oyen, F
Plomer, ET
Scoles, GW

0751059 *

611120

14100

Distributees

General Subject Matter

McIntyre, HH
Perkins, RP
Scoles, GW
Stenger, VA
Tisdale, WL
Wright, N

Barrons, KC
Boundy, RH
Colby, RW
Dow
Elshere, D
Falkenstein, W
Gay, HH
Greene, LM
Hart, A
Jones, GD
Kagy, JF
Killian, DJ
Luce, EN
Lynn, GE
McIntyre, HH
Perkins, P
Scoles, GW
Shrader, SA
Tisdale, WL
Wright, N

Results of range finding toxicological tests on M-2115, an agricultural chemical formulation containing 245T and triethyl amine

Barrons, KC
Boundy, RH
Colby, RW
Dow
Elshere, D

First aid measures

Dow Number

Date

Author

Recipient

0751060-
0751075*

611106

Dow
Hoyle, HR
Olson, KJ
Oyen, F
Plomer, ET

14101

Distributees

General Subject Matter

Falkenstein, W
 Gay, HH
 Greene, LM
 Hart, A
 Jones, GD
 Kagy, JF
 Killian, DJ
 Luce, EN
 Lynn, GE
 McIntyre, HH
 Perkins, P
 Scoles, GW
 Shrader, SA
 Tisdale, WL
 Wright, N

Barrons, KC
 Boundy, RH
 Colby, RW
 Dow
 Elshere, D
 Falkenstein, W
 Gay, HH
 Greene, LM
 Hart, A
 Jones, GD
 Kagy, JF
 Killian, DJ
 Luce, EN
 Lynn, GE
 McIntyre, HH
 Perkins, P
 Scoles, GW

M-2115 data sheet of properties,
 health hazards and precautions for
 safe handling of materials

Dow Number

Date

Author

Recipient

0751078-
0751080*

620403

Dow
Olson, KJ
Oyen, F
Vanvalkenburg, W

0751081 *

620323

14102

Distributees

Shrader, SA
Tisdale, WL
Wright, N

Barrons, KC
Boundy, RH
Brown, R
Colby, RW
Dow
Elshere, D
Falkenstein, WJ
Gay, HH
Greene, LM
Hart, A
Jones, GD
Kagy, JF
Killian, DJ
Luce, EN
Lynn, GE
McIntyre, HH
Nash, HA
Perkins, RP
Shrader, SA
Vanvalkenburg, W
Wilson, AW
Wright, N

Barrons, KC
Boundy, RH
Brown, R
Colby, RW
Dow
Elshere, D

General Subject Matter

Results of range finding toxicological tests on M-2235, an emulsifiable formulation of 24D and 245T Dowanol Esters in kerosene

First aid measures

Dow Number

Date

Author

Recipient

0751082-
0751098*

620323

Dow
Hoyle, HR
Olson, KJ
Oyen, F

14103

Distributees

General Subject Matter

Falkenstein, WJ
 Gay, HH
 Greene, LM
 Hart, A
 Jones, GD
 Kagy, JF
 Killian, DJ
 Luce, EN
 Lynn, GE
 McIntyre, HH
 Nash, HA
 Perkins, RP
 Shrader, SA
 Vanvalkenburg, W
 Wilson, AW
 Wright, N

Barrons, KC
 Boundy, RH
 Brown, R
 Colby, RW
 Dow
 Elshere, D
 Falkenstein, WJ
 Gay, HH
 Greene, LM
 Hart, A
 Jones, GD
 Kagy, JF
 Killian, DJ
 Luce, EN
 Lynn, GE
 McIntyre, HH

M-2235 data sheet of properties,
 health hazards, and precautions for
 safe handling of materials

<u>Dow Number</u>	<u>Date</u>	<u>Author</u>	<u>Recipient</u>
0751099- 0751101*	630809	Hoyle, HR Olson, KJ Oyen, F	
0751102 *	620124	Dow Wolf, MA	Dow McIntyre, HH
0751209- 0751210*	630225	Dow Olson, KJ Oyen, F Scoles, G	

14104

Distributees

General Subject Matter

Nash, HA
Perkins, RP
Shrader, SA
Vanvalkenburg, W
Wilson, AW
Wright, N

Verton T sales specification

Suggested precautionary labeling
for M-2235

Barrons, KC
Boundy, RH
Brown, R
Colby, RW
Dow
Elshere, D
Falkenstein, WJ
Gay, HH
Greene, LM
Hart, A
Jones, GD
Kagy, JF
Killian, DJ
Luce, EN
Lynn, GE
McIntyre, HH
Mullison, WR
Nash, HA
Norton, TR

Results of range finding toxicological tests on agricultural chemical formulation M-2422 containing 91 percent Dowanol PIB Ester of 245T

Dow Number

Date

Author

Recipient

0751211 *

630225

0751212-
0751213*

630220

Dow
Hoyle, HR
Olson, KJ
Oyen, F

14105

Distributees

General Subject Matter

Shrader, SA
Wilson, AW
Wright, N

Barrons, KC
Boundy, RH
Brown, R
Colby, RW
Dow
Elshere, D
Falkenstein, WJ
Gay, HH
Greene, LM
Hart, A
Jones, GD
Kagy, JF
Kilian, DJ
Luce, EN
Lynn, GE
McIntyre, HH
Mullison, WR
Nash, HA
Norton, TR
Shrader, SA
Wilson, AW
Wright, N

First aid measures

Barrons, KC
Boundy, RH
Brown, R
Colby, RW
Dow
Elshere, D

M-2422 data sheet of properties,
health hazards and precautions for
safe handling of materials

Dow Number

Date

Author

Recipient

0751214-
0751236*

630225

14106

Distributees

General Subject Matter

Falkenstein, WJ
Gay, HH
Greene, LM
Hart, A
Jones, GD
Kagy, JF
Killian, DJ
Luce, EN
Lynn, GE
McIntyre, HH
Mullison, WR
Nash, HA
Norton, TR
Shrader, SA
Wilson, AW
Wright, N

Toxicological properties of
Formulation M-2422

Barrons, KC
Boundy, RH
Brown, R
Colby, RW
Dow
Elshere, D
Falkenstein, WJ
Gay, HH
Greene, LM
Hart, A
Jones, GD
Kagy, JF
Killian, DJ
Luce, EN
Lynn, GE
McIntyre, HH

<u>Dow Number</u>	<u>Date</u>	<u>Author</u>	<u>Recipient</u>
0752264- 0752265*	670328	Dow Hoyle, HR McCollister, DD Olson, KJ	
0752266 *	661220	Buerge, TE Dow	Dow Lynn, GE
0752360- 0752361*	670410		
0752385- 0752386*	690415	Dow Norris, JM Torkelson, TR	

14107

Distributees

Mullison, WR
Nash, HA
Norton, TR
Shrader, SA
Wilson, AW
Wright, N

General Subject Matter

M-3060 data sheet of properties,
health hazards and precautions for
safe handling of materials

M-3060 request for screening or
application testing

M-3060, Safety Data and
Formulation

Axe, FD
Barton, J
Beauchamp, RR
Blair, EH
Burgert, BE
Dow
Edwards, H
Elshere, D
Gordon, HL
Holder, BB
Johnson, JE
Kagy, JF
Kilian, DJ
Kimmel, CE
Lloyd, BH

M-3401 Brush Killer-A Tordon Acid
Formulation

<u>Dow Number</u>	<u>Date</u>	<u>Author</u>	<u>Recipient</u>
0752388- 0752389*	690320	Dow Hoyle, HR Norris, JM Torkelson, TR	
0752390- 0752395*	690417	Dow Norris, JM	
0752550- 0752552*	700130	Dow Gowell, JH Loucks, MF Lynn, GE Naegele, RE Newport, JJ Ridner, JM Seymour, KG Stein, JS Williams, CS Williams, RW Wolf, MA	
0752553- 0752554*	690429	Dow Hoyle, HR	

Distributees

MacCutcheon, SM
McCollister, DD
McIntyre, HH
Morse, D
Pitman-Moore
Robinson, VB
Schwartz, AJ
Wright, N

General Subject Matter

M-3402 Brush Killer data sheet of
properties, health hazards and
precautions for safe handling of
materials

Toxicological properties of M-3401
Brush Killer-A Tordon acid for-
mulation

Tordon 225 herbicide release to
sales

Tordon 225 mixture herbicide data
sheet of properties, health

<u>Dow Number</u>	<u>Date</u>	<u>Author</u>	<u>Recipient</u>
		Norris, JM	
0762493- 0762496*	500829	Dow Rowe, VK Spencer, HC	Allen, WW Barrons, KC Britton, JW Dossier, RC Dow Dutton, WC Irish, DD Kagy, JF Lynn, GE
0762497 *	000000		
0762498 *	490309	Dow Irish, DD McCollister, DD Rowe, VK White, L	
0762499 *	490412	Dow Wyse, H	
0762500 *	490321	Dow Wyse, H	
0762501- 0762504*	490000	Dow Wyse, H	
0762505 *	490517	Dow Wyse, H	

14109

Distributees

General Subject Matter

hazards and precautions for safe handling of materials

Results of range finding toxicological tests on Esteron 245T formulations

Summary of toxicological information on 24D & 245T formulations

Esteron 245T (New formulation)
(Request for biological test)

K7716-1 Esteron 245T (New formulation) (Acute oral toxicity)

Esteron 245T (New formulation)

K7716-1 Esteron 245T (New formulation) (Skin irritation)

K7716-1 Esteron 245T (New formulation) (Single absorption exposure record)

<u>Dow Number</u>	<u>Date</u>	<u>Author</u>	<u>Recipient</u>
0762506 *	490225	Dow HAS RSH Irish Rowe, VK White, L	
0762507 *	490414	Dow Wyse, H	
0762508 *	490321	Dow Wyse, H	
0762509- 0762512*	490000	Dow Wyse, H	
0762513 *	490517	Dow Wyse, H	
0766698- 0766699*	690415	Beauchamp, RR Dow Norris, JM Torkelson, TR	

14110

Distributees

General Subject Matter

Esteron 245T formulation (Request
for biological test)

K7716-2 Esteron 245T formulation
(acute oral toxicity)

Esteron 245T formulation

K7716-2 Esteron 245T formulation
(Skin irritation)

K7716-2 Esteron 245T formulation
(Single absorption exposure
record)

Axe, FD
Barron, J
Beauchamp, RR
Blair, EH
Burgert, BE
Dow
Edwards, H
Elshere, D
Gordon, HL
Holder, BB
Johnson, JE
Kagy, JF
Killian, DJ

M-3401 Brush Killer-A Tordon Acid
Formulation

<u>Dow Number</u>	<u>Date</u>	<u>Author</u>	<u>Recipient</u>
0766700- 0766701*	690320	Dow Hoyle, JR Norris, JM Torkelson, TR	
0766702- 0766708*	690417	Dow Norris, JM	
0766709 *	681008	Beauchamp, RR Dow McCollister, DD	Byrd, BC Dow Hoerger, FD McCollister, DD
0766710 *	681008	Dow	
0766711- 0766726*	680000	Dow Litchfield, N Norris, JM	
0766727- 0766729*	690310	Dow Norris, JM	

1-1
1-2
1-3
1-4
1-5

Distributees

General Subject Matter

Kimmel, CE
Lloyd, BH
MacCutcheon, SM
McCollister, DD
McIntyre, HH
Morse, D
Robinson, VB
Schwarz, AJ
Wright, N

M-3401 Brush Killer (Data sheet of properties, health hazards and precautions for safe handling of materials)

Toxicological properties of M-3401 Brush Killer, a Tordon acid formulation

Proposed name, Tordon 124V Brush Killer (M3401) (Request for screening or application testing)

Toxicology work sheet (Tordon 124V Brush Killer)

Tordon 124V Brush Killer (Acute oral toxicity)

M-3401 Brush Killer, oral dosage to male rats

<u>Dow Number</u>	<u>Date</u>	<u>Author</u>	<u>Recipient</u>
0766730- 0766737*	680000	Dow King, CD Litchfield, N Sparschu, GL Trice, V	
0766738- 0766740*	681000	Dow Dunn, FL	
0766741- 0766744*	681104	Dow Dunn, FL	
0766745- 0766746*	690128	Dow Dunn, FL	
0766747- 0766750*	690000	Dow Litchfield, N	
0766751- 0766765*	690123	Dow Norris, JM	
0766766 *	690123	Dow	
0766767 *	681008	Beauchamp, RR Dow McCollister, DD	
0766768- 0766769*	000000	Dow	

Distributees

General Subject Matter

Tordon 124V Brush Killer (Request for pathology)

Tordon 124V Brush Killer (Eye contact test)

Tordon 124V Brush Killer (Skin contact, irritation)

M-3401 Tordon 124V Sample 2, (Skin contact, irritation)

Tordon (Skin contact absorption)

Toxicological properties of Tordon 124V Brush Killer made with CA Tordon acid

Tordon 124V Brush Killer (Toxicology work sheet)

Proposed name Tordon 124V Brush Killer (Request for screening or application testing)

M3401 Brush Killer (Data sheet of properties, health hazards and precautions for safe handling of materials)

<u>Dow Number</u>	<u>Date</u>	<u>Author</u>	<u>Recipient</u>
0766770- 0766800*	680000	Dow Dunn, FL Litchfield, M	
0766801- 0766821*	680000	Conran, PB Dow King, CD Litchfield, M Sparschu, GL Trice, V	
0766822- 0766823*	690107	Beauchamp, RR Dow Leong, BKJ Trice, VR	.
0766824- 0766847*	690113	Beauchamp, RR Conran, PB Dow Leong, BKJ Sparschu, GL Trice, VR	
0766848- 0766849*	690320	Norris, JM Torkelson, TR Hoyle, HR	
0766850 *	560524	Peterson, JE HRH	
0766851- 0766852*	690320	JMN H	

1
2
3
4
5
6
7
8
9
0

Distributees

General Subject Matter

Tordon 124V Brush Killer, male rat testing

Tordon 124V Brush Killer (Request for pathology)

Summary report on the effect of acute inhalation of the volatile components of California Tordon Acid and Texas Tordon Acid (Biochemical Res Lab Sample 1)

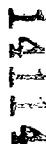
Summary pathology report on the effect of acute inhalation of the volatile components of California Tordon Acid and Texas Acid (Biochem Res Lab Pathology Report Sample)

M-3401 Brush Killer (data sheet of properties, health hazards, and precautions for safe handling of materials)

Brush Killer

M-3401 Brush Killer (safety information)

<u>Dow Number</u>	<u>Date</u>	<u>Author</u>	<u>Recipient</u>
0767018- 0767019*	560412	Dow	
0767020- 0767021*	610525	Dow Hoyle, HR Olson, KJ Oyen, F	
0767022- 0767023*	790216	Dow Fishbeck, WA Keeler, P	
0767024- 0767025*	720329	Dow	
0767026- 0767027*	580613	Dow McCollister, DD Wolf, MA	
0767028- 0767029*	610525	Dow Olson, KJ Oyen, F	
0767030 *	610531	Dow	
0767031 *	000000	Dow	
0767032 *	700721	Dow	



Distributees

General Subject Matter

Esteron Brush Killer OS M-726
(T2.30-71-1), safety data sheet
with formulation

Esteron 99 data sheet of proper-
ties, health hazards and pre-
cautions for safe handling of
materials

Esteron 99 medical information

Esteron 99 material safety data
sheet

Esteron 99 data sheet of proper-
ties, health hazards and pre-
cautions for safe handling of
materials

Esteron 99 data sheet of proper-
ties, health hazards and pre-
cautions for safe handling of
materials

Esteron 99 (Replacement
formulation)

Esteron 99 medical information
symptomatology and treatment

Esteron 99 toxicology, anticipated
human response

<u>Dow Number</u>	<u>Date</u>	<u>Author</u>	<u>Recipient</u>
0767033- 0767034*	720329	Dow	
0767054- 0767055*	570514	Dow Hoyle, HR McCollister, DD Wolf, MA	
0767056- 0767057*	580514	Dow Hoyle, HR McCollister, DD Wolf, MA	
0767058 *	000000	Dow Hoyle, HR Wolf, MA	
0767059- 0767060*	710900	Dow	
0767061 *	580716	Dow Wolf, MA	Dow McIntyre, HH
0767062 *	610112	Dow Wolf, MA	Dow McIntyre, HH
0767063- 0767064*	580425	Dow Hoyle, HR McCollister, DD Olson, KJ	
0767065 *	580717	Dow Hoyle, HR Olson, KJ	

1415

Distributees

General Subject Matter

Esteron 99 material safety data sheet

M-1086 data sheet of properties, health hazards and precautions for safe handling of materials

Veon brush killer (M-1086) data sheet of properties, health hazards and precautions for safe handling of materials

M-1086 (A herbicidal formulation T2.3098), safety data sheet

Veon brush killer

Suggested precautionary labeling for M-1094

Suggested precautionary labeling for M-1094

M-1094 weed killer formulation data sheet of properties, health hazards and precautions for safe handling of materials

M-1094 containing 245T Ester T2, 30-112-1, safety data sheet

<u>Dow Number</u>	<u>Date</u>	<u>Author</u>	<u>Recipient</u>
0767066 *	570730	Dow Wolf, MA	Coulter, LL Dow
0767067- 0767068*	571120	Dow Hoyle, HR McCollister, DD Olson, KJ	
0767069- 0767070*	571028	Dow Hoyle, HR McCollister, DD Olson, KJ	
0767071 *	571206	Dow Hoyle, HR Olson, KJ	
0767072 *	571206	Dow Hoyle, HR Olson, KJ	
0767073 *	610112	Dow Wolf, MA	Dow McIntyre, HH
0767073- 0767074*	610311	Dow Hoyle, HR Olson, KJ Oyen, F	
0767075 *	610400	Dow	
0767092- 0767098*	531029	Adams, EM	

Distributees

General Subject Matter

Inverton, a letter showing concern for hazards

Inverton M-1116 data sheet of properties, health hazards and precautions for safe handling of materials

M-1116 dilution C1-14-100 data sheet of properties, health hazards and precautions for safe handling of materials

Inverton weed killer (M-1116)
T2.30-101-1, safety data sheet

M-1116 dilution Inverton formulation

Suggested precautionary labeling for M-1123

M-1123 data sheet of properties, health hazards and precautions for safe handling of materials

