# Monsanto

ORGANIC CHEMICALS DIVISION

Monsanto Company
800 N. Lindbergh Boulevard
St. Louis, Missouri 63166
Phone: (314) 694-1000

September 23, 1970

Subject: Aroclor Plasticizers - A new series of inert, chemically-resistant, fire-retarding plasticizers compatible with a wide variety of resins

Dear Customer:

Monsanto's withdrawal of PCB-containing Aroclors from the market has led to extensive realignment of our product line and modifications to our pricing policies. We have enclosed for your use a new product bulletin which contains data on our new Aroclor line, and also a price list for these products. I believe that you will find this new series of Aroclors an extremely valuable family of products which combines the properties of chemical stability, compatibility, adhesion, fire retardancy, and low cost which have been so useful in the past. Further, they have not shown any of the apparent environmental effects which have been attributed to PCB products.

We look forward to supplying your plasticizer needs in this area in the future. Please contact us if we can be of service to you.

Very truly yours,

Walter F. Waychoff

Walter F. Waychoff
Product Manager
Plasticizers

/dbw

EXHIBIT
WBP M-106



LEXOLDMON000953
WATER_PCB-00036420

# Monsanto

ORGANIC CHEMICALS DIVISION

Monsanto Company
800 N. Lindbergh Boulevard
St. Louis, Missouri 63166
Phone: (314) 694-1000

September 23, 1970

## AROCLOR PRICE LIST

## QUOTED IN DOLLARS/POUND

| Aroclor | 1,000 Gallons Minimum | 24,000 Lbs. C/L or T/L | 10 Drums to C/L or T/L 5-23.9 M Lbs. | 3-9 Drums or 1.5 - 4.9 M Lbs. | 1-2 Drums or Std. Ctr. 1.4 M Lbs. |
|---|---|---|---|---|---|
| 1221 | .1625 | .1925 | .2025 | .2125 | .2325 |
| 5060 | - | .1900 | .2000 | .2100 | .2300 |
| 5432 | .1800 | .2100 | .2200 | .2300 | .2500 |
| 5442, 5460 | - | .2000 | .2100 | .2200 | .2400 |
| 6040, 6050, 6062, 6070 | .1800 | .2100 | .2200 | .2300 | .2500 |
| 6090 | - | .2100 | .2200 | .2300 | .2500 |

The five-gallon container price for all products will be 30 cents/pound above the one-two drum bracket. All prices are F.O.B. Anniston, Alabama.

Prices, terms and conditions subject to change without notice.

Willis S. Clark

Willis S. Clark

MCI 000545

LEXOLDMON000954
WATER_PCB-00036421

Rec'd. 9/24/70

# AROCLOR® PLASTICIZERS

A series of inert, chemically-resistant, fire-retarding plasticizers compatible with wide variety of resins.

PLASTICIZERS

"Nothing contained herein is to be construed as a recommendation to use any product in conflict with any patent. MONSANTO MAKES NO WARRANTIES AS TO THE FITNESS OR MERCHANTABILITY OF ANY PRODUCTS REFERRED TO. In pursuance of satisfactory results from reliance upon published information or recommendations, and assumes no liability for any resulting loss or damage."

Organic Chemicals Division / 800 N. Lindbergh Blvd. / St. Louis, Missouri 63166



LEXOLDMON000955
WATER_PCB-00036422

## AROCLOR PLASTICIZERS

A series of inert, chemically resistant, fire retarding plasticizers compatible with a wide variety of resins.



LEXOLDMON000956
WATER_PCB-00036423

Properties as Plasticizers

The Aroclor resins/plasticizers and their blends have a very unusual set of properties which make them extremely useful products. Their most important characteristics are:

Low Cost
Highly Compatible
Chemically Stable
Fire Retardant
Excellent Adhesion

Another very useful aspect of this product line is the fact that a continuous range of properties can be achieved by using combinations of the Aroclors and their blends. Some of the physical properties which can be controlled through product selection are shown on the following pages.



LEXOLDMON000957
WATER_PCB-00036424

Key to Nomenclature

5400 Series

These products are chlorinated terphenyls. The last two digits indicate the chlorine content of the material, e.g. Aroclor 5460 is a chlorinated terphenyl with 60 percent chlorine. Undistilled Aroclors are available and are designated by a 5000 series vs. the 5400 series. They are somewhat higher in color but otherwise have product characteristics similar to the distilled products.

6000 Series

These products are blends of Aroclor 5460 and Aroclor 1221, a chlorinated biphenyl. The last two digits indicate the percentage of Aroclor 5460 in the blend, e.g. Aroclor 6062 is a blend containing 62 percent Aroclor 5460 and 38 percent mono chlorinated biphenyl.

Miscellaneous Blends

Other product blends containing such other materials as Santicizer 140 for improved fire retardancy, or toluene/xylene for lower viscosities will also be made available as the demand for these specialty products develops.



LEXOLDMON000958
WATER_PCB-00036425

AROCLORS

| | 5432 | 5442 | 5460 |
|---|---|---|---|
| Adhesion/Tack | ——— | increasing | ——→ |
| Hardness | ——— | increasing | ——→ |
| Flexibility | ——— | decreasing | ——→ |
| Fire Retardance | ——— | increasing | ——→ |
| Volatility | ——— | decreasing | ——→ |
| Chlorine Content | ——— | increasing | ——→ |
| Viscosity | ——— | increasing | ——→ |
| Density | ——— | increasing | ——→ |
| Permanence | ——— | increasing | ——→ |
| Compatibility | ——— | decreasing | ——→ |



LEXOLDMON000959
WATER_PCB-00036426

## AROCLOR BLENDS

| | 6040 | 6050 | 6062 | 6070 | 6090 |
|---|---|---|---|---|---|
| Adhesion/Tack | ——— | increasing | ——— | | ——→ |
| Hardness | ——— | increasing | ——— | | ——→ |
| Flexibility | ——— | decreasing | ——— | | ——→ |
| Fire Retardance | ——— | increasing | ——— | | ——→ |
| Volatility | ——— | decreasing | ——— | | ——→ |
| Chlorine Content | ——— | increasing | ——— | | ——→ |
| Viscosity | ——— | increasing | ——— | | ——→ |
| Density | ——— | increasing | ——— | | ——→ |
| Permanence | ——— | increasing | ——— | | ——→ |
| Compatibility | ——— | decreasing | ——— | | ——→ |



LEXOLDMON000960
WATER_PCB-00036427

Applications

Listed below are some of the applications where these products can be used:

Aroclor Blends

| | |
|---|---|
| 6040 | Polyvinyl Acetate Emulsion Adhesives |
| | SBR Adhesives |
| | Miscellaneous applications where a high degree of flexibility is required. |
| 6050 | Chlorinated Rubber and other Resin systems for coatings. |
| | Inks |
| 6062 | Polysulfide Sealants/Adhesives |
| | Chlorinated Rubber Coatings and Adhesives |
| | SBR Coatings and Adhesives |
| | Miscellaneous applications where high chlorine content, high tack, are required. |
| | Inks |
| 6070 | Polysulfide Adhesives |
| | Chlorinated Rubber Adhesives |
| | Miscellaneous applications where very high chlorine content and very high tack are required. |
| 6090 | Radiation Curing Applications |



LEXOLDMON000961
WATER_PCB-00036428

Aroclors

| | |
|---|---|
| 5432 | Polysulfide Sealants/Adhesives |
| | Chlorinated Rubber Coatings and Adhesives |
| | SBR Coatings and Adhesives |
| 5442 | Surface Coatings |
| 5460 | Hot Melt Adhesives, Surface Coatings |



LEXOLDMON000962
WATER_PCB-00036429

## PHYSICAL PROPERTIES OF AROCLORS AND AROCLOR BLENDS

| | AROCLORS | | | | AROCLOR BLENDS | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Property | Aroclor 1221 | Aroclor 5432 | Aroclor 5442 | Aroclor 5460 | Aroclor 6040 | Aroclor 6050 | Aroclor 6062 | Aroclor 6070 | Aroclor 6090 |
| Appearance | Clear, mobile oil | Clear, yellow viscous liquid | Clear, yellow sticky resin | Clear, yellow to amber brittle resin or flakes | Clear, light yellow mobile oil | Clear, light yellow mobile oil | Clear, yellow viscous liquid | Light yellow sticky resin | Light yellow resin |
| Color, Maximum | *100 APHA | 2 NPA (Molten) | 2 NPA (Molten) | 2 NPA (Molten) | 2 NPA | 2 NPA | 2 NPA | 2 NPA | 2 NPA |
| Specific Gravity | *1.182 - 1.192 (25°/ 15.5° C) | 1.263 - 1.290 (90/ 15.5° C) | 1.470 (25°/ 25° C) | 1.670 (25°/ 25° C) | 1.330 - 1.350 (25/ 15.5° C) | 1.342 - 1.362 (65/ 15.5° C) | 1.405 - 1.425 (65°/ 15.5° C) | 1.418 - 1.438 (90/ 15.5° C) | - |
| Acidity, Maximum (Mg KOH/Gm | *0.014 | - | .05 | .05 | 0.035 | .035 | 0.035 | .035 | .035 |
| Moisture ppm Maximum | - | - | - | - | 250 | 250 | 250 | 250 | - |



LEXOLDMON000963
WATER_PCB-00036430

## PHYSICAL PROPERTIES OF AROCLORS AND AROCLOR BLENDS

| | AROCLORS | | | | AROCLOR BLENDS | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Property | Aroclor 1221 | Aroclor 5432 | Aroclor 5442 | Aroclor 5460 | Aroclor 6040 | Aroclor 6050 | Aroclor 6062 | Aroclor 6070 | Aroclor 6090 |
| Viscosity (ASTM D-88) | *38-41 (100° F SUS) | 50-60 (210° F SUS) | 300-400 (210° F SUS) | - | 122-132 (100° F SUS) | 105-115 (130° F SUS) | 50-60 (210° F SUS) | 82-92 (210° F SUS) | - |
| Flash Point ° F Minimum (Cleveland Open Cup) | 286-302 | - | 477 | None to Boiling | 270 | 290 | - | - | 340 |
| Fire Point ° F Minimum (Cleveland Open Cip) | 349 | - | >662 | None to Boiling | 300 | 335 | - | - | 550 |
| Softening Point ° C | - | - | 46-52 | 98-105 | - | - | - | - | 64-70 |

*Monsanto Specifications



LEXOLDMON000964
WATER_PCB-00036431

## PRODUCT CODES AND DRUM WEIGHTS

| Product | Code | Container | Net Weight Pounds | Gross Weight Pounds | Approximate Volume $FT^3$ |
|---|---|---|---|---|---|
| **AROCLORS** | | | | | |
| 5060 | 1040-450-04-009 | Multi-wall Bag | 50 | 50½ | 0.97 |
| 5432 | 1040-460-04-009 | 55-Gallon Metal Drum | 600 | 648 | 10-3/4 |
| | | 5-Gallon Metal Drum | 60 | 65 | 1 |
| 5442 | 1040-470-04-009 | 40-Gallon Metal Drum | 450 | 469 | 7-2/3 |
| | | 5-Gallon Metal Drum | 50 | 56 | 1-1/12 |
| 5460 | 1040-480-04-009 | Multi-wall Bag | 50 | 50-1/2 | 0.97 |
| **AROCLOR BLENDS** | | | | | |
| 6040 | 1045-040-04-009 | 55-Gallon Metal Drum | 600 | 648 | 10-3/4 |
| | | 5-Gallon Metal Drum | 55 | 60 | 1 |
| 6050 | 1045-050-04-009 | 55-Gallon Metal Drum | 600 | 648 | 10-3/4 |
| | | 5-Gallon Metal Drum | 55 | 60 | 1 |
| 6062 | 1045-062-04-009 | 55-Gallon Metal Drum | 600 | 648 | 10-3/4 |
| | | 5-Gallon Metal Drum | 60 | 65 | 1 |