M-1123, safety data sheet

Allen, WW

Results of range finding

)

<u>Dow Number</u>	<u>Date</u>	<u>Author</u>	<u>Recipient</u>
-------------------	-------------	---------------	------------------

Dow
Eslunn, E
Maxey, JS
Oyen, F

0767099-
0767119*

530325

Dow
HCS
Rowe, VK
Wolf, MA

0767153-
0767160*

570806

Dow
McCollister, DD
Wolf, MA

14117

Distributees

Allinson, RL
Alquist, FN
Barrons, KC
Beshgetoor, AW
Boundy, RH
Britton, EC
Davidson, JH
Dow
Dutton, WC
Gay, HH
Greene, LM
Kagy, JF
Luce, EN
Lynn, GE
MacCutcheon, SM
Prescott, RF
Sunderland, WW
White, LC
Wright, P

General Subject Matter

toxicological tests on Dow
Brush Killer 50-50

Toxicity of Dow Brush Killer 50-50
(T2.30-28-1)

Allinson, RL
Athay, RM
Beshgetoor, AW
Boundy, RF
Colby, RW
Dow
Elshere
Gay, HH

Results of range finding toxicological tests on M-1085 (A 245T triethylamine liquid formulation T2.30-97-1)

<u>Dow Number</u>	<u>Date</u>	<u>Author</u>	<u>Recipient</u>
0767154- 0767155*	571005	Dow Hoyle, HR McCollister, DD Wolf, MA	
0767161 *	570228	Dow	
0767162 *	570301	Dow	Barrons, KC Dow
0767163- 0767164*	570402	Babcock, D Dow Wolf, MA	
0767165- 0767166*	570415	Dow	

14118

Distributees

Greene, LM
Hart, A
Jones, GD
Kagy, JF
Killian, DJ
Luceen
Lynn, GE
McIntyre, HH
Mussell, DR
Perkins, RP
Scoles, GW
Tisdale, WL
Wright, N

General Subject Matter

M-1085 (A 245T alkyl amine formulation) data sheet of properties, health hazards and precautions for safe handling of materials

Sample 1, M-1085 (T2.30-97-1), eye and skin contact

M-1085 request for applications testing (2.30-97-1)

Sample 1 (2.30-97-1) (eye contact test)

Sample 1 M-1085 skin contact irritation T2.30-97-1

<u>Dow Number</u>	<u>Date</u>	<u>Author</u>	<u>Recipient</u>
0767184- 0767191*	570806	Dow McCollister, DD Wolf, MA	
0767185- 0767186*	570511	Dow Hoyle, HR McCollister, DD Wolf, MA	
0767192 *	570228	Dow Wolf, MA	
0767193 *	570227	Dow Scoles, G	Barrons, KC Dow

Distributees

Allison, RW
Athay, RM
Barrons, KC
Beshgetoor, AW
Boundy, RH
Colby, RW
Dow
Elshere, D
Gay, HH
Greene, LM
Hart, A
Jones, GD
Kagy, JF
Kilian, DJ
Luce, EN
Lynn, GE
McIntyre, HH
Perkins, RP
Russel, DR
Scoles, G
Tisdale, WL
Wright, N

General Subject Matter

Results of range finding toxicological tests on M-1086 (A 245T and 24D alkyl amine formulation)

M-1086 (Data sheet of properties, health hazards and precautions for safe handling of materials)

Sample 1, M-1086 (Toxicology work sheet)

M-1086 (2.30-96-1) (Request for applications testing)

<u>Dow Number</u>	<u>Date</u>	<u>Author</u>	<u>Recipient</u>
0767194- 0767195*	570326	Dow Stagerstron, E	
0767196- 0767197*	570228	Dow	
0767213- 0767222*	580521	Dow McCollister, DD Olson, K	

0767216- 0767217*	580425	Dow Hoyle, HR McCollister, DD Olson, KJ
----------------------	--------	--

14120

DistributeesGeneral Subject Matter

Eye contact test M-1086,
T2.30-96-1

M-1086 (Skin contact irritation)
(T2.30-96-1)

Allinson, RL
Athay, RM
Beshgetoor, AW
Boundy, RH
Colby, RW
Dow
Elshere, D
Gay, HH
Greene, LM
Hammer, OH
Hart, A
Jones, GD
Kagy, JF
Killian, DJ
Luce, EN
McIntyre, HH
Perkins, RP
Scoles, GW
Tisdale, WL
Vanvalkenburg, W
Wright, N

Results of range finding toxicological tests on weed killer formulation M-1094 containing a 245T Ester (T2.30-112-1)

M-1094 Weed Killer formulation
(Data sheet of properties, health hazards, and precautions for safe handling of materials)

<u>Dow Number</u>	<u>Date</u>	<u>Author</u>	<u>Recipient</u>
0767223 *	580225	Dow	
0767224 *	000000	Dow Scoles, G	
0767225 *	580218	Coulter, LL Dow	Dow Rowe, VK
0767226 *	580225	Dow NCG	
0767227- 0767228*	530311	Dow NCG	
0767229- 0767230*	580525	Dow NCG	
0767231 *	580402	Coulter, LL Dow	Dow Rowe, VK
0767243- 0767251*	571220	Dow McCollister, DD Olson, KJ	

14121

Distributees

General Subject Matter

Sample 1 Weed Killer formulation
(M-1094) (Toxicology work sheet)

245T (Request for screening or
application testing)

Dow
Fletcher, FW
Scoles, GW
Vanvalkenburg, W

Formulation M-1094, contemplated
sales program

Sample 1 Weed Killer formulation
(M-1094) (T2.30-112-1) (acute oral
toxicity)

Sample 1 Weed Killer formulation
(M-1094) (eye contact test)

Sample 1, weed killer formulation
(M-1094) (T2.30-112-1) (skin con-
tact irritation)

Dow
Fletcher, FW
Scoles, GW
Vanvalkenburg, JW

M-1094, will remain in development
during 580000

Allinson, RL
Beshgetoor, AW
Boundy, RH
Colby, RW
Coulter, LL
Dow

Results of range finding toxicolo-
gical tests on Inverton (brush
killer). (T2.30-101-1)

<u>Dow Number</u>	<u>Date</u>	<u>Author</u>	<u>Recipient</u>
-------------------	-------------	---------------	------------------

0767245- 0767246*	571120	Dow Hoyle, HR McCollister, DD Olson, KJ	
----------------------	--------	--	--

0767252 *	570520	Dow	
-----------	--------	-----	--

0767253 *	000000	Dow Scoles, G	
-----------	--------	------------------	--

0767254 *	570520	Dow	
-----------	--------	-----	--

0767255- 0767256*	570520	Babcock, D Dow	
----------------------	--------	-------------------	--

143

Distributees

Elshere, D
Gay, HH
Gray, HE
Greene, LM
Hart, A
Hymas, TA
Jones, GD
Kagy, JF
Kilian, DJ
Luce, EN
Lynn, GE
McIntyre, HH
Mussell, DR
Perkins, RP
Scoles, GW
Tisdale, WL
Wright, N

General Subject Matter

Inverton M-1116 (Data sheet of properties, health hazards and precautions for safe handling of materials)

Sample 1 M-1116 (T2.30-101-1)
(Toxicology work sheet)

M-1116 (Request for applications testing) (2.30-101-1)

Sample 1 M 1116 (Acute oral toxicity) (T2.30-101-1)

Sample 1 M-1116 (Eye contact test) (T2.30-101-1)

<u>Dow Number</u>	<u>Date</u>	<u>Author</u>	<u>Recipient</u>
0767257- 0767258*	570624	Babcock, D Dow	
0767259- 0767260*	570730	Dow Wolf, MA	Coulter, LL Dow
0767261 *	580221	Dow	Dow Olson, KJ
0767262 *	580408	Dow Wolf, MA	Dow McIntyre, HH
0767263- 0767267*	610316	Dow Olson, KJ Oyen, K Thompson, E Vanvalkenburg, W	

14123

Distributees

General Subject Matter

Sample 1 M-1116 (Skin contact
irritation) (T2.30-101-1)

Inverton, a letter showing concern
for hazards

Request for report

Suggested precautionary labelling
for Inverton (M-1116)

Results of range finding toxicolo-
gical tests on M-1123
(T2.30-201-1)

Barrons, KC
Boundy, RH
Colby, RW
Dow
Elshere, D
Falkenstein, WJ
Gay, HH
Greene, LM
Hart
Jones, GD
Kagy, JF
Kilian, DJ
Luce, EN
Lynn, GE
McIntyre, HH
Perkins, RP
Shrader, SA
Tisdale, WL
Vanvalkenburg, W
Wright, N

<u>Dow Number</u>	<u>Date</u>	<u>Author</u>	<u>Recipient</u>
0767268- 0767269*	610311	Dow Hoyle, HR Olson, KJ Oyen, F	
0767270 *	601228	Dow	
0767271 *	601229	Dow	
0767272 *	601223	Dow Vanvalkenburg, W	Dow Olson, KJ
0767273 *	610106	Dow Wolf, MA	Dow Ritty, PM
0767274 *	601228	Dow	
0767275- 0767276*	610110	Dow Thompson, E	
0767277- 0767280*	601228	Dow Thompson, E	
0767281- 0767282*	610120	Dow Thompson, E	
0767288- 0767300*	610601	Dow White, LC, Jr.	

14124

Distributees

General Subject Matter

M-1123 (Data sheet of properties, health hazards and precautions for safe handling of materials)

M-1123 (Toxicology work sheet)
(T2.30-201-1)

M-1123 (request for screening or application testing)

Dow
Johnson, JE
Ritty, PM

M-1123, Formulation, use, release to sale plans

Formulation for M-1094, no data available on toxicity for M-1123

Sample 1 M-1123 (Acute oral toxicity) (T2.30-201-1)

Sample 1 M-1123 (Eye contact test) (T2.30-201-1)

Sample 1 M-1123 (Skin contact irritation) (T2.30-201-1)

Sample 1 M-1123 (Skin contact absorption) (T2.30-201-1)

Barrons, KC
Boundy, RH
Colby, RW

Results of range finding toxicological tests on Esteron 245-OS (replacement for present for-

Dow Number

Date

Author

Recipient

0767301-
0767314*

600125

Dow
Wolf, MA

14125

Distributees

General Subject Matter

Dow
 Elshere, D
 Falkenstein, WJ
 Gay, HH
 Greene, LM
 Hart, A
 Jones, GD
 Kagy, JF
 Kilian, DJ
 Luce, EN
 Lynn, GE
 McIntyre, HH
 Oyen, F
 Perkins, RP
 Shrader, SA
 Tisdale, WL
 White, LC, Jr.
 Wright, N

mulation M-1257) (BC T2.30-167-2)

Barrons, KC
 Boundy, RH
 Colby, RW
 Dow
 Elshere, D
 Gay, HH
 Greene, LM
 Hammer, OH
 Hart, A
 Hymas, TA
 Jones, GD
 Kagy, JF
 Kilian, DJ
 Luce, EN

Results of range finding toxicological tests on Esteron 245
 OS(M.1257) (BC T2.30-167-1)

Dow Number

Date

Author

Recipient

0767309 *

591102

Dow
Vanvalkenburg, JW

Dow
Wolf, MA

0767315 *

591028

Dow
Ritty, PM

Dow
Wolf, MA

14126

Distributees

General Subject Matter

Lynn, GE
McIntyre, HH
Oyen, F
Perkins, RP
Stenger, VA
Tisdale, WL
Wright, N

Barrons, KC
Boundy, RH
Colby, RW
Coulter, LL
Dow
Elshere, D
Gay, HH
Greene, LM
Hammer, OH
Hart, A
Heath, SB
Hymas, TA
Jones, GD
Kagy, JF
Killian, DJ
Luce, EN
Lynn, GE
McIntyre, HH
Oyen, F
Perkins, RP
Stenger, VA
Tisdale, WL
Wright, N

Esteron 245 OS (M-1257), For-
mulation plans for toxicological
evaluation

Barrons, KC
Boundy, RH

Need toxicology information
sheets on Esteron Brush Killer

Dow Number

Date

Author

Recipient

0767321-
0767342*

571122

Dow
Olson, KJ

14127

Distributees

Colby, RW
 Coulter, LL
 Dow
 Elshere, D
 Gay, HH
 Greene, LM
 Hammer, OH
 Hart, A
 Heath, SB
 Hymas, TA
 Jones, GD
 Kagy, JF
 Kilian, DJ
 Luce, EN
 Lynn, GE
 McIntyre, HH
 Oyen, F
 Perkins, RP
 Stenger, VA
 Tisdale, WL
 Wright, N

Allinson, RL
 Athay, RM
 Beshgetoor, AW
 Boundy, RH
 Colby, RW
 Dosser, RC
 Dow
 Elshere, D
 Gay, HH
 Greene, LM
 Hart, A

General Subject Matter

O.S.

Results of range finding toxicological tests on Brush Killer X, Weed Killer X and Brush Killer TX
 (T2.30-76-1 T2.30-77-1
 T2.30-78-1)

Dow Number

Date

Author

Recipient

0767366-
0767385*

590423

Dow
Wolf, MA

14128

Distributees

General Subject Matter

Hymas, TA
 Jones, GD
 Killian, DJ
 Luce, EN
 Martin, D
 McCollister, DD
 McIntyre, HH
 Mussell, DR
 Perkins, RP
 Tisdale, WL
 White, LC
 Wright, N

Athay, RM
 Barrons, KC
 Boundy, RH
 Colby, RW
 Dow
 Elshere, D
 Gay, HH
 Greene, LM
 Hammer, OH
 Hart, A
 Hymas, TA
 Jones, GD
 Kagy, JF
 Killian, DJ
 Luce, EN
 Lynn, GE
 McCollister, DD
 McIntyre, HH
 Perkins, RP
 Stenger, VA

Results of range finding toxicological tests on Forron brush killer (M-1368) (T2.30-123-1)

<u>Dow Number</u>	<u>Date</u>	<u>Author</u>	<u>Recipient</u>
0767402- 0767416*	590818	Ilson, KJ Iyen, F IS toyle, HR	
0767417- 0767418*	590506	Dow McCollister, DD Wolf, MA	
0767419- 0767421*	590202	Dow Hoyle, HR	

Distributees

Tisdale, WL
Vanvalkenburg, W
Wright, N

Barrons, KC
Colby, RW
Lynn, GE
Boundy, RH
McIntyre, HH
Perkins, RP
Hart, A
Wright, N
Hammer, OH
Hymas, TA
Jones, GD
Gay, HH
Tisdale, WL
Luce, EN
Green, LM
Stenger, LM
Scoles, G
Gray, HE
Kilial, DJ
Elshere, D
Kagy, JF

General Subject Matter

Results of range finding toxicological tests on M1413, formulation of Dowanol Ester 245T made for Stull Chem. Data sheet of properties, health hazards and precautions for safe handling of materials

Results of range finding toxicological tests on M-1447 and M-1433 weed killer formulations (Similar to Esteron 245 OS and Esteron Brush Killer respectively)

A concentrate formulation of 245T Dowanol 97B70 Ester data sheet of

<u>Dow Number</u>	<u>Date</u>	<u>Author</u>	<u>Recipient</u>
-------------------	-------------	---------------	------------------

McCollister, DD
Wolf, MA

0767422-
0767930*

590202

Dow
Hoyle, HR
McCollister, DD
Wolf, MA

0767431 *

590127

Dow

0767432 *

581120

Dow
Wade, J

14130

Distributees

General Subject Matter

Barrons, KC
 Boundy, RH
 Colby, RW
 Dow
 Elshere, D
 Gay, HH
 Gray, HE
 Greene, LM
 Hammer, OH
 Hart, A
 Hymas, TA
 Jones, GD
 Kagy, JF
 Killian, DJ
 Luce, EN
 Lynn, GE
 McIntyre, HH
 Perkins, RP
 Stenger, VA
 Tisdale, HH
 Vanvalkenburg, W
 Wright, N

properties, health hazards and precautions for safe handling of materials

A concentrate formulation of 24D and 245T Dowanol 97B70. Esters data sheet of properties, health hazards and precautions for safe handling of materials

M-1433 Toxicology work sheet

A concentrate brush killer formulation of 31b. 24D and 31b. 245T acid equiv per gal. based on Dowanol 97B70 Esters. Request for screening or application testing

<u>Dow Number</u>	<u>Date</u>	<u>Author</u>	<u>Recipient</u>
0767433 *	581121	Dow Vanvalkenburg, JW	Dow Olson, RJ
0767434- 0767439*	581120	Dow	
0767440- 0767441*	590506	Dow McCollister, DD Wulf, MA	
0767442- 0767444*	590202	Dow Hryle, HR McCollister, DD Wulf, MA	
0767445- 0767453*	590202	Dow Hryle, HR McCollister, DD Wulf, MA	

Distributees

Coulter, LL
Dow
Heath, SB

General Subject Matter

M-1433 and M-1447, formulations

M-1433 eye contact test

Results of range finding toxicological tests on M-1447 and M-1433 weed killer formulations (Similar to Esteron 245 OS and Esteron Brush Killer OS respectively)

M-1447 A concentrate formulation of 245T Dowanol 97B70 esters. Data sheet of properties, health hazards and precautions for safe handling of materials

M-1433 A concentrate formulation of 240 and 245T Dowanol 97B70 esters. Data sheet of properties, health hazards and precautions for safe handling of materials

Barrons, KC
Boundy, RH
Colby, RW
Dow
Elshere, D
Gay, HH
Gray, HE
Greene, LM
Hammer, OH
Hart, A
Hymas, TA
Jones, GD
Kagy, JF
Killian, DJ

<u>Dow Number</u>	<u>Date</u>	<u>Author</u>	<u>Recipient</u>
0767454 *	590127	Dow	
0767455- 0767456*	581120	Dow Vanvalkenburg, JW	
0767457- 0767462*	581120	Dow	
0767463- 0767464*	590202	Dow Hoyle, HR McCollister, DD Wolf, MA	
0767465- 0767466*	700709	Dow	
0767478- 0767479*	590713	Dow McCollister, DD Wolf, MA	
0767480- 0767485*	590414	Dow McCollister, DD	

Distributees

Luce, EN
Lynn, GE
McIntyre, HH
Perkins, RP
Stenger, VA
Tisdale, WL
Vanvalkenburg, JW
Wright, M

General Subject Matter

M-1447 toxicology work sheet

M-1447 request for screening or
application testing

M-1447 acute oral toxicity

M-1433 A concentrate formulation
of 24D and 245T Dowanol 97B70
esters. Data sheet of properties,
health hazards and precautions for
safe handling of materials

Dowanol 97 B-70 medical infor-
mation

Results of range finding toxicolo-
gical tests on Forron 235T

Barrons, KC
Boundy, RH

Forron 245 M-1456 data sheet of
properties, health hazards and

<u>Dow Number</u>	<u>Date</u>	<u>Author</u>	<u>Recipient</u>
		Peterson, JE Wolf, MA	

0767486 *	590319	Dow	
-----------	--------	-----	--

0767487 *	590127	Dow	
-----------	--------	-----	--

0767488 *	590113	Dow Vanvalkenburg, JW	Dow Olson, RJ
-----------	--------	--------------------------	------------------

0767489- 0767493*	590127	Dow	
----------------------	--------	-----	--

14133

Distributees

Colby, RW
Dow
Elshere, D
Gay, HH
Greene, LM
Hammer, OH
Hart, A
Hymas, TA
Jones, GS
Kagy, JF
Kilian, DJ
Luce, EN
Lynn, GE
McIntyre, HH
Perkins, RP
Stenger, VA
Tisdale, WL
Vanvalkenburg, W
Wright, N

General Subject Matter

precautions for safe handling of materials

M-1456 (Forron 245T) toxicology work sheet

M-1456 (Contains K-7756) (Forron 245) Request for screening of application testing

Formulation M-1456

M-1456 acute oral toxicity

Coulter, LL
Dow
Heath, SB

<u>Dow Number</u>	<u>Date</u>	<u>Author</u>	<u>Recipient</u>
0767494 *	000000	Dow Wolf, MA	
0767495- 0767497*	590610	Dow McCollister, DD Peterson, JE Wolf, MA	
0767498 *	590722	Dow Olson, K Oyen, F	
0767499- 0767504*	590702	Dow Hoyle, HR Olson, KJ Oyen, F	

Distributees

General Subject Matter

Suggested precautionary labeling
for Forron 245

Forron 245 (M-1456) Data sheet of
properties, health hazards and
precautions for safe handling of
materials

Results of range finding toxicolo-
gical tests on M-1459. Formulation
of K-7797 and K-7856

M-1459 formulation of K-7797 and
K-7856

Athay, RM
Barrons, KC
Boundy, RH
Colby, RW
Dow
Elshere, D
Gay, HH
Gray, HE
Greene, LM
Hammer, OH
Hart, A
Hymas, T
Jones, GD
Kilian, DJ
Lynn, GE
Martin, D
McIntyre, HH
Perkins, RP
Scoles, GE
Stenger, VA
Tisdale, WL
Wright, N

<u>Dow Number</u>	<u>Date</u>	<u>Author</u>	<u>Recipient</u>
0767505 *	590618	Dow	
0767506 *	590216	Dow	
0767635- 0767637*	590901	Dow Olson, K Oyen, F Scoles, GE	

0767638- 0767639*	590811	Dow Hoyle, HR Olson, KJ Oyen, F
----------------------	--------	--

1435

Distributees

Barrons, KC
 Boundy, RH
 Colby, RW
 Dow
 Elshere, D
 Gay, HH
 Greene, LM
 Hammer, OH
 Hart, A
 Hymas, TA
 Jones, GD
 Kagy, JF
 Kilian, DJ
 Leasure, JK
 Luce, EN
 Lynn, GE
 McIntyre, HH
 Perkins, RP
 Scoles, GE
 Stenger, VA
 Tisdale, WL
 Wright, N

General Subject Matter

M-1459 Toxicology work sheet

M-1459 formulation of K-7797 and request for screening or application testing

Results of range finding toxicological tests on M-1586 (Formulation containing Dowanol 97B70 Esters of 24D and 245T) (T2.30-156-1)

M-1586 (Data sheet of properties, health hazards and precautions for safe handling of materials)

<u>Dow Number</u>	<u>Date</u>	<u>Author</u>	<u>Recipient</u>
0767640 *	590729	Dow KO	
0767641 *	590611	Dow Scoles, G	
0767642 *	590610	Dow Scoles, GW	Dow Olson, KJ
0767643 *	590710	Dow Greenhoe, NC KO	
0767644- 0767646*	590721	Dow Greenhoe, NC KO	
0767647- 0767649*	590727	Dow Greenhoe, NC KO	
0767650- 0767652*	590811	Dow Hoyle, HR Olson, KJ Oyen, F	

Distributees

General Subject Matter

Coulter, LL
Dow
Scoles, G

M-1586 (Toxicology work ~~sheet~~)
(T2.30-156-1)

Formulation containing the Dow
97B70 Esters of 24D and 245T
(M-1586) (Request for screening
application testing)

Coulter, LL
Dow
Dosser, RC
Heath, SB
Maddox, JF
White, LC

Improved Esteron formulation

M-1586 (Acute oral toxicity)
(T2.30-156-1)

M-1586 (Eye contact test)
(T2.30-156-1)

M-1586 (Skin contact irritation)
(T2.30-156-1)

M-1586 (Data sheet of properties
health hazards and precautions
safe handling of materials)

<u>Dow Number</u>	<u>Date</u>	<u>Author</u>	<u>Recipient</u>
0767767- 0767780*	600331	Dow Olson, KJ Scoles, G	

0767792- 0767793*	600128	Dow Hoyle, HR Olson, KJ Oyen, F
----------------------	--------	--

0767794 *	600313	Dow
-----------	--------	-----

0767824 *	600216	Dow Olson, KJ
-----------	--------	------------------

Distributees

Barrons, KC
Boundy, RH
Colby, RW
Dow
Elshere, D
Gay, HH
Greene, LM
Hammer, OH
Hart, A
Hymas, TA
Jones, GD
Kagy, JF
Kilian, DJ
Luce, EN
Lynn, GE
McIntyre, HH
Oyen, F
Perkins, RP
Scoles, G
Stenger, VA
Tisdale, WL
Wright, N

Barrons, KC
Boundy, RH

General Subject Matter

Results of range finding
gical tests on agricultural
cal formulation M-1639
killer type)

M-1639 (Veon brush killer
(Data sheet of properties
hazards and precautions
handling of materials)

M-1639 (Veon brush killer
Safety data sheet

Results of range finding
gical tests on agricultural

Dow Number

Date

Author

Recipient

Oyen, F

0767825-
0767828*

600223

Dow
Olson, KJ

Distributees

Colby, RW
Dow
Elshere, D
Gay, HH
Greene, LM
Hammer, OH
Hart, A
Hymas, TA
Jones, GD
Kagy, JF
Kilian, DJ
Luce, EN
Lynn, GE
McIntyre, HH
Perkins, RP
Scoles, G
Stenger, VA
Tisdale, WL
Wright, N

General Subject Matter

cal formulation M-1683 (1
245 Type)

Corrections in biochemical
research laboratory report
(T2.30-177-1) Results of
finding toxicological tests
agricultural chemical for
M-1683 (Esteron 245 Type)
Results of range finding
toxicological tests on Bi
Acetonitrile Decaborane
(T23.14-94-2); Results of
finding toxicological tests
Alpha Phenoxy Propionic A

<u>Dow Number</u>	<u>Date</u>	<u>Author</u>	<u>Recipient</u>
0767829- 0767830*	600126	Dow Hoyle, HR Olson, KJ Oyen, F	
0767831- 0767841*	600000	Dow EO NS O'Connor Scoles, GW Torkelson, TR	
0767851- 0767852*	600126	Dow Hoyle, HR Olson, KJ Oyen, F	
0767853 *	600212	Dow	
0767854 *	551108	Dow	
0767872 *	600406	Dow Wolf, MA	Dow McIntyre, H
0767873- 0767875*	600215	Dow Olson, KJ Oyen, F	
0767988- 0767990*	611031	Dow Olson, KJ Oyen, F	

Distributees

General Subject Matter

M-1683 (Esteron 245T) (Data sheet of properties, health hazards and precautions for safe handling of materials)

Toxicology work sheet, acute toxicity, eye contact test, contact irritation, single exposure record (M-1683)

M-1683 (Esteron 245T) (Data sheet of properties, health hazards and precautions for safe handling of materials)

AG chem formulation M-1683

Esteron 245T, safety data sheet

Suggested precautionary labels for M-1684

H
Dow
Sales
Wolf, MA

Dow
Hoyle, HR

M-1684 (Esteron Brush Killer)
Data sheet of properties, health hazards and precautions for handling of materials

Dow
Hoyle, HR

M-2016 data sheet of properties, health hazards and precautions for safe handling of materials

<u>Dow Number</u>	<u>Date</u>	<u>Author</u>	<u>Recipient</u>
0767994- 0767997*	611106	Dow Hoyle, HR Oyen, F Plomer, ET	
0768010- 0768025*	611117	Dow Olson, KJ Plomer, ET	

0768087- 0768103*	611108	Olson, K Oyen, F Hoyle, HR KS Scoles, GW Tompson, E
----------------------	--------	--

14140

Distributees

Dow
Hoyle, HR

Barrons, KC
Boundy, RH
Colby, RW
Dow
Elshere, D
Falkenstein, W
Gay, HH
Greene, LM
Hart, A
Jones, GD
Kagy, JF
Killian, DJ
Luce, EN
Lynn, GE
McIntyre, HH
Oyen, F
Perkins, RP
Scoles, GW
Shrader, Sa
Tisdale, WL
Wright, N

Boundy, RH
McIntyre, HH
Perkins, RP
Hart, A
Jones, GD
Scoles, G

General Subject Matter

M-2115 data sheet of properties,
health hazards and precautions for
safe handling of materials

Results of range finding
toxicological tests on M-2115, an
agricultural chemical formulation
containing 245T acid and triethyl
amine

Results of range finding toxicolo-
gical tests on agricultural chem-
ical formulation M-2016
containing 35 percent Dowanol
Ester 245T. Material safety data
sheet

Dow Number

Date

Author

Recipient

0768104-
0768143*

631129

Dow
Lynn, GE
Olson, KJ

1441

Distributees

Gay, HH
Tisdale, WL
Luce, EN
Greene, LM
Shrader, SA
Falkenstein, W
Elshere, D
Kagy, JF
Barrons, KC
Colby, RW
Kilian, DJ
Lynn, GE

Barrons, KC
Boundy, RH
Colby, RW
Dow
Elshere, D
Epstein, J
Falkenstein, WJ
Gordon, HL
Greene, LM
Hake, CL
Hart, A
Jones, GD
Kagy, JF
Kilian, DJ
Koerker, FW
Luce, EN
Lynn, GE
McIntyre, HH
Mullison, WR
Norton, TR

General Subject Matter

Results of range finding t
gical tests on Verton T he
(M-2137) a formulation con
Dowanol Ester of 245T
ng to
T her,
cont.

<u>Dow Number</u>	<u>Date</u>	<u>Author</u>	<u>Recipient</u>
-------------------	-------------	---------------	------------------

0768236-
0768254*

620403

Olsen, KJ
Oyen, F
Vanvalkenburg, W

0768240-
768241*

620323

Olsen, KJ
Oyen, F
Hoyle, HR

14142

Distributees

Oyen, F
Shrader, SA
Wilson, AW
Wright, N

Boundy, RK
McIntyre, HH
Perkins, RP
Hart, A
Wright, N
Lynn, GE
Jones, GD
Barrons, K
Vanvalkenburg, V
Brown, R
Gay, HH
Wilson, AW
Luce, EN
Greene, LM
Shrader, SA
Falkenstein, WJ
Nash, HA
Colby, RN
Killian, DJ
Elshere, D
Kagy, JF

Boundy, RH
McIntyre, HH
Perkins, RP
Hart, A
Wright, N
Lynn, GE

General Subject Matter

Results of tox. tests
dowanol esters in ker on 21
osene

Data sheet for M2235

Dow Number

Date

Author

Recipient

0768243-
768244*

611108

Vanvalkenburg, W Olson, KJ

1443

Distributees

Jones, GD
Barrons, H
Vanvalkenburg, V
Brown, R
Gay, HH
Wilson, AW
Luce, EN
Greene, LM
Shrader, SA
Falkenstein, WJ
Nash, HA
Colby, RW
Kilian, DJ
Elshere, D
Kagy, JF

General Subject Matter

Johnson, JE
Boundy, RK
McIntyre, HH
Perkins, RP
Hart, A
Wright, N
Lynn, GE
Jones, GD
Barrons, K
Vanvalkenburg, V
Brown, R
Gay, HH
Wilson, AW
Luce, EN
Greene, SA
Falkenstein, WJ
Nash, HA

Cover letter with sample
for testing

ip1

UPDATED INDEX OF
CONFIDENTIAL DOCUMENTS

<u>Dow Number</u>	<u>Date</u>	<u>Author</u>	<u>Recipient</u>
0768262- 0768263*	620323	Olson, KJ Oxen, F Hoyle, HR	
0768264 *	620300	Dow	
0768268- 0768269*	720416	Wolf, MA Hoyle, HR	
0768270- 0768271*	720413	Wolf, MA	
0768297- 0768299*	630108	Dow Hoyle, HR Olson, KJ Oyen, F	
0768300- 0768301*	710400		
0768302 *	630507	Dow	
0768303- 0768304*	720328	Dow	

14145

Distributees

Colby, RN
Killian, DJ
Elshere, D
Kagy, JF

General Subject Matter

M-2235 (data sheet of properties, health hazards, and precautions for safe handling of materials)

M-2235 (safety information)

Verton CE (data sheet of properties, health, hazards, and precautions for safe handling of materials)

Verton CE (medical information)

M-2422 (Data sheet of properties for safe handling of materials)

Esteron 245 concentrate

Esteron 245 concentrate (Safety specification)

Esteron 245 concentrate brush weed killer (Material safety sheet)

<u>Dow Number</u>	<u>Date</u>	<u>Author</u>	<u>Recipient</u>
0768305- 0768306*	780401	Dow	
0768680- 0768699*	660526	Dow Stevenson, GT	
0768961- 768962*	610601	Olson, KJ Oyen, F Hoyle, HR	
0768963- 768964*	580630	Wolf, MA McCollister, DD Hoyle, HR	
0768965- 768966*	610531	Dow	
0768984- 0769027*	660510	Dow Lynn, GE Olson, KJ	

1455

Distributees

Dow
Haagsma, TA
BLS
GTS
KJO
Prod. Plan Target Team
Mgr.
Robinson, VB
RJS
RMS
RVJ

Barrons, KC
Boundy, RH
Dow
Elshere, D
Falkenstein, WJ
Hart, A

General Subject Matter

Esteron 245 concentrate¹
weed killer (Material safety
sheet)

A summary of acute oral
LD50 studies in poultry¹
TOX-37 thru TOX-66 inclu¹
(Report GH-A 186))

Safety data sheet for Es¹
OS

Safety data sheet for Re¹
concentrate (M-2157)

Safety data information¹
245 OS

Toxicological properties¹
bicide formulation M-299¹
taining 4-amino-3,5,6-trich¹
picolinic acid, isooctyl¹
245T polypropylene glycol¹
ether ester

Dow Number

Date

Author

Recipient

0769080 *

001216

Dow
Getzendaner, ME
Herman, JL
Moss, RD

1417

Distributees

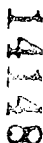
General Subject Matter

Holder, BB
 Johnston, RV
 Jones, GD
 Kagy, JF
 Killian, DJ
 Luce, EN
 Lynn, GE
 McCollister, DD
 McIntyre, HH
 Moss, RD
 Mullison, WR
 Norton, TR
 Pitman-Moore
 Shrader, SA
 Wilson, AW
 Wright, N

Barrons, KC
 Bauriedel, WR
 Dow
 Dowell, FH
 Hanson, RG
 Hymas, TA
 Johnston, RV
 Kagy, JF
 Laning, ER
 Ludwig, PD
 Moss, RD
 Osborne, DW
 Popoff, FP
 Ridner, JM
 Rowe, VK
 Seymour, KG

A residue study picloram and 245T
 in grass from application of
 M-3060 formulation (GH-C 343)

<u>Dow Number</u>	<u>Date</u>	<u>Author</u>	<u>Recipient</u>
0769081- 0769082*	670410	Dow	
0769083- 0769085*	661205	Dow Olson, KJ Oyen, F Wilson, H	
0769086- 0769087*	661108	Dow Hoyle, HR Olson, KJ Oyen, F Wilson, H	
0769088- 0769094*	660816	Dow Wilson, H	
0769160- 0769162*	670316	Olson, KJ Oyen, F	



Distributees

Shaver, RJ
Spalding, JL
Williams, CS

Dow
Lynn, GE

Boundy, RH
Buerge, TE
Dean, P
Dow
Elshere, D
Holder, BB
Jones, GD
Kagy, JF
Kilian, DJ
Luce, EN
Lynn, GE
McIntyre, HH

General Subject Matter

M-3060, safety data sheet

Results of range finding toxicological tests on Esteron O.S.
(M-3094) (T2.3094-1)

Esteron 245 O.S. (Data sheet, properties, health hazards and precautions for safe handling materials)

Esteron 245 O.S. (M-3094) Toxicology work sheets

Toxicological properties and industrial handling hazards of Tordon 105 mixture
(T2.MO-3132-1)

<u>Dow Number</u>	<u>Date</u>	<u>Author</u>	<u>Recipient</u>
-------------------	-------------	---------------	------------------

0769163- 0769179*	660000	Dow Tinker, B Wilson, H	
0769268- 0769271*	671224	Dow McCollister, DD Olson, KJ	
0769272- 0769297*	680104	Dow Lynn, GE Olson, KJ	

0769351- 0769352*	690121	Dow Hoyle, HR	
----------------------	--------	------------------	--

1449

Distributees

Moss, RD
 Sheetz, DP
 Shrader, SA
 Wilson, AW
 Wright, N

General Subject Matter

Tordon 105 mixture
 worksheet)