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LEXOLDMON000965
WATER_PCB-00036432

## PRODUCT CODES AND DRUM WEIGHTS

| Product | Code | Container | Net Weight Pounds | Gross Weight Pounds | Approximate Volume $FT^3$ |
|---|---|---|---|---|---|
| 6070 | 1045-070-04-009 | 55-Gallon Metal Drum | 600 | 648 | 10-3/4 |
| | | 5-Gallon Metal Drum | 60 | 65 | 1 |
| 6090 | 1045-070-04-009 | 40-Gallon Metal Drum | 500 | 519 | 7-2/3 |
| | | 5-Gallon Metal Drum | 50 | 56 | 1-1/12 |



LEXOLDMON000966
WATER_PCB-00036433

## Toxicity and Safe Handling

### Inhalation

At ordinary temperatures, the Aroclor chlorinated polyphenyls have not presented industrial toxicological problems. The hazard of potential toxic exposure varies with their volatility: the lower-chlorinated, more volatile ones present more of a potential problem from the standpoint of both inhalation and skin contact. When Aroclor plasticizers are used at elevated temperatures, engineering controls must be applied, either by the use of closed systems or by effective local-exhaust ventilation together with general workroom exhaust.

Vapor of the liquid Aroclor plasticizers at room temperature should not be breathed in a confined space, and no vapor of any Aroclor evolved at elevated temperatures should be allowed to be dispersed into the general workroom.

### Skin Contact

Continuous or repeated skin contact with the Aroclor plasticizers must be avoided by the use of gloves and protective garments, because of the possible occurrence of a condition called chloracne. Although reports of this condition caused by Aroclor are rare, it can be produced by excessive skin contact. If any Aroclor is spilled on the skin, the skin should be washed in the usual manner with a soap solution.

A burn caused by contact with a hot Aroclor should be treated like any ordinary burn. Aroclor plasticizer adhering to the burned area need not be removed immediately, unless treatment of the burn demands it, in which case either soap and water or repeated washings with a vegetable oil are recommended.



LEXOLDMON000967
WATER_PCB-00036434

## DISTRICT SALES OFFICES ALL DIVISIONS

*ATLANTA, GEORGIA 30326*
*Lenox Towers East*
*3400 Peachtree Rd. N. E. — Suite 1711*
*Tel. (404) 577-2260*

*BOSTON, MASSACHUSETTS 02149*
*Everett Station*
*Tel. (617) 387-5010*

*CHICAGO, ILLINOIS*
*3158 Des Plaines Ave.*
*Des Plaines, Illinois 60018*
*Tel. (312) 296-6688*

*CINCINNATI, OHIO 45206*
*1501 Madison Road*
*Tel. (513) 751-6707*

*CLEVELAND, OHIO 44122*
*3645 Warrensville Center Rd.*
*Tel. (216) 991-5400*

*DETROIT, MICHIGAN 48235*
*500 Northland Towers East*
*Tel. (313) 357-0910*

*HONOLULU, HAWAII 96812*
*205 Pacific International Bldg.*
*677 Ala Moana Blvd., P. O. Box 3624*
*Tel. (808) 512-744*

*HOUSTON, TEXAS 77002*
*1300 Main Street*
*Tel. (713) Capitol 3-4011*

*LOS ANGELES, CALIFORNIA 90022*
*6670 E. Flotilla St.*
*Tel. (213) 723-2492*

*MINNEAPOLIS, MINNESOTA 55402*
*912 Northstar Center 110 S. Seventh St.*
*Tel. (612) 339-4651*

*NEW YORK, NEW YORK 10017*
*277 Park Avenue*
*Tel. (212) 922-4111*

*PITTSBURGH, PENNSYLVANIA 15222*
*No. 4 Gateway Center Bldg. Room 534*
*Tel. (412) 261-2156*

*ST. LOUIS, MISSOURI 63166*
*800 N. Lindbergh Blvd.*
*Tel. (314) Oxford 4-1000*

*SAN FRANCISCO BAY AREA*
*2710 Lafayette, Santa Clara, Calif. 95052*
*Tel. (408) 243-0414*

*SEATTLE, WASHINGTON 98104*
*911 Western Avenue*
*Tel. (206) Main 2-4203*

*SPRINGFIELD, MASSACHUSETTS 01101*
*730 Worcester Ave.*
*Tel. (413) 788-6911*

*WILMINGTON, DELAWARE 19803*
*2005 Concord Pike, Fairfax*
*Tel. (302) Olympia 8-6531*

***Additional District Offices are maintained by:***

**Agricultural Division**

LULING, LOUISIANA 70070
P. O. Box 124
Tel. (504) 784-6263

MEMPHIS, TENNESSEE 38113
1023 Riverside Drive
P.O. Box 13248
Tel. (901) Whitehall 7-3151

**Textiles Division**

AKRON, OHIO 44313
3030 West Market St.
Tel. (216) 836-7841

ATLANTA, GEORGIA 30303
Atlanta Merchandise Mart
240 Peachtree St., N.W.
Tel. (404) 577-2260

CHARLOTTE, NORTH CAROLINA 28202
Wachovia Bank Building
129 West Trade St.
Tel. (704) 376-9871

ENGLEWOOD CLIFFS, N. J. 07631
661 Palisades Ave.
Tel. (201) 568-2151

NEW YORK, NEW YORK
350 Fifth Ave.
Tel. (201) 568-6100

**Hydrocarbons & Polymers Division-Lion Oil**

EL DORADO, ARKANSAS 71730
Lion Oil Building
Tel. (501) Union 3-3111

JACKSON, MISSISSIPPI 39209
P. O. Box 10037
Westland Station
Tel. (601) 352-3648

LITTLE ROCK, ARKANSAS 72203
1515 West Seventh St.
Tel. (501) Franklin 6-1437

MEMPHIS, TENNESSEE 38113
1023 Riverside Drive
P. O. Box 13248
Tel. (901) Whitehall 7-3151

**Organic Chemicals Division *(Rubber Industry)***

AKRON, OHIO 44311
820 Brown Street
P. O. Box 2307
Tel. (216) Hemlock 4-1921

***MONSANTO, 800 N. LINDBERGH BLVD., ST. LOUIS, MISSOURI 63166***

MCL000559

LEXOLDMON000968
WATER_PCB-00036435

W. S. Clark stated on 2 May 1973 that this specific price sheet was probably not sent; rather a special typed form using the appropriate product prices.