Tordon 144 mixture
 properties, health
 precautions for s

Toxicological per
 industrial handli
 Tordon 144 mixture

Boundy, RH
 Dean, P
 Dow
 Elshere, D
 Holder, BB
 Jones, GD
 Kagy, JF
 Luce, EN
 McCollister, DD
 McIntyre, HH
 Moss, RD
 Olson, KJ
 Robinson, VB
 Sheetz, DP
 Shrader, SA
 Wilson, AW
 Wright, N

M-3199X Tordon 2
 bicide data sheet

<u>Dow Number</u>	<u>Date</u>	<u>Author</u>	<u>Recipient</u>
-------------------	-------------	---------------	------------------

Norris, JM

0769353-
0769354*

700130

Bjork, C
Dow
Gowell, JH
JBD
Loucks, MF
Nagele, RE
Newport, JJ
Seymour, KG
Sheldon, HW
Stein, JS
Talcott, AT
Williams, CS
Wolf, MA

0769355-
0769356*

681213

Dow
Norris, JM

0770043-
0770058*

571122

Dow
Olson, KJ

0
C
U
I
A
I

Distributees

General Subject Matter

health hazards and precautions for
safe handling of materials
(T2.MO-003199-1)

Tordon 225 herbicide release to
sales

M-3199X Tordon 225 herbicide
(T2.MO-003199-(1)), safety data
sheet

Allinson, RL
Athay, RM
Beshgetoor, AW
Boundy, RH
Colby, RW
Dossier, RC
Dow
Elshere, D
Gay, HH
Greene, LM
Hart, A

Results of range finding toxicological tests on Brush Killer X, Weed Killer X and Brush Killer TX

<u>Dow Number</u>	<u>Date</u>	<u>Author</u>	<u>Recipient</u>
-------------------	-------------	---------------	------------------

0770044- 0770045*	571115	Dow McCollister, DD Olson, KJ Peterson, JE	
----------------------	--------	---	--

0770047- 0770048*	571115	Dow McCollister, DD Olson, KJ Peterson, JE	
----------------------	--------	---	--

0770049 *	000000	Dow	
-----------	--------	-----	--

0770050- 0770052*	571115	Dow McCollister, DD Olson, KJ Peterson, JE	
----------------------	--------	---	--

1
2
3
4
5

Distributees

Hymas, TA
Jones, GD
Kilian, DJ
Luce, EN
Martin, D
McCollister, DD
McIntyre, HH
Mussell, DR
Perkins, RP
Tisdale, WL
White, LC
Wright, W

General Subject Matter

Brush Killer TX (Data sheet of properties, health hazards and precautions for safe handling of materials)

Weed Killer X (Data sheet of properties, health hazards and precautions for safe handling of materials)

Brush Killer X (Data sheet of properties, health hazards and precautions for safe handling of materials)

Brush Killer X (Data sheet of properties, health hazards and precautions for safe handling of materials)

<u>Dow Number</u>	<u>Date</u>	<u>Author</u>	<u>Recipient</u>
0770059 *	560308	Dow White, LE	
0770060- 0770061*	560424	Dow	
0770062- 0770063*	560521	Dow	
0770064- 0770065*	571115	Dow McCollister, DD Olson, KJ Peterson, JE	
0770665- 0770684*	660526	Dow Stevenson, GT Stock, BL	
0781791- 0781794*	501017	Dow Rowe, VK	Allen, WW Alquist, FC Britton, JW Dossier, RC Dow Dutton, WC Irish, FN Kagy, JF Lynn, GE

14152

Distributees

BLS
GTS
KJO
RJS
RMS
RVJ
TAH
VBR

General Subject Matter

Brush Killer TX (Request application testing).

Brush Killer TX (Eye contact test)

Brush Killer TX (Skin contact irritation)

Brush Killer TX (Data sheet properties, health hazard precautions for safe handling materials)

A summary of acute oral LD50 studies in poultry TOX-37 thru TOX-66 inclusive (186)

Results of skin irritation and skin sensitization tests on human subjects with (New Ester) (T2.30-3-1)

<u>Dow Number</u>	<u>Date</u>	<u>Author</u>	<u>Recipient</u>
0781795 *	500405	Dow REW Streeter, LE	Dow White, L
0781796- 0781810*	530217	Dow Oyen, F	Allen, WW Allinson, RL Alquist, FN Beshgetoor, AW Boundy, RH Britton, EC Britton, JW Collier, B Davidson, JH Dow Dutton, WC Gay, HH Gibson, J Greene, LM Heath, SB Johnson, JE Kagy, JF Kelly, JA Kriner, RR Luce, EN Lynn, GE MacCutcheon, SM Melass, VH Nation, HA Otis, CE Predergast Southwick, L Sunderland, WW Vanhorn, JC

14153

Pa

Distributees

General Subject Matter

Esteron 245T (Main lab report
sheet)

Results of range finding, toxicological
tests on Esteron 245
(T2.30-3-2)

<u>Dow Number</u>	<u>Date</u>	<u>Author</u>	<u>Recipient</u>
			Walker, H White, LC Wright, P Zuhl, HH

0782085- 0782091*	531030	Dow Oyen, F	
----------------------	--------	----------------	--

0782092 *	530305	Dow Rowe, VK Spencer, HC White, L	
-----------	--------	--	--

0782093- 0782100*	530000	Dow Wolf, MA Wyse, H	
----------------------	--------	----------------------------	--

14154

Distributees

General Subject Matter

Allen, WW
Allinson, RL
Alquist, FN
Barrons, KC
Beshgetoor, AW
Boundy, RH
Britton, EC
Davidson, JH
Dow
Dutton, WC
Gay, HH
Greene, LM
Kagy, JF
Luce, EN
Lynn, GE
MacCutcheon, SM
Prescott, RF
Sunderland, WW
White, L
Wright, P

Results of range finding toxicological tests on Dow Brush Killer T^D

Dow Brush Killer T (Request for biological test)

Dow Brush Killer T (Acute oral toxicity)

<u>Dow Number</u>	<u>Date</u>	<u>Author</u>	<u>Recipient</u>
0782101- 0782103*	530000	Dow Wyse, H	
0782104- 0782112*	530000	Dow Wyse, H	
0782113- 0782114*	700721	Dow HCS	
0782115 *	000000	Dow	
0782116- 0782117*	710714	Dow Hoyle, HR Wolf, MA	
0782118- 0782119*	710920	Dow Wolf, MA	
0782178- 0782198*	560501	Dow McCollister, DD Torkelson, TR	

Distributees

General Subject Matter

Brush Killer T (Eye irritation)

Brush Killer T (Skin irritation)

Brush Killer T, safety data sheet

Brush Killer T (Medical
information)

Brush killer T (Data sheet of
properties, health hazards and
precautions for safe handling of
materials)

Brush Killer T (Medical
information)

Results of range finding toxicolo-
gical tests on M-631 (Esteron 245
type formulation) (BC T2.30-67-1)

Allinson, RL
Beshgetoor, AW
Boundy, RH
Britton, EC
Coulter, LL
Dow
Elshere, D
Gay, HH
Greene, LM
Hart, A
Kilian, DJ
Luce, EN
MacCutcheon, SM

<u>Dow Number</u>	<u>Date</u>	<u>Author</u>	<u>Recipient</u>
0782199- 0782200*	580916	Dow Hoyle, HR Torkelson, TR	
0782201 *	560504	Dow	
0782202- 0782220*	560409	Dow McCollister, DD Wolf, MA	

14156

Distributees

Martin, D
Scoles, G
Sunderland, WW
Wright, N

General Subject Matter

Esteron 245 type formulation
(M-631) (Data sheet of properties,
health hazards and precautions for
safe handling of materials)

M-631 (Esteron 245 type for-
mulation) (T2.30-67-1), safety
data sheet

Allinson, RL
Beshgetoor, AW
Boundy, RH
Britton, EC
Colby, RW
Dow
Elshere, D
Gay, HH
Greene, LM
Hart, A
Kagy, JF
Kelly, J
Killian, DJ
Luce, EN
Lynn, GE
MacCutcheon, SM
Sunderland, WW
Wright, N

Results of range finding toxicolo-
gical tests on 2 formulations of
Reddon (M-640 and M-713)

<u>Dow Number</u>	<u>Date</u>	<u>Author</u>	<u>Recipient</u>
0782285- 0782306*	560503	Dow Lockwood, D McCollister, DD Torkelson, TR	

0782379- 0782393*	560702	Dow Lockwood, D McCollister, DD Olson, KJ	
----------------------	--------	--	--

14157

Distributees

Allinson, RL
 Beshgetoor, AW
 Boundy, RH
 Britton, EC
 Coulter, LL
 Dow
 Elshere, D
 Gay, HH
 Greene, LM
 Hart, A
 Killian, DJ
 Luce, EN
 MacCutcheon, SM
 Martin, D
 Scoles, G
 Sunderland, WW
 Wright, N

Allinson, RL
 Alquist, FN
 Barrons, KC
 Beshgetoor, AW
 Boundy, RH
 Britton, EC
 Colby, RW
 Dow
 Elshere, D
 Gay, HH
 Greene, LM
 Hart, A
 Kagy, JF
 Kelly, JA
 Killian, DJ

General Subject Matter

Results of range finding toxicological tests on M-6977 (Esteron Brush Killer type formulation (T2.30-66)

Results of range finding toxicological tests on Esteron Brush Killer OS (M-7726) (T2.30-71-1)

<u>Dow Number</u>	<u>Date</u>	<u>Author</u>	<u>Recipient</u>
0786942- 0786954*	000000	Dow	
0786955- 0786975*	000000	Dow	
0787000- 0787030*	680122	DeLong, HC	
0890394- 0980398*	000000	Dow	
0970330- 0970343*	700901	Blair, EH Dow	
0979033- 0979047*	691215	Bailey, RE	

14158

Pa
Pa

Distributees

Luce, EN
Lynn, GE
MacCutcheon, SM
Sunderland, WW
Wright, N

General Subject Matter

24D Esters-process information^{on}

Direct Ester process

Acid Ester operating instructions¹⁰
489 Bldg

General process description, 241²⁴¹
process

Chemistry of the Dow agricultural^{ure}
department

Blair, EH
Fernandez, JB
Johnson, JE
Moss, RD
Chamberlain, LC
Peterson, LI
Strojny, EJ
Tobey, SW
Hillary, BB
Rehurg, CE
Moyer, JR
Pumpelly, CT

Miniplant preparation of 2,4-D^a
2,4,5-T

<u>Dow Number</u>	<u>Date</u>	<u>Author</u>	<u>Recipient</u>
0979188- 0979210*	680000	Dow	
0979411- 0979416*	670828	Seidel, EM	
0979429- 0979430*	670906	Tacy, W	
0979686 *	670915	Seidel, EM	
0979732 *	670914	EMS	
0979733 *	670914	EMS WHH	
0979734 *	670914	EMS	
0979735 *	670914	EMS	

1
2
3
4
5
6

Distributees

General Subject Matter

Poffenberger, N
Haberstroh, WH
Deline, DD
Ayers, JE
Woodward, RE
Jones, GD
Blue, RD
Vanwestenburg, JA

Historical overview of chloracne experiences, includes process information

Agent Orange related costs and capacity

Process flow chart with recommended raw material unit ratios for Orange

Flow chart with costs and capacity for making Agent Orange

Trichlorophenol plant unit ratios

Dichlorophenol plant unit ratios

Chloroacetic acid plant unit ratios

Crystalline chloracetate acid unit ratios

<u>Dow Number</u>	<u>Date</u>	<u>Author</u>	<u>Recipient</u>
0979736 *	670914	EMS	
0979737 *	670914	EMS	
0979738 *	670914	EMS	
0979883- 0979884*	000000	Dow	
0979885 *	670311	Delisle, NG	
0979886- 0979887*	670829	Delisle, NG	
0979927- 0979934*	670411	Delisle, NG	
0979935 *	670427	Delisle, NG	
0979989- 0979994*	670417	Delisle, NG EMS	
0980024 *	670130	Jossi, JA	

1490

Distributees

General Subject Matter

Butyl chloroacetate plant unit ratios

Butyl ester 24D plant unit ratios

Butyl ester 245T plant unit ratios

Process flow chart indicating costs and capacity for Agent Orange production

Process flow chart indicating costs and capacity for Agent Orange production

Process flow chart indicating costs and capacity for Agent Orange production

Agent Orange production flow charts showing capacities

Chart showing capacity and costs for Agent Orange production

Flow sheets on 24D butyl ester acid

Orange 24Dichlorophenol block flow sheet

<u>Dow Number</u>	<u>Date</u>	<u>Author</u>	<u>Recipient</u>
0980085- 0980086*	661227	Gilbert, PW	
0980089 *	670130	EMS GTG	
0980178- 0980188	690307	Wen, RY	

0980320- 0980341*	660121	Amstutz, FC Highhill, CA Kosinski, JE DeLong, HC	
----------------------	--------	---	--

0980394- 0980398*	000000	Dow	
----------------------	--------	-----	--

0980971 *	000000	Dow	
-----------	--------	-----	--

Distributees

Look, AT
Sheetz, DP
Pumpelly, CT
Hennis, HE
Thompson, CJ
DeMott, DN
McGee, TW
Fernandez, JB
Lindy, L
Molehouse, D
Wisner, R
Wen, RY
DeLine, DD
Woodward, RE
Seidel, EM
Thurston, DH
Kellom, DB

General Subject Matter

245-Trichlorophenol block flow
chart

Ester production product Orange

Manufacture of 24D, 245T and
2,4,5-Trichlorophenoxypropionic
Acid: a literature survey

Dow customer - Weed killer for-
mulating plant

General process description, 24D
process

Mexico Phenoxy Ester process flow
chart

<u>Dow Number</u>	<u>Date</u>	<u>Author</u>	<u>Recipient</u>
0980994- 0981006*	750000	Dow	
0981012- 0981024*	691030	Dow	
0981025- 0981030*	000000	Dow	
0981031- 0981036*	691022	Haberstroh, WH	
0981366- 0981372	620227	Fernandez, JB	
0981474 *	711209	Hoff, RC Williams, CS Chase, FI Woodward, R Blosser, KC Scoles, GW 2 Illegible	
0981484	690227	White, LC DeLong, HC Chase, FI Loucks, MF Hawley, HM	

14162

Distributees

Doser, RC
Prescott, RF
Sculati, JJ
Hillary, BB
Johnson, D
Highhill, CA

Hoff, RC
Williams, CJ
Chase, FI
Woodward, R.
Blosser, KC
Scoles, GW
2 Illegible

White, LC
DeLong, HC
Chase, FI
Loucks, MF
Scheddel, RT

General Subject Matter

Cost data, process information

Technology review

Flow chart for 2,4-D processes

Projected book costs to 1977
and 2,4-D) 1969 accomplishments
and goals, 1970 G & P

The preparation of Esters of
Phenoxy Acetic Acid

Brush killer, LV4T, M3508,
duct specification, 12662

24D, Butyl-Isopropyl Ester,
50-50 mix

<u>Dow Number</u>	<u>Date</u>	<u>Author</u>	<u>Recipient</u>
		Sheldon, HW Talcott, AT Holdeman, GE	
0981538 *	701005	Chase, FI Loucks, MF Tait, SR Woodward, RE Holdeman, GE Hawley, AM Seymour, KG Talcott, AT MacDonald, LA	
0981590	690227	Williams, JL Loucks, MF Stobby, GE White, LC Hawley, HM Sheldon, HW Talcott, AT Holdeman, GE	
0981591	671011	Hawley, HM Sculati, JJ White, LC	
0981596	690227	Williams, JL Loucks, MF	

Distributees

Sheldon, HW
Talcott, AT
Holdeman, GE
Reigler, PF
McCoy, WJ

Chase, FI
Loucks, MF
Tait, JR
Woodward, RE
Holdeman, GE
Hawley, HM
Seymour, KG
Talcott, AT
MacDonald, LA

Williams, JL
Loucks, MF
Stobby, GE
White, LC
Hawley, HM
Sheldon, HW
Talcott, AT
Holdeman, GE
Reigler, PF
Scheddel, RT

General Subject Matter

Esteron Ten-Ten, M3503, 2, v
only

245T - product specification
P87523

245T - raw material specification

Williams, JL
Loucks, MF

245T - product specification
P87523

<u>Dow Number</u>	<u>Date</u>	<u>Author</u>	<u>Recipient</u>
		Stobby, GE White, LC Hawley, HM Sheldon, HW Talcott, AT Holdeman, GE	
0981597	671011	White, LC Sculati, JJ Hawley, HM	
0981617- 0981620	680207	Kubiak, CJ	
0981895 *	690227	VanHorn, R	
0981896	671011	White, LC Sculati, JJ Hawley, HM	
0981899	671011	White, LC Sculati, JJ Hawley, HM	
0981900	690227	Williams, JL Loucks, MF Stobby, GE White, LC Hawley, HM Sheldon, HW Talcott, AT	

14364

Distributees

Stobby, GE
White, LC
Hawley, HM
Sheldon, HW
Talcott, AT
Holdeman, GE
Reigler, PF
Scheddel, RT

General Subject Matter See

245T - raw material spec^{Dec 4}

245T - Butyl Esters - anal^{anal}
method - 87554A

M-3393 - 2nd revision

245T - raw material spec^{spec}

245T - raw material spec^{spec}

Williams, JL
Loucks, MF
Stobby, GE
White, LC
Hawley, HM
Sheldon, HW
Talcott, AT

245T - product specification^{spec}

<u>Dow Number</u>	<u>Date</u>	<u>Author</u>	<u>Recipient</u>
		Holdeman, GE	
0981901	710316	Gill, HH Reigler, PF Loucks, MF Tait, SR Chase, FI Woodward, RE Hawley, HM Hoff, RC Talcott, AT MacDonald, L Holdeman, GE	
1119499- 1119500	670317	DeLong, HC White, LC Hawley, HM	
1119595- 1119599*	650315	Anderson, RE Delisle, NG	

14165

Distributees

Holdeman, GE
Reigler, PF
Scheddel, RT
McCoy, WT

Gill, HH
Reigler, PF
Loucks, MF
Tait, SR
Chase, FI
Woodward, RE
Hawley, HM
Hoff, RC
Talcott, AT
MacDonald, L
Holdeman, GE

Coulter, KE
Graves, HE
Wolf, RR
Goergen, GG
Lueck, A
Dylewski, S
Trapp, W
Sauers, R
Poffenberger, N
Hutchenreuther, N
Wappenhensch, CA
Morello, VS
Wehn, WR

General Subject Matter

245T, Butyl Esters production
specification

N-Butyl 2,4,5-Trichlorophenoxy-
acetate raw material specifica-
tion

Trichlorophenol plant scope of
project

<u>Dow Number</u>	<u>Date</u>	<u>Author</u>	<u>Recipient</u>
1119943- 1119944*	670420	Dow	
1119947- 1119952*	670417	Dow	Nummy, WR
1119953- 1119960*	670410	Dow	
1119961- 1119968*	670419	Dow	
1119969 *	000000	Dow	
1119990- 1119991*	660614	McCoy, WJ	Bryant, CA

14166

Distributees

Staehling, EC
Kennett, WW
Putnam, MS

Pletcher, DE
Bosscher, H
Timm, WC
Coulter, KE
Tacey, WJ
Hensley, EF
Gunkler, AA
Kennett, WW
Deline, DD
Goergen, GG
Carlson, RG
Bender, SL
Putnam, MS

Nielsen, WH
Staehling, EC
Putnam, MS
Vanarsdale, JD

Van Arsdale, JD
Gill, WM
Hanson, KY

General Subject Matter

Agent Orange proposal listing
capacity of non-herbicide product

Orange information for development
of reply to H.G. Fredricks letter
dated 670331

Costs and capacity information
about Agent Orange

Costs, capacity and technical
information about the proposed
production of Agent Orange

Tetrachlorobenzene capacity
information

245T capabilities

<u>Dow Number</u>	<u>Date</u>	<u>Author</u>	<u>Recipient</u>
1120090- 1120092*	671220	Heath, WO	Koster, W
1124150- 1124160*	650302	Cornell, JL Anderson, RE	

1127397- 1127398	641208	Johnson, D	
---------------------	--------	------------	--

Distributees

General Subject Matter

Coulter, KE
 Dylewski, SW
 Goergen, GG
 Haberstroh, WH
 Lueck, AF
 Poffenberger, N
 Sauers, RC
 Trapp, WB
 Wappenhensch, O
 West, KD
 Wehn, WE
 Widiger, AH
 Graves, HE
 Wolf, RR
 Delisle, NG
 Hutchenreuther, C
 Morello, VS
 Beyer, DG
 Harris, JS

Project conference 14 million
 pounds per year.
 Trichlorophenol plant
 Job 50175

Denisik, R
 Hay, JM
 Hillary, BB
 LeSueur, RW
 Maunder, WG
 Morrison, JA
 Mulholland, RS
 Smart, JL

Condensation of Butyl
 Dichloroacetate with Sodium
 24-Dichlorophenate

<u>Dow Number</u>	<u>Date</u>	<u>Author</u>	<u>Recipient</u>
-------------------	-------------	---------------	------------------

1232117- 1232129*	570806	Dow McCollister, DD Wolf, MA	
----------------------	--------	------------------------------------	--

1232130- 1232143*	600331	Dow Olson, KJ Oyen, F	
----------------------	--------	-----------------------------	--

1232355- 1232378*	571122	Dow McCollister, DD	
----------------------	--------	------------------------	--

14168

Distributees

Smy, KG
Sundberg, FA
Veatch, RH
Young, DM

Barrons, KC
Boundy, RH
Colby, RW
Dow
Elshere, D
Gay, HH
Greene, LM
Hammer, OH
Hart, A
Hymas, TA
Jones, GD
Kagy, JF
Killian, DJ
Luce, EN
Lynn, GE
McIntyre, HH
Scoles, G
Stenger, VA
Tisdale, WL
Wright, N

Allinson, RL
Allison, WE

General Subject Matter

Results of range find-
gical tests on M1086 ^{admg.}
24D alkyl amine formul (A
ulatt

Results of range find-
gical tests on agricul ^{ing.}
cal formulation M1639 ^{tura.}
Killer type) (Vec

Results of range find-
gical tests on Brush ^{Ktoxic}
or X,

Dow Number

Date

Author

Recipient

Olson, KJ

1284728-
1284733

650622

Tiffany, PA
Gill, HH

1288153-
1288155*

700130

Ridner, JM
Williams, CS
Loucks, MF
Wolf, MA
Seymour, KG
Bjork, C

14169

Distributees

Athay, RM
Beshgetoor, AW
Boundy, RH
Colby, RW
Dosser, RC
Dow
Elshere, D
Gay, HH
Greene, LM
Hart, A
Hymas, TA
Jones, GD
Kilian, DJ
Luce, EN
Martin, D
McIntyre, HH
Mussell, DR
Perkins, RP
Tisdale, WL
White, LC
Wright, N

General Subject Matter

Weed Killer X and Brush K^e

h' Killer

Analytical method for detection
of TCDD in 2,4,5-T by GLC

ation

Tordon 225 - Release to S

<u>Dow Number</u>	<u>Date</u>	<u>Author</u>	<u>Recipient</u>
1298300 *	640921	Dow EMS	
1298301- 1298302*	000000	Dow	
1298303 *	000000	Dow	
1298304- 1298305*	681030	Dow Erickson, AC	
1298306 *	741202	Dow JNJ	
1298307- 1298309*	730315	Dow	
1298310- 1298312*	490720	Dow BFW WJC Luce, EN Waling, BF	Dow Schrauf, B
1298313- 1298315*	680826	Dow JJ RH Stobby, G	
1298316- 1298320*	731128	Dow Messing, S	Dow Hart, JP

14171

Distributees

General Subject Matter

Dowanol Ester of 245T (Physical properties data sheet)

Silvex (Physical properties data sheet)

24D NA salt monohydrate (Physical properties data sheet)

245-Trichlorophenol (Physical properties data sheet)

245T (Physical properties data sheet)

Freezing point molten 24D H₂O

24D report sheet (Main lab No. SSR 146-851)

Colby, A
Dow
Holdeman, GE
Kiley, L
Shrader, S
Wengert, GB

Herbicides, vapor pressure data,
(Analytical laboratories report,
AL 79-202)

Arestin,
Bleiweiss, J

24D acid ester process
solubilities

<u>Dow Number</u>	<u>Date</u>	<u>Author</u>	<u>Recipient</u>
-------------------	-------------	---------------	------------------

1298321-
1298322*

670327

Dow
Stull, DF
Walker, L

1298323-
1298326*

691022

Dow
Sinke, G
Stull, DF

1298328 *

710917

Dow
Gilbert, M
Hawley, M
Holdeman, E
Loucks, W
MacDonald, H
Reigler, F
Talcott, F

1298329 *

720615

Blosser, K
Chase, FT

1298329

Dis

General Subject Matter

Chase -
Dhing
Dow
Haber
Jones .
Lafey
Mani
Martr
Miller
Mint .
More
Yeager

Dow
Ferre

Thermal data for process steps
synthesis of 24D (HL-304)

Holmes

Heat of reaction of dimethyl
and 24D (HL-527)

Dow
Gilb
Hawle
Hold
Louche
MacD
Reig
Talc
Tree

2,4-Dichlorophenol, technical
product specification)

Bloss
Chase

35T propylene glycol butyl
esters (Product specification)

Distributees

Dow
Flannery, RF
Fraser, JM
Gill, HH
Hoff, RC
Talcott, AT
Woodward, R

General Subject Matter

245T propylene glycol butyrate
esters (Sales specification)

Chase, FI
Dow
Hawley, HM
Holdeman, GE
Loucks, MF
MacDonald, LA
Reigler, PF
Seymour, KG
Tait, SR
Talcott, AT
Woodward, RE

Formula 40 Weed killer M-3
(Product specification)

Blosser, KC
Chase, FI
Dow
Flannery, RF
Fraser, JM
Hoff, RC
Holdeman, GE
Seymour, KG
Talcott, AT
Woodward, RE

DMA-6 unsequestered N-2255⁵⁵
(Product specification)

<u>Dow Number</u>	<u>Date</u>	<u>Author</u>	<u>Recipient</u>
1298333 *	710601	Chase, FI Dow Hawley, HM Holdeman, GE Loucks, MF MacDonald, LA Reigler, PF Seymour, KG Tait, SR Talcott, AT Woodward, RE	
1298334 *	000000	Dow	
1298335 *	000000	Dow	
1298336 *	000000	Dow	
1298337 *	000000	Dow	
1298338 *	000000	Dow	

Distributees

Chase, FI
Dow
Hawley, HM
Holdeman, GE
Loucks, MF
MacDonald, LA
Reigler, PF
Seymour, KG
Tait, SR
Talcott, AT
Woodward, RE

General Subject Matter

DMA-6 sequestered M-3637 (Prop)
specification

Propylene glycol butyl ether,
esters of Silvex (Physical
properties)

Isooctyl esters of 245T (Physical
properties)

Low volatile esters of 245T, [C]
sales grade 245T, propylene,
(C₃H₆O to C₉H₁₈O₃) butyl ether,
esters (Physical properties)

Isooctyl esters of 24D (Physical
properties)

N-Butyl ester of 24D (Physical
properties)

<u>Dow Number</u>	<u>Date</u>	<u>Author</u>	<u>Recipient</u>
1298339 *	000000	Dow	
1298340 *	710316	Dow	
1298341 *	720117	Blosser, KC Chase, FI Dow Flannery, RF Gill, HH Hoff, RC Holdeman, GE Scoles, GW Talcott, AT Woodward, RE	
1298342 *	000000	Dow	
1298343- 1298344*	611017	Dow Hoyle, HR Olson, KJ	
1298345 *	000000	Dow	
1298346- 1298347*	570927	Dow Hoyle, HR Peterson, JE	

14175

Distributees

Blosser, KC
Chase, FI
Dow
Flannery, RF
Gill, HH
Hoff, RC
Holdeman, GE
Scoles, GW
Talcott, AT
Woodward, RE

General Subject Matter

24D Butyl esters (Physical properties)

24D propylene glycol butyl ester (Product specification)

24D (Product specification)

Tordon 101 mixture (Data sheet, properties, health hazards and precautions for safe handling of materials)

Dowanol PIB mix ester of 24D (Data sheet of properties, health hazards and precautions for safe handling of materials)

245-Trichlorophenol (Data sheet, properties, health hazards and precautions for safe handling of materials)

24D (Data sheet of properties, health hazards and precautions for safe handling of materials)

<u>Dow Number</u>	<u>Date</u>	<u>Author</u>	<u>Recipient</u>
1298348- 1298349*	000000	Dow	
1298350 *	741202	Bethke Boust, HF Dersnah Dow Jones, W	
1298351 *	750109	Dersnah Dow Fey, K	
1298352 *	700801	Abegg, CF Dow Harris, W Higgins, HS	
1298353 *	741211	Wozniak, LJ	
1298354 *	750123	Dersnah Dow Jones, JN, Jr.	
1298355 *	750123	Dersnah Dow Jones, JN, Jr.	
1298356 *	750123	Dersnah Dow Jones, JN, Jr.	
1298357- 1298360*	741204	Dow Jones, J	

Distributees

General Subject Matter

Consequences of overexposure
chemicals in 489 building

Bis-(24D) (Reactive chemical
hazard data)

Ethylene Glycol W/ 24D active
molten 24D process (Reactive
chemical hazard data)

24D (Reactive chemical hazard
data)

DE waste treatment plant
Waste treatment, butyl ester
24D, distillation feed (Reactive
chemical hazard data)

Waste treatment, butyl ester
24D solvent (Reactive chemical
hazard data)

Waste treatment of butyl ester
24D tars (Reactive chemical
hazard data)

Alcohols, and molecular weight
data summary

<u>Dow Number</u>	<u>Date</u>	<u>Author</u>	<u>Recipient</u>
1298361- 1298362*	710526	Boggs, GU Dow	Dow Dunlap, R Haberstroh, W Higgins, HS Theis, JM
1298363- 1298369*	730000	Dow Southwick, L	
1298603- 1298605*	000000	Dow	
1298606- 1298607*	650119	Dow Hoyle, HR Olson, KJ Oyen, F	
1298608- 1298609*	650125	Dow Hoyle, HR Olson, KJ	
1298610- 1298611*	740300	Dow	
1298612- 1298614*	780601	Dow	
1298615- 1298617*	780601	Dow	

1477

Distributees

General Subject Matter

Direct ester "T" waste:
489 (Analytical laboratory
report AL28-830)

Kuron Silvex herbicide
to gain acceptance (Inc
mgmt 5(2), 18-24)

Properties and hazards
points of various products

Tordon 50D formulation
of properties, health
precautions for safe handling
materials) (T2.MD-277)

Tordon 101 mixture (Data
properties, health hazards
precautions for safe handling
materials) (T2.MD-243)

Tordon 101 mixture weed
killer (Material safety
sheet) (Form 336-158-70)

Tordon (R) 101 mixture
brush killer (Material
sheet)

Tordon (R) 101 mixture
brush killer private label
(Material safety data)

<u>Dow Number</u>	<u>Date</u>	<u>Author</u>	<u>Recipient</u>
1298618- 1298620*	780601	Dow	
1298621- 1298623*	780601	Dow	
1298624- 1298625*	660412	Dow Hoyle, HR McCollister, DD Olson, KJ	
1298626- 1298627*	740300	Dow	
1298628- 1298629*	660201	Dow Hoyle, HR McCollister, DD Olson, KJ	
1298630- 1298632*	780601	Dow	
1298633- 1298634*	671031	Dow Hoyle, HR Norris, JM Olson, KJ	
1298635- 1298636*	760800	Dow	
1298637- 1298638*	780601	Dow	

14178

Distributees

General Subject Matter

Tordon (R) 101R forestry H^h he^{et}
(material safety data sheet)

Tordon (R) 155 mixture brush^{rus}
killer (Material safety data^{dat}
sheet)

1 Tordon 155 (Data sheet of^{of}
properties, health hazards and^{and}
cautions for safe handling^{og}
materials) (T2.MO-2993-1)

Tordon 155 mixture brush k^{ki}
(Material safety data sheet^{et})

Tordon 202 mixture (Data s^{she}
properties, health hazards^{s a}
precautions for safe handl^{lin}
materials) (T2.MO-2861-1)

Tordon (R) 202C mixture he^{erb}
(Material safety data sheet^{et})

Tordon 212 (Data sheet of^{mix}
ties, health hazards and^{pre}
cautions for safe handling^{og}
materials) (T2.MO-3200-1)

Tordon 212 mixture herbici^{ide}
(Material safety data sheet^{et})
336-161-76)

Tordon (R) 212 mixture her^{erb}
(Material safety data sheet^{et})

<u>Dow Number</u>	<u>Date</u>	<u>Author</u>	<u>Recipient</u>
1298639- 1298640*	771001	Dow	
1298641- 1298643*	780601	Dow	
1298644- 1298651*	750811	Dow Gutenkunst, V Porter, DF Skelly, NE	
1298652- 1298653*	700514	Dow Hoyle, HR Norris, JM	
1298654- 1298655*	750600	Dow	
1298656- 1298658*	780601	Dow	
1298659- 1298660*	710422	Dow Hoyle, HR Norris, JM	
1298661- 1298662*	710917	Dow Hoyle, HR Wolf, MA	

141
6

DistributeesGeneral Subject Matter

Tordon (R) 225 herbicide (Material safety data sheet)

Tordon (R) 225E mixture herbicide (Material safety data sheet)

Analytical method Tordon 225 mixture herbicide by liquid chromatography (Method 87141)

Tordon 472 herbicide (Data sheet of properties, health hazards and precautions for safe handling of materials) (BC12.MO-3427-17-1)

Tordon 472 herbicide (Material safety data sheet) (Form 336-166-75)

Tordon (R) 472 weed killer (Material safety data sheet)

DMA4 (Data sheet of properties, health hazards and precautions for safe handling of materials) (NB T2.MO-3538-1)

245T Dowanol 97B ester (Data sheet of properties, health hazards and precautions for safe handling of materials) (K-7856 NB 75-114-76)

<u>Dow Number</u>	<u>Date</u>	<u>Author</u>	<u>Recipient</u>
1298663- 1298664*	750310	Dow Silverstein, LG Wolf, MA	
1298665- 1298666*	760823	Dow Langner, RR Wroblewski, D	
1298667 *	000000	Dow Lamott, S	Rafos, G
1298668- 1298670*	760800	Dow	
1298671- 1298672*	710517	Dow Hoyle, HR Wolf, MA	
1298673- 1298674*	650125	Dow Hoyle, HR Olson, KJ	
1298675- 1298676*	690909	Dow Hoyle, HR Norris, JM	
1298677- 1298678*	650119	Dow Hoyle, HR Olson, KJ Oyen, F	

1480

Distributees

General Subject Matter

24D Trisopropanolamine salt sheet of properties, health hazards and precautions for safe handling of materials) (K-8886)

DMA-6 (Data sheet of properties, health hazards and precautions for safe handling of materials) (M-3637)

Cover memo for data sheets

Tordon 212 mixture herbicide (Material safety data sheet) (Form 336-161-76)

245T Dowanol 97B ester (Data sheet of properties, health hazards and precautions for safe handling of materials) (K-7856 NBT25.14-106)

Tordon 101 mixture (Data sheet of properties, health hazards and precautions for safe handling of materials) (T2.MO-2439-1)

Tordon 472 herbicide (Data sheet of properties, health hazards and precautions for safe handling of materials) (BC T2.MO-3472-1)

Tordon 50D formulation (Data sheet of properties, health hazards and precautions for safe handling of materials) (BC T2.MO-2777X-1)

<u>Dow Number</u>	<u>Date</u>	<u>Author</u>	<u>Recipient</u>
1298679- 1298680*	660412	Dow Hoyle, HR McCollister, DD Olson, KJ	
1298681- 1298682*	751009	Dow Hoyle, HR Yakel, HO	
1298683- 1298684*	700319	Dow Hoyle, HR Norris, JM	
1298685 *	750711	Dow Krumel, KL	
1298686- 1298689*	750711	Dersnah, H Dow	Dow Krumel, KL
1298690 *	711116	Brown, M Dow JL Robb, J	
1298691- 1298692*	000000	Dow	