MONSANTO

# ORGANIC CHEMICALS DIVISION
# MONSANTO COMPANY
# PLASTICIZERS

## PRICE AND SHIPPING INFORMATION

This price sheet announces new price schedules on Aroclors, some Permanents, Phosphates, Sulfonamides and Phthalates. It also lists new Aroclors which have been developed to replace those which have been removed from our product line.

October 1, 1970

| | T/C-T/T (1) (40 M Lbs.) | T/T (1) (20 M to 39.9 M Lbs.) | T/T (1) (8 M to 19.9 M Lbs.) | C/L or T/L | LCL Liq-10 Dr. C/L or T/L Solid 5-19 M Lbs. | LCL 3-9 Dr 1.5-4.9 M Lbs. | LCL 1-2 Dr Std. Ctr. 1.5 M Lbs. | F.O.B. (13) | Std. Ctr. Pounds | Pounds per Gal. |
|---|---|---|---|---|---|---|---|---|---|---|
| PERMANENTS | | | | | | | | | | |
| Santicizer ® 405 | ----- | ----- | ----- | $0.47 | $0.48 | $0.49 | $0.51 | Evt. Mass.*(8) | 450 | 9.0 |
| Santicizer 409 | $0.39 | $0.3925 | $0.3975 | .42 | .43 | .44 | .46 | Evt. Mass.*(8) | 460 | 9.0 |
| Santicizer 411 | .31 | .3125 | .3175 | .34 | .35 | .36 | .38 | Evt. Mass.*(8) | 450 | 9.2 |
| Santicizer 412 | .33 | .3325 | .3375 | .36 | .37 | .38 | .40 | Evt. Mass.*(8) | 450 | 8.8 |
| Santicizer 429 | .37 | .3725 | .3775 | .40 | .41 | .42 | .44 | Evt. Mass.*(8) | 450 | 9.1 |
| Santicizer 430 | .27 | .2725 | .2775 | .30 | .31 | .32 | .34 | Evt. Mass.*(8) | 460 | 8.7 |
| Santicizer 431 | .30 | .3025 | .3075 | .33 | .34 | .35 | .37 | Evt. Mass.*(8) | 450 | 9.0 |
| Santicizer 432 | .33 | .3325 | .3375 | .36 | .37 | .38 | .40 | Evt. Mass.*(8) | 450 | 9.2 |
| PHOSPHATES | | | | | | | | | | |
| Tricresyl Phosphate | .32 | .3225 | .3275 | .35 | .36 | .37 | .39 | Sauget, Ill.*(7) | 530 | 9.7 |
| Triphenyl Phosphate | ----- | ----- | ----- | .37 | .38 | .39 | .41 | Sauget, Ill.** | 250 | Solid |
| Triphenyl Phosphite | ----- | ----- | ----- | .29 | .30 | .31 | .33 | Sauget, Ill. frt. equalized (3) | 510 | 9.8 |
| Santicizer 140 | .30 | .3025 | .3075 | .33 | .34 | .35 | .37 | Sauget, Ill. *(7) | 545 | 10.0 |
| Santicizer 141 | .34 | .3425 | .3475 | .37 | .38 | .39 | .41 | St. Louis, or Bridgeport*(7) | 495 | 9.1 |
| Santicizer 148 | .275 | .2775 | .2825 | .305 | .315 | .325 | .345 | St. Louis or Bridgeport*(7) | 485 | 8.9 |
| Tributyl Phosphate | .56 | .5625 | .5675 | .59 | .60 | .61 | .63 | St. Louis, Mo.*(7) | 450 | 8.5 |
| Tributoxy Ethyl Phosphate | .49 | .4925 | .4975 | .515 | .525 | .535 | .555 | St. Louis, Mo.*(8) | 460 | 8.1 |
| ADIPATES | | | | | | | | | | |
| Dioctyl (DOA) | .25 | .2525 | .2575 | .28 | .29 | .30 | .32 | Evt. or St. Louis*(8) | 420 | 7.7 |
| Di-Isodecyl (DIDA) | .25 | .2525 | .2575 | .28 | .29 | .30 | .32 | Evt. Mass.*(8) | 415 | 7.7 |
| Di-(n-Octyl, n-Decyl) (DNODA) | .25 | .2525 | .2575 | .28 | .29 | .30 | .32 | Evt. Mass.*(8) | 415 | 7.6 |
| SULFONAMIDES | | | | | | | | | | |
| Santicizer 1-B | ----- | ----- | ----- | .52 | .53 | .54 | .56 | St. Louis, Mo. | 375(13) | Solid |
| Santicizer 3 | ----- | ----- | ----- | .61 | .62 | .63 | .65 | St. Louis, Mo. | 400 | Solid |
| Santicizer 8 | .445 | .445 | .445 | .475 | .485 | .495 | .515 | St. Louis, Mo. | 530 | 9.9 |
| Santicizer 8 Spec. | ----- | ----- | ----- | .50 | .51 | .52 | .54 | St. Louis, Mo. | 530 | 9.9 |
| Santicizer 9 bags | ----- | ----- | ----- | .42 | .43 | .44 | .46 | St. Louis, Mo. | 50 | Solid |
| Santicizer 9 LP's | ----- | ----- | ----- | .4275 | .4375 | .4475 | .4675 | St. Louis, Mo. | 250 | Solid |
| Santolite ® MHP | ----- | ----- | ----- | .48 | .49 | .50 | .54 | St. Louis, Mo. | 60 | Solid |
| Santolite MS80% | ----- | ----- | ----- | .48 | .49 | .50 | .54 | St. Louis, Mo. | 540 | 10.5 |
| GLYCOLLATES | | | | | | | | | | |
| Santicizer E-15 | ----- | ----- | ----- | .60 | .61 | .62 | .64 | St. Louis, Mo. | 535 | 9.9 |
| Santicizer B-16 | .445 | .445 | .445 | .475 | .485 | .495 | .515 | St. Louis, Mo. | 500 | 9.2 |
| Santicizer M-17 | .44 | .44 | .44 | .47 | .48 | .49 | .51 | St. Louis, Mo. | 550 | 10.2 |
| ANTIOXIDANTS | | | | | | | | | | |
| Santonox ® | ----- | ----- | ----- | 1.14 | 1.15 | 1.17 | 1.17 | Nitro, W.Va.*(5)(11) | 150 | Solid |
| Santonox R | ----- | ----- | ----- | ----- | 2.80 | 2.90 | 2.90 | Nitro, W.Va.*(5)(11) | 150 | Solid |
| Santowhite ® Powder | ----- | ----- | ----- | 1.14 | 1.15 | 1.17 | 1.17 | Nitro, W.Va.*(5)(11) | 125 | Solid |
| Santowhite Powder Refined | ----- | ----- | ----- | ----- | 4.50 | 4.60 | 4.60 | St. Louis, Mo.* (5)(11) | 150 | Solid |