1298693
1298694
1298695
1298696
1298697
1298698
1298699
1298700

Distributees

General Subject Matter

Tordon 155 (Data sheet of properties, health hazards and precautions for safe handling of materials) (T2.MO-2993-1)

Tordon 212 mixture herbicide (Data sheet of properties, health hazards and precautions for safe handling of materials) (HET M-3179-(2))

Tordon 212 mixture herbicide (Data sheet of properties, health hazards and precautions for safe handling of materials) (T2.MO-3179-1)

24D (Reactive chemical hazard data)

Dust explosion properties of 24D acid (Analytical report)

DMA-6 (unsequestered) (Reactive chemical hazard data)

24D (Summary of chemical reactivity precautions and properties)

<u>Dow Number</u>	<u>Date</u>	<u>Author</u>	<u>Recipient</u>
1298693 *	741031	Dow Hebbourn, R Kerby, JE	
1298694- 1298695*	690716	Dow Dullap, RL Mandrell, ME	
1298696- 1298697*	690716	Dow Dunlap, RL Mandrell, ME	
1298698 *	750206	Bethke Dersnah Dow Holdeman, G Keeney, N Vanhorn, R	
1298699- 1298700*	691003	Dow Gilbert, PW Mandrell, ME	
1298701 *	710830	Dow CJR JRL RSS	
1298702- 1298703*	690716	Dow Dunlap, RL Mandrell, ME	

Distributees

General Subject Matter

24D PGBEE (Reactive chemical hazard data)

Tordon 212 mixture (Summary of chemical reactivity precautions and properties)

Tordon 101 mixture (Summary of chemical reactivity precautions and properties)

Tordon 101 R (Reactive chemical hazard data)

Tordon acid (Summary of chemical reactivity precautions and properties)

Tordon 225 (Reactive chemical hazard data)

Tordon 155 mixture (Summary of chemical reactivity precautions and properties)

<u>Dow Number</u>	<u>Date</u>	<u>Author</u>	<u>Recipient</u>
1298704- 1298714*	710125	Dow Prophet, H Stull, DR	
1298715 *	710801	Dersnah, H Dow McCarty, WM	
1298716- 1298717*	690627	Dow Gilbert, PW Mandrell, ME	
1298718- 1298719*	690718	Dow Gilbert, RW Mandrell, ME	
1298726 *	000000	Dow	
1298766 *	000000	Dow	
1299165- 1299169*	000000	Dow	
1299256- 1299265*	000000	Dow	
1299267- 1299270*	000000	Dow	
1339420- 1339423*	650810	Barrons, KC Lynn, GE	

14
03
63

Distributees

General Subject Matter

Studies of hazardous chemicals and their reactions, kinetics of chemical destruction by burning (NCT-5007)

Esteron 245 CONC (Reactive chemical hazard data)

Dowanol PIB esters of 245T
(Summary of chemical reactivity precautions and properties)

24D TIPA mix (Summary of chemical reactivity precautions and properties)

Chloro-Pyridines dept.

Block flow H₂O form. Tordon

Formulations, special formulations area

Tordon operations manual

TIPA and TIPA 2D storage and transfer from 489 building

Esteron TR2 (Release to Sales 12)

<u>Dow Number</u>	<u>Date</u>	<u>Author</u>	<u>Recipient</u>
		McCoy, WJ Southwick, L Wolf, MA Vanvalkenburg, W Sachs, SB Branaman, J Gill, WM DeLong, HC Matutz, H Davis, H Corbin, WL Johnson, J CEO DEP	
1341834- 1341853*	700422	Fauver, VA	MacDonald, LA

1410790- 1410792*	701217	Dow Gehring, PJ Norris, JM Williams, CS
----------------------	--------	--

14184

Distributees

General Subject Matter

Demott, DN
Hanners, HH
Martin, RA
Tree, RM
Deline, DD
Kennedy, TL
Robbins, LA
Plepys, RA
Stamand, VE
Clark, GA
Spencer, RA
Dylewski, SW
Bleiweiss, JC

High purity 245-trichlorophenol,
state of the art review

Barton, J
Blair, EH
Burgert, BE
Clegg, DH

Toxicological properties and
industrial handling hazards of
formulation M-3592 containing the
propylene glycol butyl ether ester

Dow Number

Date

Author

Recipient

1410793-
1410794*

701228

Dow
Hoyle, HR
Norris, JM

1410795-
1410798

701217

Dow
Norris, JM

1410799-
1410800*

701119

Bourne, JE
Dow

1410801-
1410802*

701228

Silverstein, EH

1410801-
1410802*

Distributees

General Subject Matter

Dow
 Edwards, H
 Frevel, LK
 Gordon, HL
 Goring, Ca
 Holder, BB
 Johnson, JE
 Killian, DJ
 Kimmel, CE
 Lloyd, BH
 MacCutcheon, SM
 McCollister, DD
 McIntyre, HH
 Morgan, RW
 Morse, D
 Pitchforth, L
 Robinson, VB
 Schwarz, BA
 Williams, CS

of 245T

M-3592 (Data sheet of properties,
 health hazards, and precautions
 for safe handling of materials)

Acute toxicological properties of
 Formulation M-3592 containing the
 propylene glycol butyl ester of
 245T

M-3592 (Acute oral toxicity)

M-3592 (Acute oral toxicity)

<u>Dow Number</u>	<u>Date</u>	<u>Author</u>	<u>Recipient</u>
1410803- 1410804*	701110	Silverstein, EG	
1410805 *	701106	Silverstein, EH	
1410806- 1410807*	701210	Silverstein, EH	
1410810- 1410811*	701210	Silverstein, EH	
1410812- 1410813*	701210	Silverstein, EH	
1410814- 1410815*	701217	Dow Gehring, PJ Norris, JM Williams, CS	

14186

Distributees

General Subject Matter

M-3592 (Eye irritation)

M-3592 (Primary skin irritation - patch test (household chemical))

M-3592 (Skin contact absorption)

M-3592 (Skin contact absorption)

M-3592 (Skin contact absorption)

Bergert, BE
Blair, EH
Clegg, DH
Dow
Frevel, LK
Gordon, HL
Goring, CA
Holder, BB
Johnson, JE
Kimmel, CE
Lloyd, BH
MacCutcheon, SM
McCollister, DD
McIntyre, HH
Morgan, RW
Morse, D
Pitchforth, L
Robinson, VB

Toxicological properties and industrial handling hazards of formulation M-3592 containing the propylene glycol butyl ether ester of 245T

<u>Dow Number</u>	<u>Date</u>	<u>Author</u>	<u>Recipient</u>
1410816- 1410817*	701217	Dow Hoyle, HR Norris, JM	
1410818- 1410821*	701217	Dow Norris, JM	
1410822- 1410823*	701119	Bourne, JE	
1410824- 1410825*	701228	Silverstein, EH	
1410826- 1410827*	701110	Silverstein, EH	
1410828 *	701106	Silverstein, EH	
1410829- 1410830*	701210	Silverstein, EH	
1410831- 1410832*	701210	Silverstein, EH	
1410833- 1410834*	701210	Silverstein, EH	

1410837

Distributees

General Subject Matter

Schwarz, AJ
Williams, CS

M-3592, (Data sheet of properties, health hazards and precautions for safe handling of materials)

Acute toxicological properties of formulation M-3592 containing the propylene glycol butyl ether ester of 245T

M-3592 (Acute oral toxicity).

M-3592 (Acute oral toxicity)

M-3592 (Eye irritation)

M-3592 (Primary skin irritation - patch test (household chemical))

M-3592 (Skin contact absorption)

M-3592 (Skin contact absorption)

M-3592 (Skin contact absorption)

<u>Dow Number</u>	<u>Date</u>	<u>Author</u>	<u>Recipient</u>
1410835- 1410836*	701210	Silverstein, EH	
1410880- 1410902*	630225	Dow Olson, KJ Oyen, F Scoles, G	

1410903- 1410909*	531030	Dreyer, F	
----------------------	--------	-----------	--

14188

Distributees

General Subject Matter

M-3592 (Skin contact absorption)

Barrons, KC
Boundy, RH
Brown, R
Colby, RW
Dow
Elshere, D
Falkenstein, WJ
Gay, HH
Greene, LM
Hart, A
Jones, GD
Kagy, JF
Killian, DJ
Luce, EN
Lynn, GE
McIntyre, HH
Mullison, WR
Nash, HA
Norton, TR
Scoles, G
Shrader, SA
Wilson, AW
Wright, N

Results of range finding toxicological tests on agricultural chemical formulation M-2422 containing 91 percent Dowanol PIB ester of 245T (Biochemical Research Laboratory)

Adams, EM
Allen, WW
Allinson, RL
Alquist, FN
Barrons, KC
Beshgetoor, AW

Results of range finding toxicological tests on Dow Brush Killer T

<u>Dow Number</u>	<u>Date</u>	<u>Author</u>	<u>Recipient</u>
1428610- 1428611*	611228	Dow Winston, AW, Jr.	
1431259- 1431263*	000000	Ivon Watkins	
1436354- 1436364*	000000		
1437060- 1437102*	660622	Graves, HH DRE	

14368

Distributees

General Subject Matter

Boundy, RH
 Britton, EC
 Davidson, JH
 Dow
 Dutton, WC
 Gay, HH
 Greene, LM
 Kagy, JF
 Luce, EN
 Lynn, GE
 MacCutcheon, SM
 Prescott, RF
 Sunderland, WW
 White, L
 Wright, P

Fish toxicity of some herbicide
 formulations and their ingre-
 dients

IWD 245T Esters

Compounds showing toxicity to fish
 at 5 MG/L or less

Goergen, GG
 Lueck, A
 Sauers, RC
 Widiger, AH
 Tuttle, FC
 Poffenberger, N
 Wolf, RR

Pilot Plant Study of the Caustic
 Hydrolysis of 1245 -
 Tetrachlorobenzene CF-1043-2

<u>Dow Number</u>	<u>Date</u>	<u>Author</u>	<u>Recipient</u>
1443925- 1443928*	701217	Dow Norris, JM	
1443929- 1443932*	700000	Bourne, JE Dow Silverstein, EH	
1443933- 1443934*	761110	Dow Silverstein, EH	
1443935 *	701106	Dow Silverstein, EH	
1443936- 1443941*	701210	Dow Silverstein, EH	
1511476 *	800606	K&E Wine, LM	Braun, WH Dow
1548662- 1548663*	610124	Strand, D HRH LGS	
1549497- 1549536*	501214	Delisle, NG Strand, D LGS Prior, CA Teal, JL Brittos, WW Arnold, JB DeLong, HC Pott, S Highhill, CA Brown, M	

14191

Distributees

General Subject Matter

Acute toxicological properties of
formulation M-3592T

M-3592 (Acute oral toxicity)

M-3592 (Eye irritation)

Primary skin irritation patch test
(household chemical) (M-3592)

M-3592 skin contact absorption

Dow
Tucker, M

Oil formulations

24D process

<u>Dow Number</u>	<u>Date</u>	<u>Author</u>	<u>Recipient</u>
1549641- 1549693*	700410	Axe, FD Hoyle, HR	

1550150 *	710202	Olson, RD Axe, FE Hoyle, HR	
-----------	--------	-----------------------------------	--

1550401- 1550407*	690930	Mutcher, JE	Tree, RM Plepys, RA Bailey, CE Kramer, CG Morse, DB Stehl, RH Seidel, EM Rowe, VK Snyder, RE Axe, FD
----------------------	--------	-------------	---

1550424- 1550441*	650716	Dow	
----------------------	--------	-----	--

117192

Distributees

Lynn, GE
Deline, DD
Schmidtke, DJ
Hodson, RE
Miller, DE
Kramer, CG
Holder, BB
Morse, DB
Rowe, VK
Soule, RD

Murray, N
Deline, DD
Tree, RM
Bailey, CZ
Seidel, EM
Snyder, RE
Holder, BB
Silverstein, LG

General Subject Matter

Industrial hygiene survey of 245T

Summary of environmental conditions in dowicides plant

Dowicide plant environmental control task force minutes

Dowicides - industrial hygiene job analysis

<u>Dow Number</u>	<u>Date</u>	<u>Author</u>	<u>Recipient</u>
1550444	000000	Dow	
1550445	580807	Bradford, R	
1550446	580805	Bradford, R	
1550447	580808	Bradford, R	
1550448	580806	Bradford, R	
1550449	581015	Synder, RE	
1550455	651007	Krohn, L	
1550456	651007	Krohn, L	
1550457	651007	Krohn, L	
1550458	651007	Krohn, L	
1550459	651006	Krohn, L	
1550460	651007	Krohn, L	
1550464 *	000000	Dow	
1550550	580807	Bradford, R	
1550551	580807	Bradford, R	

14193

Distributees

General Subject Matter

Flowchart of production of Dowicides

Flowchart - Dowicide B

Flowchart - Dowicide P

Flowchart - Scrubber and Trap Phenol

Flowchart - Monochlorophenol crude production

Flowchart - Monochlorophenol

Flowchart - Dowicide 6

Flowchart - Dowicide 6

Flowchart - Orthochlorophenol

Flowchart - Dichlorophenol

Flowchart - Dowicide 2

Flowchart - Dowicide DPM

Schematic diagram of 265 Bldg. processes

Flowchart - Dowicide 1

Flowchart - Dowicide 2S

<u>Dow Number</u>	<u>Date</u>	<u>Author</u>	<u>Recipient</u>
1558517 *	671027	Fairey, BP	
1558517 *	670607	Chang, KY Fernandez, JB	
1558518- 1558518A*	790316	Krumel, KL Arnold, RF Howard, AC First, KE Owen, PW	

Distributees

General Subject Matter

Laboratory preparation of 24D

Laboratory preparation of 24D

High yield aqueous 24D process
a study of the modified Brazil
process.

Bumb, RR
Johnson, SR
Pruitt, ME
Ward, WH
Williams, CS
Maddox, JF
Owen, PW
May, VT
McGregor, SD
Williams, AJ
Tobey, SW
Bohnert, TJ
Morehouse, DS
Buzzelli, DT
Haberstroh, WH
Woodward, RE
Humbert, D
Westover, LB
Jewett, G
Kleidon, D
Fothergill, W
Valcore, D
Mendoza, C
Hormel, T
Kennedy, TL
Aerstin, FG
Manfrom, R
Schloemann, P

Dow Number

Date

Author

Recipient

1558519-
1558520

750101

Mintz, MJ
Brust, HF

14196

Distributees

General Subject Matter

Bleiweiss, J
Giebelhaus, L
Dasilva, AA

Blair, EH
Hein, ND
Karwal, JH
Leng, ML
Mintz, MJ
Moss, RD
Pruitt, ME
Sheetz, DP
Theis, JM
Brust, HF
Morehouse, DS
Dhingra, YR
Messing, SH
Aerstin, FG
Yeager, LM
Bleiweiss, JC
Kennedy, TL
Haberstroh, WH
McCoy, CE
Woodward, RE
Lafevor, DR
Skelly, NE
Robbins, LA
Little, DW
Kern, WG
Hoffman, RL
Werling, CL
Mirsky, MJ
Jones, WO

Thermal decomposition rate of
bis (24 dichlorophenyl)
acetal of glyoxylic acid (BIS
24D) present in 24D

Dow Number

Date

Author

Recipient

1558521-
1558522*

810204

Krumel, KL
Arnold, RF
McGregor, SD

1559777 *

671102

Seidel, EM

1559781-
1559786*

000000

T.A.G.

1559787-
1559788*

640625

Seidel, EM

Distributees

Swogger, KW
Chase, FI
Carlson, RG
Osborne, DW

Gledhill, JR
Sheetz, DP
McGregor, SD
May, VT
Muench, WC
Williams, A
Tobey, S.
Buzzelli, DT
Woodward, RE
Haberstroh, WH
Gorgacz, S
Hormel, T
Moser, J
Yocum, R
Downs, T
Veurink, G
Westover, W
Pierzinski, B
Dersnah, BE

General Subject Matter

The continuous preparation of
24D and 2-methly-4-chloro-
phenoxyacetic acid (MCPA)

245T process

Direct Ester reaction information
489 bldg. Dichlorophenol Dowanol

Material balance considerations

<u>Dow Number</u>	<u>Date</u>	<u>Author</u>	<u>Recipient</u>
1559789 *	640625	Seidel, EM	
1559790 *	640625	Seidel, EM	
1559791- 1559797*	640618	E.M.S.	
1559798- 1559799*	650118	E.M.S.	
1559800 *	650118	Seidel, EM	
1559801- 1559806*	000000	Dow	
1560178- 1560214*	681017	Seidel, EM Gilbert, PW Dunlap, RL	

Distributees

General Subject Matter

24D Ester (unit ratios)

245T Ester unit ratios material
balance

Utilities, DE

Utility requirements 489

Utility requirements 260 Bldg. -
Direct Ester

General process description
Direct Ester process

Technical report with information
about 24D and 245T processes,
costs, capacity and equipment

Seidel, EM
Gilbert, PW
Dunlap, RL
Bleiweiss, J
Chase, FI
Deline, DD
DeLong, HC
Jossi, JA
Rogers, JP
Schwark, GJ
Williams, JL
Woodward, RE
Fernandez, JB

<u>Dow Number</u>	<u>Date</u>	<u>Author</u>	<u>Recipient</u>
1560215- 1560237*	681017	Seidel, EM Gilbert, PW Dunlap, RL	

1560238- 1560241*	681111	Seidel, EM Gilbert, PW Dunlap, RL	
----------------------	--------	---	--

1560242- 1560265*	681111	Seidel, EM Gilbert, PW Dunlap, RL	
----------------------	--------	---	--

Distributees

Seidel, EM
Gilbert, PW
Dunlap, RL
Bleiweiss, J
Chase, FI
Deline, DD
DeLong, HC
Jossi, JA
Rogers, JP
Schwark, GJ
Williams, JL
Woodward, RE
Fernandez, JB

Seidel, EM
Gilbert, PW
Dunlap, RL
Bleiweiss, J
Chase, FI
Deline, DD
DeLong, HC
Jossi, JA
Rogers, JP
Schwark, GJ
Williams, JL
Woodward, RE
Fernandez, JB

Seidel, EM
Gilbert, PW
Dunlap, RL
Bleiweiss, J
Chase, FI

General Subject Matter

Technical report with information about 24D and 245T processes, costs, capacity, plant design and equipment

Technical report with information about 24D and 245T processes, capacity, plant design and equipment

Process information and operating procedures for 24D Esters

<u>Dow Number</u>	<u>Date</u>	<u>Author</u>	<u>Recipient</u>
1560266 *	670109	Johnson, RL Widiger, AH	
1560539 *	600324	DeLong, HC	
1560540 *	491200	Dow	
1560542 *	690722	McKnight, FW	
1560548 *	000000	Kosinski, JE	
1560549 *	000000	Kosinski, JE	
1560550 *	000000	Kosinski, JE	

Distributees

Deline, DD
DeLong, HC
Jossi, JA
Rogers, JP
Schwark, GJ
Williams, JL
Woodward, RE
Fernandez, JB

Johnson, RL
Widiger, AH
Bender, S
Bailey, C
Silverstein, L
Cobler, J
Haberstroh, WH
Sauers, R

General Subject Matter

Summary of laboratory research on
temperature control of processes
related to 24D and 245T formation

Safety precautions

24D Amine weed killer hazards and
precautions

Block flow diagram of Amine
formulations

Unit ratios Amine formulation

Cycle times formulating

Cycle times packaging

<u>Dow Number</u>	<u>Date</u>	<u>Author</u>	<u>Recipient</u>
1560714 *	510228		
1560951- 1561000*	680826	Fernandez, JB Seidel, M Brown, M Highhill, C	
1561307- 1561310*	670329	MS	
1561311 *	670118	Hartenstein	
1561312 *	670419		
1561343- 1561346*	670316	Hartenstein, P	Sculati, JJ
1561353- 1561375*	681114	Jassi, JA Seidel, EM Williams, JL	

Distributees

Hoff, RC
Bleiweiss, J
Beauchamp, R
Deline, DD
DeLong, H
Dosser, R
Schwark, J
Snodgrass, B
Woodward, D

Deline, DD
Kearney, JK
Delisle, NG

Chase, F
Jossi, JA
Bleiweiss, J
Haberstroh, W
Williams, L
Marshall, S
Rodgers, J
Schwark, G,
Seidel, M
Snodgrass, W

General Subject Matter

Raw material specification L2-0-3

Technology review phenoxy & Tor-
don formulations

245T process

245T process

245T material balance

245T centrifuge installation

245T, 245T Esters and for-
mulations of Esters technology
review

<u>Dow Number</u>	<u>Date</u>	<u>Author</u>	<u>Recipient</u>
1561376- 1561397*	681114	Seidel, EM Williams, JL Jossi, JA	
1561695- 1561698*	690417	Dow	
1561699- 1561700*	690413	Wyant, G Brown, M	Charlie
1561701 *	690709	CAH	
1561702 *	690319	Highhill, CA	Chase, FI
1561703- 1561705*	690417	Dow	

Distributees

General Subject Matter

Woodward, RE
Delisle, NG
Fernandez, JB
Deline, DD

Williams, L
Marshall, S
Rodgers, J
Schwark, G
Seidel, M
Snodgrass, W
Woodward, RE
Delisle, NG
Fernandez, JB
Deline, DD
Chase, F
Jossi, JA
Bleiweiss, J
Haberstroh, W

Silvex acid, Dowanol Ester of
Silvex and Isooctyl Ester of
Silvex technology review

Veon 245 process

Veon formulations

245T formulation Australia

24D products

Veon 245 process

<u>Dow Number</u>	<u>Date</u>	<u>Author</u>	<u>Recipient</u>
1561706- 1561707*	670700	Dow	
1562177- 1562199*	000000	Dow	
1562341- 1562397*	680711	Delise, NG Schmidtke, DJ Deline, DD	
1562343 *	681024	Delisle, NG	Bleiweiss, JC Pumpelly, CT Deline, DD Rogers, JP Fernandez, JB Schmidtke, DJ Goergen, GG Schwark, GJ Widiger, AH
1562365- 1562383	650000	Harris, JS West, KD Passmore, L Knopp, DO McClure Owens, B Anderson, RE Cornell, JL	

14203

Distributees

General Subject Matter

Esteron brush killer O.S., label &
production specification

Process descriptions

Fernandez, JB
Bleiweiss, JC
Goergen, GC
Haberstroh, WH
Pumpelly, CT
Rogers, JP
Schwark, GJ
Widiger, AH

245T technology review

Corrections for Trichlorophenol
technology review

Trichlorophenol plant

<u>Dow Number</u>	<u>Date</u>	<u>Author</u>	<u>Recipient</u>
1562386 *	661212	Johnson, RL	
1562694- 1562695*	000000	Dow	
1562696- 1562697*	000000	Dow	
1564233- 1564240	700209	Schmidtke, DJ	
1568450- 1568452*	641118	Widiger, AH Holmes, RD	Greiss, GA
1568511- 1568513*	640730	Holmes, R	Hoyle, HE
1568528 *	000000	Dow	
1568532 *	650813	Smith, FB	Goodchild, CD

14204

Distributees

General Subject Matter

Alcoholic caustic hydrolysis of
Tetrachlorobenzene

Block flow H₂O from Tordon

Tordon 10K pellets process

Fernandez, JB
Hanners, H
Tree, R
Fauver, V
DeMott, D
Stamend, V
McDonald, L
Haberstroh, W
Eigsti, D

Routes to higher purity
Trichlorophenol

Goergen, GG

199 building production of Sodium
245 Trichlorophenate

Manufacture of Trichlorophenol at
199 building

Notes on 245T manufacturing
process

Coulter, LL
Trapp, WB

Ivon Watkins Trichlorophenol know-
how

<u>Dow Number</u>	<u>Date</u>	<u>Author</u>	<u>Recipient</u>
1568533- 1568534*	650707	Trapp, WB	Merz, H
1568535- 1568537*	650128	Trapp, WB	Merz, H
1568549	000215	Trapp, WB	Doll, O
1568552 *	650401	Trapp, WB	Kooperman, P
1568553- 1568555	650621	Merz, H Deckers Tolkmith, H	Trapp, WB
1568556- 1568557	650312	Trapp, WB	Merz, H
1568558	650000	Dow	

14205

Distributees

General Subject Matter

Sinclair, JR
Cessna, OC
Visger, HC
Coon, ET
Walker, E
Farnum, JH

Coon, ET
Amos, JL
Koopman, R
Sinclair, J
Coulter, LL
Gill, HH

Griess, Ga
Dylewski, SW
Silverstein, L

Grote, M
Amos, L
Silverstein, L
Sinclair, JR

Analytical methods to determine
TCDD in Phenols CTTL

Summary of phone conversation
between Dow employees

245T manufacturing processing
contract CTTL

Contract concerning Chloracne

Gas Chromatography analyses CTTL

Analyses of NA Trichlorophenate
Solution and Anisole Oil CTTL

GLC analysis of your
245-Trichlorophenate Solution

<u>Dow Number</u>	<u>Date</u>	<u>Author</u>	<u>Recipient</u>
1568559- 1568560	650000	Dow	
1568569- 1568572*	650126	Trapp, WB	Chamberlain, LC
1568577- 1568578*	650422	Merz, H Doll, O	
1568579- 1568580*	650422	Merz, H Doll, O	
1568581- 1568582*	650422	Merz, H	
1568583- 1568586*	650409	Trapp, WB	Mertz, H
1568588- 1568589*	650330	Sinclair, JR Trapp, WB	
1568592	650223	Merz, H Gerner	Trapp WB
1568593	650205	Trapp, WB	Merz, H
1568594- 1568595	650113	Trapp, WB Farnum, JH	Kudszus, CH

14206

Distributees

General Subject Matter

Analysis of caustic insoluble oil
and 245 Trichlorophenol for com-
position by gas liquid chroma-
tography

Coulter, KE
Haberstroh, WH
Goergen, GG
Sauers, RC

Trichlorophenol research

245T Contract

245T Contract

245T Contract

Amos, L
Grote

Toxicological studies, Gas
Chromatography and infrared ana-
lyses CTTL

Amos, L
Coon, ET
Koopman, P

245T Contract

Chloroanisole Oil samples CTTL

Griess, GA

Chloroanisole Oil samples CTTL

Griess, Ga
Silverstein, L

Request for Process information

<u>Dow Number</u>	<u>Date</u>	<u>Author</u>	<u>Recipient</u>
1568602- 1568603	650113	Trapp, WB Farnum, JH	Kudszus
1568604- 1568605	641215	Kudszus Merz Trapp, WB	Dow
1568606- 1568608	641215	Kudszus Merz	Dow
1568609	641217	Merz Jaenicke Boehringer Sohn	Silverstein, L
1568610- 1568613	551005		Weyland
1568614- 1568615*	650128	Trapp WB	Coulter, KE
1568622- 1568626*	650105	Poffenberger, N	

14207

Distributees

General Subject Matter

Goergen, GG
Lueck, AF
Poffenberger, N
Sauers, RC

Griess, GA
Lueck, GA
Silverstein, L
Goergen, GG
Poffenberger, N
Sauers, RC

Request for additional information on 245T production

Report on isolation of chlorac-negen sent to Dow

Report on isolation of chlorac-negen sent to Dow

Enclosure letter for rabbit tests conducted in connection with 1955 plant disinfection

Johne
Knecht
Nick
Horner

Rabbit tests conducted in connection with 1955 plant disinfection

Sauers, RC
Haberstroh, WH

C.H. Boehringer Sohn Contract

Poffenberger, N
Sauers, R

245-Trichlorophenol notes, process information and flowsheet

<u>Dow Number</u>	<u>Date</u>	<u>Author</u>	<u>Recipient</u>
1568627- 1568630	641208	Sauers, RC	
1568639- 1568646*	610104	Poffenberger, N	
1568647- 1568664*	641127	Sorge AWB	Sauers, RC
1568666- 1568667	641208	Sorge	
1568666- 1568667	641208	Sorge	
1568687- 1568690*	650105	Poffenberger, N	

14208

Distributees

Trapp, W
Lueck, A
Widiger, A
Bradley, K
Goergen, G
Holmes, R
Delisle, N

General Subject Matter

Chronological survey of the first
production period of 245T produc-
tion .

245-Trichlorophenol flow sheet

Description and prints for pro-
duction methods for obtaining
245-Trichlorophenolate solution
in Boehringer process

Chronological survey of the first
production period of 245T pro-
duction

Chronological survey of the first
production period of 245T
production

Poffenberger, N
Sauers, R
Trapp, W
Lueck, A

245-Trichlorophenol notes,
process information and flowsheet

<u>Dow Number</u>	<u>Date</u>	<u>Author</u>	<u>Recipient</u>
1568691- 1568735	650107	Sorge	
1568736- 1568778	560912	Sorge	
1568779- 1568780	641208	Merz	
1568781- 1568795	641127	Sorge	
1568796- 1568797*	650319	Branch, CB CH Boehringer Sohn	
1568800- 1568801	6503305	Trapp, WB Farnum, JH	CH Boehringer Sohn
1568802- 1568803*	650000	CH Boehringer Sohn	Dow

Distributees

Widiger, A
Bradley, K
Goergen, G
Holmes, R
Delisle, N

General Subject Matter

Attempts to determine the
chloracne inciter in the pro-
duction of 245T

Experiments to determine the
chloracnegens in 245T production

245T production chronology

Trichlorophenol process

Agreement concerning the disclo-
sure of information regarding the
prevention of Chloracne arising
out of the production of Sodium
245-Trichlorophenate

Revision of agreement regarding
disclosure of information con-
cerning 245-Trichlorophenate pro-
cess

Agreement concerning the disclo-
sure of information regarding the
prevention of Chloracne arising

<u>Dow Number</u>	<u>Date</u>	<u>Author</u>	<u>Recipient</u>
1568804- 1568805	650305	Trapp, WB Farnum, JH	CH Boehringer Sohn
1568806- 1568807*	650000	CH Boehringer Sohn	Dow
1568814- 1568815	570222	Smith, FB	CH Boehringer Sohn
1568816	570211	CH Boehringer Sohn	Dow
1568817- 1568818*	570000	Weyland	
1569006- 1569019*	650107	Poffenberger, N	

14210

Distributees

General Subject Matter

out of the production of Sodium
245-Trichlorophenate

Amos, L
Doedens, J
Haberstroh, W

Revision of agreement regarding
disclosure of information con-
cerning 245-Trichlorophenate pro-
cess

Agreement concerning the disclo-
sure of information regarding the
prevention of chloracne arising
out of the production of
245-Trichlorophenate

Griswold, AM
Vanderweele, JC
Hoyle
Melching, WA
Knapp
Kleine
Myers, JR
Krahne, O

Preparation of Trichlorophenol to
avoid Chloracne

Chloracne, preparation of
Trichlorophenol

Preparation of 245T avoiding the
formation of Chloracnegens

Sauers, R
Trapp, WB
Poffenberger, N
Widiger, A

245-Trichlorophenol, outline of
requirements of applying
Boehringer data to Midland
operations

<u>Dow Number</u>	<u>Date</u>	<u>Author</u>	<u>Recipient</u>
1569105- 1569112*	650209	Dow	Anderson Lueck Goergen West Trapp Morello Wolf Widiger Poffenberger
1569137 *	650127	AHW	
1569138 *	641128	AHW	
1569139- 1569140	650127	RAJ	
1569141- 1569142	650310	AHW	
1569143- 1569153	650211	Bradley, KB	
1569154- 1569167*	650107	Poffenberger, N	

14211

Distributees

Lueck, A
Holmes, R
Bradley, K
Goergen, GG
Haberstroh, WH

General Subject Matter

German TCP process, safety
techniques

245 Trichlorophenol reaction
graph time vs temp

Graph Chloracne exciter vs temp

245 Trichlorophenol reaction
graph conversion vs time at 155°C

Caustic hydrolysis of 1245
Tetrachlorobenzene graphs
conversion vs time at 155°C &
165°C

Data & graphs on hydrolysis of
1245-Tetrachlorobenzene

Sauers, RC
Trapp, WB

245-Trichlorophenol; outline of
batch reaction

Dow Number

Date

Author

Recipient

1569168-
1569176*

650203

Poffenberger, N

1569177-
1569192*

650212

Poffenberger, N

14212

Distributees

General Subject Matter

Poffenberger, N
Widiger, A
Lueck, A
Holmes, R
Delisle, N
Bradley, K
Goergen, GG

Bradley, K
Graves, H
Dylewski, S
Delisle, N
Haberstroh, WH
Sauers, R
Trapp, W
Poffenberger, N
Widiger, A
Coulter, K
Goergen, G
Lueck, A
Staehling, E

245-Trichlorophenol preliminary
process design

Bradley, K
Graves, H
Dylewski, S
Delisle, N
Haberstroh, WH
Sauers, R
Trapp, W
Poffenberger, N
Widiger, A
Coulter, K
Goergen, G

245-Trichlorophenol preliminary
process design appendix

<u>Dow Number</u>	<u>Date</u>	<u>Author</u>	<u>Recipient</u>	<u>Distributees</u>	<u>General Subject Matter</u>
				Lueck, A Staehling, E	
1569195- 1569197*	650311	Graves, HH			Pilot plant preparation of Sodium Trichlorophenate solution
1569209- 1569210*	650518	Trapp, WB	Goergen, GG	Anderson, RE Delisle, NG Lueck, AF Wehn, WE Hillman, RE	TCP Process
1569221- 1569223*	650302	Cornell, JL	Coulter, KE Delisle, NG Dylewski, SW Goergen, GG Hutchenreuther, CO Haberstroh, WH Lueck, AF Poffenberger, N Sauers, RC Trapp, WB Wappenhensch, O West, KD Wehn, WE Widiger, AH Graves, HE Wolf, RR Anderson, RE Morello, VS Beyer, DG Harris, JS Cornell, JL		Project Conference Trichlorophenol plant

<u>Dow Number</u>	<u>Date</u>	<u>Author</u>	<u>Recipient</u>
1569232- 1569233*	650304	Harris, JS	

1569239- 1569243*	650315	Anderson, RE Delisle, NJ	
----------------------	--------	-----------------------------	--

1569247- 1569250*	650318	Harris, JS	
----------------------	--------	------------	--

14214

Distributees

General Subject Matter

Coulter, KE
Graves, HE
Wolf, RR
Haberstroh, WH
Dylewski, SW
Trapp, W
Widiger, A
Morello, V
Cornell, J
Goergen, G

Notes from 6th Trichlorophenol
process review

Coulter, KE
Graves, HE
Wolf, RR
Goergen, GG
Lueck, A
Dylewski, SW
Trapp, W
Sauers, R
Poffenberger, N
Hutchenreuther, CO
Wappenhensch, CA
Morrello, VS
Wehn, WE

Trichlorophenol plant scope of
project

Coulter, KE
Graves, HE
Wolf, RR
Haberstroh, WH
Dylewski, SW
Trapp, W
Widiger, A
Morello, V

Notes from 9th Trichlorophenol
process review

<u>Dow Number</u>	<u>Date</u>	<u>Author</u>	<u>Recipient</u>
1569251- 1569254*	650317	Anderson, RE	
1570156- 1570165*	000000		
1570376 *	000000	Dow	
1570380 *	000000	Dow	
1572316- 1572322*	690310	Jankowski, S	
1572429- 1572440*	641110	EMS	
1572730- 1572734*	710202	Theis, JM	
1572735	700914	Knutson, AT Chase, FI Schmidtke, H Dorton, RO	

14215

Distributees

Lyon, G
Goergen, G

Woodward, RE
Marshall, SP
Chase, FI
Gilbert, PW
Snodgrass, WA
Kensicki, RF
Haberstroh,
Jankowski, SJ

General Subject Matter

Trichlorophenol reactor cycle

Tordon process information

Oil formulations

Phenoxy herbicide formulations

Preliminary investigation of
direct ester expansion
capabilities

Direct ester

24D, alternate facility

Dow raw material specification
2,4-Dichlorophenol

<u>Dow Number</u>	<u>Date</u>	<u>Author</u>	<u>Recipient</u>
1572736	700924	Knutson, AT Chase, FI Martin, RA Loucks, MF	
1572737	700406	Knytson, AT Dorton, RO Yeager, LM	
1572738	700721	Knutson, AT Kennedy, TL Chase, FI Schmidtke, DJ Martin, RA Landis, CA	
1572739	660923	Hawley, HM DeLong, HC Highhill, CA White, LC Hawley, HM	
1573474*	700915	Haberstroh, WH	Savaso, JC
1573475- 1573482*	700910	Haberstroh, WH Seidel, EM	

Distributees

General Subject Matter

Dow raw material specification
Sodium Monochloroacetate solution

Caustic soda solution raw
material specification

Internal Dow raw material speci-
fication for Hydrochloric acid

Dow raw material specification
24D

Bleiweiss, JC
Deline, DD
Henry, HE
Hensley, EF
Schmidt, BV
Tefft, TH

24D Capital Estimates

Revision of 24D Capital Estimates

<u>Dow Number</u>	<u>Date</u>	<u>Author</u>	<u>Recipient</u>
1579003- 1579009*	701231	Theis, JM Siedel, M	
1580542- 1580566*	680514	JFL Kern, WG Fernandez Gorgasz Dalman	
1580567- 1580585*	680822	Dow	
1581361- 1581376*	660000	Dow	
1581382- 1581397*	660000	Dow	
1581983- 1582013*	620700	Gilzorilla, F FGZ CAH	
1582654- 1582657*		McCauley, V Mathew, BA	
1583667- 1583675*	000000	Millhisler, RD	
1583690- 1583691*	721125	Vanhorn, R Bethke	
1630441*	500600		

14217

Distributees

General Subject Matter

Alkaline hydrolysis of 245T and silvex

Technology review of industrial chloroacetic acid

Dowanol, Butyl & Isooctyl Chloroacetate technology review

Chlorophenol Prod.