MCL 000560

LEXOLDMON000969
WATER_PCB-00036436

| | T/C-T/T (1) (40 M Lbs.) | T/T (1) (20 M to 39.9 M Lbs.) | T/L (1), (8 M to 19.9 M Lbs.) | T/L or T/L | Liquid Drums or T/L Solid 5-24M Lbs. | 3-5 Dr 1.8-4.9 M Lbs. | Std. Dr. 1.4 M Lbs. | FOB (15) | Std. Pkg. Pounds | Sp. Gr. |
|---|---|---|---|---|---|---|---|---|---|---|
| PHTHALATES | | | | | | | | | | |
| Dibutyl | $0.22 | $0.2225 | $0.2275 | $0.25 | $0.26 | $0.27 | $0.29 | St. Louis, Mo.* | 400 | 8.7 |
| Dicyclohexyl (DCHP) Granular | ----- | ----- | ----- | .455 | .465 | .475 | .495 | Evt. Mass.*(2) | 300 | Solid |
| Diethyl | .21 | .2125 | .2175 | .24 | .25 | .26 | .28 | St. Louis, Mo.*(2) | 500 | 9.4 |
| Diethyl Low Odor | .235 | .2375 | .2425 | .265 | .275 | .285 | .305 | St. Louis, Mo.*(2) | 500 | 9.4 |
| Dimethyl | .21 | .2125 | .2175 | .24 | .25 | .26 | .28 | St. Louis, Mo.*(2) | 530 | 9.9 |
| Diphenyl | ----- | ----- | ----- | .51 | .52 | .53 | .55 | St. Louis, Mo. | 400(13) | Solid |
| Dioctyl (DOP) | .12 | .1225 | .1275 | .15 | .16 | .17 | .19 | Texas City, St. Louis or Long Beach*(12) | 445 | 8.2 |
| Di-isodecyl (DIDP) | .125 | .1275 | .1325 | .155 | .165 | .175 | .195 | Texas City, St. Louis or Long Beach*(12) | 440 | 8.1 |
| Di (n-Octyl, n-Decyl) (DNODP) | .1625 | .165 | .170 | .1925 | .2025 | .2125 | .2325 | Evt. or Long Beach* (8) | 440 | 8.1 |
| Ditridecyl | .22 | .2225 | .2275 | .25 | .26 | .27 | .29 | Evt. or Long Beach* (12) | 420 | 7.9 |
| Diundecyl (DUP) | .215 | .2175 | .2225 | .245 | .255 | .265 | .285 | Evt. Mass.*(12) | 420 | 7.9 |
| Santicizer® 160 | .185 | .1875 | .1925 | .215 | .225 | .235 | .255 | Bridgeport, N.J.*(2) | 500 | 9.3 |
| Santicizer 213 | .185 | .1875 | .1925 | .215 | .225 | .235 | .255 | Evt.or Bridgeport*(8) | 450 | 8.7 |
| Santicizer 214 | .235 | .2375 | .2425 | .265 | .275 | .285 | .305 | St.Louis or Evt.*(2) | 440 | 7.9 |
| Santicizer 215 | .1404 | .1429 | .1479 | .1704 | .1804 | .1904 | .2104 | Evt. Mass.*(2) | 445 | 8.1 |
| Santicizer 218A | .175 | .1775 | .1825 | .205 | .215 | .225 | .245 | St.Louis, Bridgeport or Long Beach*(8) | 495 | 9.2 |
| Santicizer 261 | .22 | .2225 | .2275 | .25 | .26 | .27 | .29 | Bridgeport, N.J.*(8) | 480 | 8.9 |
| Santicizer 278 | .40 | .4025 | .4075 | .43 | .44 | .45 | .47 | Evt. Mass.*(2) | 400 | 7.6 |
| Santicizer 630 | .1334 | .1359 | .1409 | ----- | ----- | ----- | ----- | Evt. Mass.*(2) | *** | 8.7 |
| Santicizer 636 | .1225 | .125 | .13 | ----- | ----- | ----- | ----- | Evt. Mass.*(12) | *** | 9 |
| Santicizer 683 | .1252 | .1257 | .1307 | ----- | ----- | ----- | ----- | Evt. Mass.*(2) | *** | -- |
| Santicizer 711 | .14 | .1425 | .1475 | .17 | .18 | .19 | .21 | Texas City, Tex.*(12) | 440 | |
| Santicizer 885 | .175 | .1775 | .1825 | .205 | .215 | .225 | .245 | St. Louis, Bridgeport or Long Beach*(8) | 500 | 9.2 |
| AROCLOR® | | | | | | | | | | |
| Solid 5442, 5460 | ----- | ----- | ----- | .20 | .21 | .22 | .24 | Anniston, Ala. | Various | Solid |
| Solid 5060 | ----- | ----- | ----- | .19 | .20 | .21 | .23 | Anniston, Ala. | 50 | Solid |
| Solid 6090 | ----- | ----- | ----- | .21 | .22 | .23 | .25 | Anniston, Ala. | 500 | Solid |
| Liquid 1221 | .1625 | .1625 | .1625 | .1925 | .2025 | .2125 | .2325 | Anniston, Ala. | 520 | 9.5 |
| Liquid 5432, 6040 6050,6062,6070 | .18 | .18 | .18 | .21 | .22 | .23 | .25 | Anniston, Ala. | 500 | 11(13) |
| SPECIAL PLASTICIZERS/MODIFIERS | | | | | | | | | | |
| HB-40® | .16 | .1625 | .1675 | .19 | .20 | .21 | .23 | Anniston Ala.*(7) | 460 | 9.3 |
| Santomark® II | ----- | ----- | ----- | 1.16 | 1.17 | 1.18 | 1.20 | St. Louis, Mo.(14) | 250 | -- |
| Dytrol® | 3.10(4) | 3.10 | 3.10 | 3.35 | 3.45 | 3.45 | 3.45 | St. Louis (10) | 495 | -- |
| Mod-Epox® | ----- | ----- | ----- | .35 | .36 | .37 | .39 | Sauget, Ill. | 510 | 9.6 |
| Monex® 5 | ----- | ----- | ----- | .0525 | .08 | .08 | .08 | Anniston, Ala. | Various | Solid |
| Rodaflow® | ----- | ----- | ----- | 3.68 | 3.70 | 3.70 | 3.70 | Nitro,W.Va.(9) | 300 | -- |
| Rhoxard® C-22-R | ----- | ----- | ----- | .47 | .48 | .49 | .51 | St. Louis, Mo. | 630 | 11.9 |
| Santicizer 679 | .175 | .1775 | .1825 | .205 | .215 | .225 | .245 | St. Louis or Bridgeport*(8) | 500 | 8.9 |

* *FOB shipping point, minimum freight prepaid to all points in the Continental U.S. except Alaska.*

** *Freight equalized with Point Pleasant, West Virginia.*

*** *We prefer to sell in bulk only, however, in case of product adoption, they are available in drums at the drum price intervals.*

*(1) Tank truck shipments of 40,000 pounds or more of most plasticizers are available within established delivery zones at tank car price. The minimum tank-truck shipment is 8,000 pounds of a single product. Two plasticizers (maximum of three) may be used to obtain 40,000 pounds and the T/C price on each. There must be a minimum of 4,000 pounds of one product in a mixed shipment.*

*Bulk stations in Bridgeport, N. J., Everett, Mass., St. Louis, Mo., Long Beach, Calif., Sauget, Ill., Texas City, Texas., Anniston, Ala., Cleveland, Ohio, New Haven, Conn., and Miami, Fla.*

*(2) Item is 3/4¢ per lb. extra to California, Oregon, Washington, Idaho, Nevada, Montana, Arizona, Utah and Wyoming.*

*(3) Freight equalized with Niagara Falls, New York.*

*(4) Price per gallon.*

*(5) Item is 2¢ per lb. extra to 9 western states.*

*(6) Tank car or tank truck only for Aroclor 1221, 5432, 6040, 6050, 6062 and 6070 .*

*(7) Item is 1½¢ per lb. extra to 9 western states.*

*(8) Item is 1¢ per lb. extra to 9 western states.*

*(9) 28 gallon containers 5¢ per lb. and 1 gallon containers 40¢ per lb. higher than 1 to 2 drum price .*

*(10) 5 gallon containers 85¢ per gallon higher than 1 to 2 drum price.*

*(11) Less than standard container 30¢ per lb. higher than 1 to 2 drum price FOB plant.*

*(12) Item ½¢ per pound extra to 9 western states.*

*(13) Approximate.*

*(14) 1 gallon containers 40¢ per lb. higher than 1 to 2 drum price .*

*(15) Five gallon containers are FOB plant in all cases. Prices are 30¢ per lb. higher than 1 to 2 drum price unless listed as an exception.*

MCL000561

LEXOLDMON000970
WATER_PCB-00036437

# AROCLOR® PLASTICIZERS

A series of inert, chemically-resistant, fire-retarding plasticizers compatible with wide variety of resins.

PLASTICIZERS Monsanto

"Nothing contained herein is to be construed as a recommendation to use any product in conflict with any patent. MONSANTO MAKES NO WARRANTIES AS TO THE FITNESS OR MERCHANTABILITY OF ANY PRODUCTS REFERRED TO, no guarantee of satisfactory results from reliance upon contained information or recommendations, and disclaims all liability for any resulting loss or damage."

Organic Chemicals Division / 800 N. Lindbergh Blvd. / St. Louis, Missouri 63166

MCL 000562

LEXOLDMON000971
WATER_PCB-00036438

# AROCLOR® PLASTICIZERS

A series of inert, chemically resistant, fire retarding plasticizers compatible with a wide variety of resins.

MCL000563

LEXOLDMON000972
WATER_PCB-00036439

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MCL000564

LEXOLDMON000973
WATER_PCB-00036440

Properties as Plasticizers

The Aroclor® resins/plasticizers and their blends have an unusual combination of properties which make them extremely useful products. Their most important characteristics are:

Low Cost
Highly Compatible
Chemically Stable
Fire Retardant
Excellent Adhesion

Another very useful aspect of this product line is the fact that a continuous range of properties can be achieved by using combinations of the Aroclors and their blends. Some of the physical properties which can be controlled through product selection are shown on the following pages.