670000 Chlorophenol Research

Preliminary engineering study for Dow Quimica Argentina, SA

Tordon 105 Manufacture

Tordon 225E

M3990 or Tordon 225E reactive chemical hazard data

24D Amine Weed Killer
(Raw materials description and specifications)

<u>Dow Number</u>	<u>Date</u>	<u>Author</u>	<u>Recipient</u>
1630444*	510228	Dupont	
1630446*	501000		
1630447- 1630473*	501000		
1630466	500810	Ott, RC	
1630474- 1630478*	491200		
1630479- 1630483*	500201	Jirouch, EA	
1630485*	500510	Dupont	
1630489- 1630490*	491200		
1630491- 1630494*	491200		
1631888- 1631889*	640624	Seidel, EM	
1631901- 1631913*	000000	Seidel, EM	

Distributees

General Subject Matter

Raw material specification

24D Amine Weed Killer
(Raw materials handling &
storage conditions)

24D Amine Weed Killer
(operating directions)

Effect of DMA Concentration on PH
of 24D Amine Weed Killer

24D Amine Weed Killer
(Operational hazards)

Tentative Operating Instructions,
Dimethylamine

24D Amine Weed Killer
Specifications & average analysis

24D Amine Weed Killer
(Labor Required for Operation).

24D Amine Weed Killer
(Production and Yield Accounting
Methods and Information)

Direct Ester Authorization

Handwritten notes concerning
various steps of 245T process

<u>Dow Number</u>	<u>Date</u>	<u>Author</u>	<u>Recipient</u>
1642690- 1642691*	000000	JRU	
1645090- 1645098*	550826	Bennett, CM Widiger, A Dugan, G	
1650079- 1650081*	630429	Barrons, KC Coulter, LL Johnson, JE Lynn, GE Wolf, MA Hunt, M Loucks, MF Vanvalkenburg, W Fayerweather, BL McIntyre, HH Branaman, J Lang, HC Falkenstein, WJ Davis, HW Allen, WW	
1650139- 1650141*	670522	Barrons, KC Byrd, BC	

Distributees

General Subject Matter

Trichlorophenol Manufacturing

Griswold, A
Williams, WH
Britton, EC
Alquist, FN
Colby, A
Vanarsdale, J
Reese, R
Brainerd, A
Poffenberger, N
Widiger, A
Dugan, G

Phenol, 245 Tricholor

Verton CE with oil
(Release to Sales)

Tordon 155 Mixture
(Release to Sales 9)

<u>Dow Number</u>	<u>Date</u>	<u>Author</u>	<u>Recipient</u>
		Wolf, MA Gowell Loucks, MF Falsey, MP Buerge, TE McIntyre, HH Hammer, OH Gill, WM Highhill, CA Woodward, RE Davis, H Corbin, WF Nummy, WR DEP CJK JLS	
1650146- 1650148*	671009	Dow	Woodward, RE
1650262 1650264*	630517	Barrons, KC Coulter, LL Johnson, JE Lynn, GE Ritty, PM Wolf, MA Loucks, MF Vanvalkenberg, W Branaman, J Lang, HC	

14220

Distributees

General Subject Matter

Dosser, RC
Hoff, RC
Matuska, R
Colby, A
Stone, F

Sales Release Tordon 155

Verton T (Release to Sales 16)

<u>Dow Number</u>	<u>Date</u>	<u>Author</u>	<u>Recipient</u>
		Falkenstein, WJ Allen Saunders, ES	
1650466- 1650468*	621012	Amstutz, FC Barrons, KC Johnson, JE Lynn, GE Southwick, L Wolf, MA Vanvalkenberg, W McIntyre, HH Branaman, J Lang, HC Allen, WW JLS KEE ES PMR Saunders, E	
1710838- 1710856*	740221	Roush, GJ Hoyle, HR	
1710857- 1710885*	700410	Axe, FD Hoyle, HR	

14221

Distributees

General Subject Matter

Esteron 245 Concentrate
(Proposed Release to Sales 21)

Winters, RE
Degeer, JL
Williams, FL
Langner, RR
Kelyman, M
Holder, BB
Blair, EH

Wipe test for Tertiary Butyl
Catechol and TCDD in 267 bldg.
prior to demolition

Deline, DD
Hodson, RE
Miller, DE

Industrial hygiene survey of 245T
production 267 production

<u>Dow Number</u>	<u>Date</u>	<u>Author</u>	<u>Recipient</u>
-------------------	-------------	---------------	------------------

1711008 *	000000	Dow	
-----------	--------	-----	--

1718318- 1718319*	000000	Dow	
----------------------	--------	-----	--

1718333- 1718335*	000000	Dow	
----------------------	--------	-----	--

1719566- 1719572*	000000	Dow	
----------------------	--------	-----	--

1724098- 1724104*	690310	Jankowski, SJ	
----------------------	--------	---------------	--

1727967- 1727968*	580630	Dow McCollister, DD Wolf, MA	
----------------------	--------	------------------------------------	--

14222

Distributees

Kramer, CG
 Morse, DB
 Soule, RD
 Tolder, BB
 Lynn, GE
 Lowe, VK
 Schmidtke, DJ

General Subject Matter

Notes on direct Ester production
 of 24D and 245T

IWD 24D & MCPA & 245T esters

Process time cycles

NATCP Solution IWD

Zankowski, SJ
 Woodward, RE
 Chase, FI
 Silbert, PW
 Snodgrass, WA
 Marshall, SP
 Lensicki, RF
 Haberstroh, WH

24D and 245T Esters preliminary
 investigation of Direct Ester ex-
 pansion capabilities
 (ACPD 69-10)

Low
 Doyle, HR

Dow 245T amine weed killer (Data
 sheet of properties, health
 hazards and precautions for safe
 handling of materials)

<u>Dow Number</u>	<u>Date</u>	<u>Author</u>	<u>Recipient</u>
1728049- 1728050*	590702	Dow Olson, KJ Oyen, F	
1728053- 1728054*	630108	Dow Olson, KJ Oyen, F	
1728057- 1728058*	621214	Dow Olson, KJ Oyen, F	
1728059- 1728060*	660412	Dow McCollister, DD Olson, KJ	
1728061- 1728062*	700514	Dow Norris, JM	
1728101- 1728102*	580616	Dow McCollister, DD Wolf, MA	
1728103- 1728104*	580630	Dow McCollister, DD Wolf, MA	
1728167- 1728168*	580514	Dow McCollister, DD Wolf, MA	

Distributees

General Subject Matter

Dow
Hoyle, HR

M-1459 formulation of K-7797 and K-7856 (Data sheet of properties, health hazards and precautions for safe handling of materials)

Dow
Hoyle, HR

M-2422 (Data sheet of properties, health hazards and precautions for safe handling of materials)

Dow
Hoyle, HR

M-2468 (Data sheet of properties, health hazards and precautions for safe handling of materials)

Dow
Hoyle, HR

M-2993 (Data sheet of properties, health hazards and precautions for safe handling of materials).
(T2.MO-2993-1)

Dow
Falkenstein, WJ
Hoyle, HR

M-3427 (Data sheet of properties, health hazards and precautions for safe handling of materials)
(BC T2.MO-3427-1)

Dow
Hoyle, HR

Reddon (Data sheet of properties, health hazards and precautions for safe handling of materials)

Dow
Hoyle, HR

Reddon concentrate (Data sheet of properties, health hazards and precautions for safe handling of materials)

Dow
Hoyle, HR

Veon brush killer (Data sheet of properties, health hazards and precautions for safe handling of materials)

<u>Dow Number</u>	<u>Date</u>	<u>Author</u>	<u>Recipient</u>
		Wolf, MA	
1728526- 1728527*	000000	Dow	
1738627- 1738628*	000000	Dow	
1765919*	650919	Sinke, GC	
1766300- 1766308	661104	Widiger, AH Johnson, RL Dugan, GF	
1766309- 1766336*	650203	Poffenberger, N Bradley, K Ebert Warren	

14224

Distributees

General Subject Matter

precautions for safe handling of materials)

Tordon formulation plant and Tordon pellet plant

Flow chart for Tordon production

Heat of reaction data per GC Sinke of the Thermal Lab

Phenol, 245 Trichloro study of Chloracne problem
Preparation of 245 Trichlorophenol from Trichlorobenzene

Widiger, AH
Coulter, KE
Johnson, R
Thurstom, D
Dugan, G
Haberstroh, WH
Goergen, GG
Sauers, RC
Bender, S
Wolf, RRR
Louck, A
Poffenberger, N
Bailey, CZ
Putnam, MS
Nielson, WH
Staehling, EC

Bradley, K
Graves, H
Dylewski, S
Haberstroh, WH

Phenol 245 Trichloro
Preliminary Process Design
Using 100 percent NAOH,
PL2028-4

<u>Dow Number</u>	<u>Date</u>	<u>Author</u>	<u>Recipient</u>
-------------------	-------------	---------------	------------------

1766651- 1766660*	641125		
----------------------	--------	--	--

1766681- 1766686*	650107	Poffenberger, N	
----------------------	--------	-----------------	--

1766687- 1766694*	650112	Poffenberger, N	
----------------------	--------	-----------------	--

14225

Distributees

General Subject Matter

Sauers, R
Trapp, W
Poffenberger, N
Widiger, AH
Coulter, KE
Goergen, GG
Lueck, A
Redmond, W
Delisle, NG
Staehling, EC

Trichlorophenol Process

Poffenberger, N
Sauers, RC
Trapp, WB
Widiger, A
Lueck, A
Holmes, R
Bradley, K
Goergen, GG

245 Trichlorophenol - Outline of
Requirements

Poffenberger, N
Delisle, NG
Sauers, R
Trapp, WB
Widiger, A
Lueck, A
Holmes, R
Bradley, K
Goergen, G

Appendix to Report PL2028-3
(245 Trichlorophenol)

<u>Dow Number</u>	<u>Date</u>	<u>Author</u>	<u>Recipient</u>
1766695- 1766698*	650105	Poffenberger, N	
1766704- 1766708*	641120	Holmes, R	
1766713- 1766730*	641224	Sorge	Sauers
1766734- 1766736*	691212	Widiger, A	Chang, KY
1766739- 1766750*	700720	Chang, KY Tou, JC	

14226

Distributees

General Subject Matter

Poffenberger, N
 Sauers, R
 Trapp, W
 Lueck, A
 Widiger, A
 Bradley, K
 Goergen, G
 Holmes, R

245 Trichlorophenol Process
 Information

Hydrolysis of Tetrachlorobenzene
 using flake caustic

Description and prints for the
 current production methods for
 obtaining 245 Trichlorophenolate
 solution in building 74 (Report 50)

Leavittg, FC
 Demott, DN
 Poffenberger, N
 Tree, R
 Plepys, RA
 Schmidtke, DJ

Progress report on research
 on blooming of 245 -
 Trichlorophenol

Chang, KY
 Tou, JC
 Look, A
 Leavitt, FC
 Demott, DN
 Poffenberger, N
 Gum, WF
 Plepys, RA
 Pierce, JK

Oxygen 18 labeling study on
 the mechanism of caustic
 hydrolysis of 1245 -
 tetrachlorobenzene in methanol

<u>Dow Number</u>	<u>Date</u>	<u>Author</u>	<u>Recipient</u>
1766760 1766761*	641118	Widiger, AH Holmes, RD	Greiss, GA
1766762- 1766764*	640730	Holmes, R	Hoyle, HR
1766766- 1766769*	641120	Holmes, RD	
1766770- 1766771*	000000	Dow	
1766772*	000000	Dow	
1766773- 1766784*	340905	Prescott, RF	
1766824- 1766825*	000000	Dow	

14227

Distributees

General Subject Matter

Frevel, LK
 Potts, WJ
 Westover, LB
 Fauver, VA
 Kennedy, TL
 Widiger, AT
 Pews, G
 Rodia, RM
 Nummy, WR
 Blue, RD
 Delisle, NG
 Sheetz, DP

Goergen, GG

199 Bldg Production of
 Sodium 245 Trichlorophenate

Manufacture of Trichlorophenol at
 199 Bulding

Hydrolysis of Tetrachlorobenzene
 using flake caustic

TCP Process Flow Sheet

TCP Process Flow Sheet

Manufacture of 245 Trichlorophenol
 from 1245 Trichlorobenzol

Dichlorophenol and trichlorophenol
 proccess flow sheet

<u>Dow Number</u>	<u>Date</u>	<u>Author</u>	<u>Recipient</u>
1766944- 1766948*	000000	Dow	
1768247- 1768249*	650317	REA	
1770187- 1770195*	661104	Widiger, A Johnson, RL Dugan, GF	

1770705- 1770709*	700525	Brady, P
----------------------	--------	----------

The following 2,4-D related documents have been deleted:

0725773-0725777, 0981364, 1298570, 1298598, 1580108-1580109,

Distributees

General Subject Matter

245 Trichlorophenol operations
804 Building

Trichlorophenol Reactor Cycle

Wdiger, A
Johnson, RL
Digan, GF
Culter, KE
Turston, D
Haberstroh, WH
Sawers, RC
Wulf, RR
Piffenberger, N
Goergen, GG
Bender, S
Luick, A
Bailey, CZ
Pitnam, MS
Nielson, WH
Saehling, EC

Phenol 245 - Trichloro study of
chloracne problem preparation of
245-Trichlorophenol from
Trichlorobenzene, PL 2064-13

Schmidtke, DJ
Haberstroh, WH
Williams, L
Vogelsang, P
Clase, FI
Kensicki, RF

Manufacture of Phenoxy Herbicides

1E0525, 1631287-1631289, 1631290, 1631291, 1721835-1721836

STATE OF NEW YORK)
) ss.:
COUNTY OF NASSAU)

ROSEMARIE CIANI , being duly sworn, deposes and says:

That deponent is not a party to this action, is over 18 years of age and resides in New Hyde Park, N.Y.

That on the day of March, 1983 , deponent served the within Notice of Confidentiality and Updated Index of Confidential Documents of Defendant The Dow Chemical Company

upon the attorneys below set forth representing the parties, as indicated, at the addresses shown, said addresses being designated by said attorneys for that purpose, by depositing a true copy of same, enclosed in a postpaid properly addressed wrapper in an official depository under the exclusive care and custody of the United States Post Office Department within the State of New York.

TO: SEE ATTACHED SERVICE LIST

Rosemarie Ciani

ROSEMARIE CIANI

Sworn to before me this
day of March 2 , 1983

Kathryn La Russa

NOTARY PUBLIC

KATHRYN LARUSSA
NOTARY PUBLIC, State of New York
No. 4470270
Qualified in Nassau County
Commission Expires March 30, 1984

14229

TO:

Morton B. Silberman, Esq.
Clark, Gagliardi & Miller
The Inns of Court
99 Court Street
White Plains, NY 10601

Wendell B. Alcorn, Jr., Esq.
Cadwalader, Wickersham & Taft
One Wall Street
New York, NY 10005

John Sabetta, Esq.
Townley & Updike
405 Lexington Avenue
New York, NY 10174

William Krohley, Esq.
Kelley, Drye & Warren
101 Park Avenue
New York, NY 10178

Howard Lester, Esq.
Lester, Schwab, Katz & Dwyer
120 Broadway
New York, NY 10271

David R. Gross, Esq.
Budd, Lerner, Kent, Gross,
Picillo & Rosenbaum
33 Washington Street
Newark, NJ 07102

Thomas A. Beck, Esq.
Arthur, Dry & Kalish, P.C.
1230 Avenue of the Americas
New York, NY 10020

Victor J. Yannacone, Jr., Esq.
Yannacone & Yannacone
P.O. Box 109
Patchogue, NY 11772

Irving Like, Esq.
200 West Main Street
Babylon, NY 11702

Arvin Maskin, Esq.
Torts Branch, Civil Division
United States Department
of Justice
Safeway Building
521 - 12th Street, N.W.
Washington, D.C. 20530

Sol Schreiber, Esq.
Milberg, Weiss, Bershad
& Specthrie
One Pennsylvania Plaza
Room 4915, 49th Floor
New York, NY 10119

The Counsel of Vietnam Veterans
329 Eighth Street, N.E.
Washington, D.C. 20002

Patricia D. Howard
Chief of the Judicial Panel
on Multidistrict Litigation
1120 Vermont Avenue, N.W.
Suite 1002
Washington, D.C. 20005

Paul Esposito, Esq.
Lewis, Overbeck & Furman
135 South LaSalle Street
Suite 1060
Chicago, IL 60603

CLERK
U.S. DISTRICT COURT
EASTERN DISTRICT
OF NEW YORK
LONG ISLAND OFFICE

MAR 2 3 23 PM '83

RECEIVED

14230