Our Aroclor® product line is now made up of polychlorinated terphenyls, monochlorinated biphenyl, and blends of these products. None of these materials has been shown to create any environmental problems. On the other hand, Food and Drug Administration approval has not been obtained for any of these products. Accordingly, the Aroclor® plasticizers should not be used in connection with food or food-related products, with food wrapping or food container materials. Further, Monsanto strongly recommends that these products not be used in any other application such as non-FDA regulated food systems, in potable water systems, in any animal feeding systems, or in pharmaceuticals.

LEXOLDMON000974
WATER_PCB-00036441

## Key to Nomenclature

### 5400 Series

These products are chlorinated terphenyls. The last two digits indicate the chlorine content of the material, e.g., Aroclor® 5460 is a chlorinated terphenyl with 60 percent chlorine. Undistilled Aroclors® are available and are designated by a 5000 series vs. the 5400 series. They are somewhat higher in color but otherwise have product characteristics similar to the distilled products.

### 6000 Series

These products are blends of Aroclor® 5460 and Aroclor® 1221-B, a biodegradable monochlorinated biphenyl. The last two digits are an indication of the proportion of Aroclor® 5460 in the blend, e.g., Aroclor® 6062 has more Aroclor® 5460 in it than does Aroclor® 6050.

### Miscellaneous Blends

Other product blends containing such other materials as Santicizer 140 for improved fire retardancy, or toluene/xylene for lower viscosities will also be made available as the demand for these specialty products develops.



LEXOLDMON000975
WATER_PCB-00036442

## AROCLORS

| | 5432 | 5442 | 5460 |
|---|---|---|---|
| Adhesion/Tack | ——— | increasing | ——→ |
| Hardness | ——— | increasing | ——→ |
| Flexibility | ——— | decreasing | ——→ |
| Fire Retardance | ——— | increasing | ——→ |
| Volatility | ——— | decreasing | ——→ |
| Chlorine Content | ——— | increasing | ——→ |
| Viscosity | ——— | increasing | ——→ |
| Density | ——— | increasing | ——→ |
| Permanence | ——— | increasing | ——→ |
| Compatibility | ——— | decreasing | ——→ |



LEXOLDMON000976
WATER_PCB-00036443

## AROCLOR BLENDS

| | 6040 | 6050 | 6062 | 6070 | 6090 |
|---|---|---|---|---|---|
| Adhesion/Tack | ← | | increasing | | → |
| Hardness | ← | | increasing | | → |
| Flexibility | ← | | decreasing | | → |
| Fire Retardance | ← | | increasing | | → |
| Volatility | ← | | decreasing | | → |
| Chlorine Content | ← | | increasing | | → |
| Viscosity | ← | | increasing | | → |
| Density | ← | | increasing | | → |
| Permanence | ← | | increasing | | → |
| Compatibility | ← | | decreasing | | → |



LEXOLDMON000977
WATER_PCB-00036444

Applications by Product

Listed below are some of the applications where these products can be used:

Aroclor Blends

| | |
|---|---|
| 6040 | Polyvinyl Acetate Emulsion Adhesives |
| | SBR Adhesives |
| | Miscellaneous applications where a high degree of flexibility is required. |
| 6050 | Chlorinated Rubber and other Resin systems for Coatings. |
| | Inks |
| 6062 | Polysulfide Sealants/Adhesives |
| | Chlorinated Rubber Coatings and Adhesives |
| | SBR Coatings and Adhesives |
| | Miscellaneous applications where high chlorine content, high tack, are required. |
| | Inks |
| 6070 | Polysulfide Adhesives |
| | Chlorinated Rubber Adhesives |
| | Miscellaneous applications where very high chlorine content and very high tack are required. |
| 6090 | Radiation Curing Applications |



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WATER_PCB-00036445

**Aroclors**

| | |
|---|---|
| 5432 | Polysulfide Sealants/Adhesives |
| | Chlorinated Rubber Coatings and Adhesives |
| | SBR Coatings and Adhesives |
| 5442 | Surface Coatings |
| 5460 | Hot Melt Adhesives, Surface Coatings |



LEXOLDMON000979
WATER_PCB-00036446

## AROCLOR MARKETS

| Aroclor Applications | Polymers and/or Binders | Aroclor Recommended |
|---|---|---|
| **Adhesives** | | |
| Delayed Tack | SBR, PVAc, PS | 6090, 5460 |
| Emulsion | PVAc, SBR, Acrylic-VAc, Acrylic-ethylene | 1221-B, 6040, 6050 |
| Pressure Sensitive | Natural Rubber, SBR, Cl Rubber | 1221-B, 6062, 5460 |
| Hot Melt | EVAc, PVB, Phenoxies, Polyamides | 5460, 5465, 5060, Montar 5 |
| **Sealants** | Polysulfide, Nitrile Epoxy, Polyurethane | 5460/S-261, HB-40, 6070, 5432 |
| **Caulking Compounds** | Acrylics | 5460, 6070 |
| **Surface Coatings** | | |
| Paints | PVAc, PVC, Nitriles, Styrene, Acrylics | 5460, 6062, 6070 |
| Lacquers | Alkyd, Cl Rubber | 5460, 6062, 6070, 6090 |



LEXOLDMON000980
WATER_PCB-00036447

AROCLOR MARKETS (Continued)

| Aroclor Applications | Polymers and/or Binders | Aroclor Recommended |
|---|---|---|
| **Surface Coatings (Continued)** | | |
| Varnish | Polysulfide | 6070 |
| Paper Coatings | Ethyl Cellulose | 6040, 6050 |
| Printing Inks | Nitrocellulose, Acrylic | 5460, 6070, 6062, 6090 |
| **Miscellaneous** | | |
| Lost Wax Casting | Wax | 5442, 5460, 5465 |
| Impregnating Phenolic Resistors | Resinox, PVC | 5460, 6062 |
| Laminating Resins | Phenolic | 5460, 6070 |
| Epoxy Resins | Epoxy | 6062, 6070 |



LEXOLDMON000981
WATER_PCB-00036448

## DELAYED TACK ADHESIVES

Total Market for Plasticizers: 3-4 Million Pounds/Year

Typical Formulations:

| Component | Parts by Weight |
|---|---|
| 1. Diphenyl Phthalate | 60.6 |
| Cumar W 12 | 15.1 |
| Lustrex 15 | 24.3 |
| 2. Vinsol Resin | 50.0 |
| Santicizer 1-H | 50.0 |
| Acrysol M. R. | 10.0 |
| Thinned amine dispersant | 250.0 |
| Thinned amine dispersant | |
| Steric Acid | 1 |
| Poly-pale Resin | 1 |
| 2-amino-2-methyl-1-propanol | 1 |
| Water | 3 |

Properties Desired:

1. Activation at specific temperature.
2. Remains tacky for specific time period.
3. Remains bonded over wide temperature range.

Current Recommendations:

1. Dicyclohexyl Phthalate - DCHP
2. Diphenyl Phthalate
3. Santicizer 1-H
4. Aroclor 5460
5. Aroclor 6090

MCL000573

LEXOLDMON000982
WATER_PCB-00036449

## EMULSION ADHESIVES

Total Market for Plasticizers: 35-40 Million Pounds/Year

Typical Formulations:

| | | | |
|---|---|---|---|
| Gelva S-55 | 90 | Gelva TS-65 | 90 |
| Santicizer 218-A | 10 | Santicizer 885 | 10 |
| | 100 | | 100 |
| Gelva S-77 | 90 | Gelva TS-100 | 90 |
| Aroclor 1221-B | 10 | Aroclor 6040 | 10 |
| | 100 | | 100 |
| Aircoflex 400 | 95 | Gelva TS-100 | 65 |
| Aroclor 6050 | 5 | Aroclor 1221 | 10 |
| | 100 | Staybelite Ester 10 | 15 |
| | | Butyl Acetate | 10 |
| | | Santomerse SX | 0.1 |
| | | | 100.1 |

Properties Desired:

1. Controlled wet tack: in most cases, the shorter the wet tack time before the adhesive grabs, the better.
2. Open time of at least one minute: open time is the time during which two adhered substrates can be adjusted after making contact.
3. Physical properties of adhesive film: the cohesive strength of the adhesive must be strong enough to hold the substrates together.



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WATER_PCB-00036450

EMULSION ADHESIVES (Continued)

4. Relatively high heat delamination temperature: this depends on the film forming polymers, the type and amount of plasticizer.

5. Good resistance to water: prolonged immersion in water causes loss of adhesion by most emulsion adhesives at elevated temperatures.



LEXOLDMON000984
WATER_PCB-00036451

## PRESSURE SENSITIVE ADHESIVES

Total Market for Plasticizers: 30 Million Pounds/Year

Typical Formulations:

| Component | Parts by Weight |
|---|---|
| 1. Calendered into Fabric | |
| Cellulose Acetate | 1 |
| Santicizer 8 | 3 |
| Santolite MHP | 2 |
| 2. Hot Melt Type | |
| Crepe Rubber | 15 |
| Polyisobutylene | 15 |
| Ester Gum | 20 |
| Santolite MHP | 20 |
| Aroclor 6070 | 30 |
| Wax | 10 |

Properties Desired:

1. Low volatility
2. Good heat stability
3. High flow/spreadability at elevated temperatures
4. Good moisture resistance
5. Broad use temperature range



LEXOLDMON000985
WATER_PCB-00036452

PRESSURE SENSITIVE ADHESIVES (Continued)

Current Recommendations:

1. Santicizer 160
2. Santicizer 148
3. Aroclor 5460, 6040, 6070
4. Santclite MHP



LEXOLDMON000986
WATER_PCB-00036453

## HOT MELT ADHESIVES

Total Market for Plastifier/Tackifier: 30-40 Million Pounds/Year

Typical Formulations:

| Component | Parts by Weight |
|---|---|
| 1. Basic Formula | |
| EVAc | 30 |
| Aroclor 5460 | 40 |
| Microcrystalline Wax | 30 |
| 2. Alkali Dispersable Bookbinding Adhesive | |
| PVAc | 40 |
| Santicizer 160 | 8 |
| Aroclor 5432 | 26 |
| Nevellac Hard | 24 |
| Acrowax C | 1 |
| Sodium Benzoate | 0.75 |

Properties Desired:

1. Good heat stability
2. Sharp melting point
3. Satisfactory viscosity/temperature relationship
4. Bond flexibility
5. Adhesion

MCL000578

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WATER_PCB-00036454

HOT MELT ADHESIVES (Continued)

Current Recommendations:

1. Aroclor 5460, 5465
2. Aroclor 5060, Montar 5
3. Santicizer 160, 141, 148
4. Santicizer 8

LEXOLDMON000988
WATER_PCB-00036455

## POLYSULFIDE SEALANTS

Typical Formulation:

| | |
|---|---|
| Thiokol LP-2 | 100 |
| Lead dioxide paste ($50\%$ $PbO_2$, $45\%$ S-160, $5\%$ St. acid) | 15 |
| Plasticizer | 30 |
| | 145 |

Fillers such as SRF black, MT black, Lithopone, Zinc Sulfide and York Whiting may be included in the 15 to 75 phr range.

Properties Desired:

1. Adhesions
2. Specific Rate of Cure
3. Specific Creep Characteristics
4. Shelf Stability
5. Pot Life

Current Recommendations

1. Santicizer 261
2. HB-40
3. Blends of Aroclor 5460/S-261 (Santicizer 326)
4. Aroclor 5460/S-160
5. Santicizer 148

LEXOLDMON000989
WATER_PCB-00036456

## CHLORINATED RUBBER COATINGS

Typical Formulation:

| | |
|---|---|
| Parlon S-10 | 35 |
| Epon 828 | 1 |
| Epichlorhydrin | 0.2 |
| Xylene | 100 |
| Plasticizer | 25 |
| $TiO_2$ | 38.4 |
| Carbon Black | 0.4 |
| | 200.0 |

Properties Desired:

1. Water impermeability
2. Chemical resistance
3. Adhesion to substrate
4. Flexibility

Current Recommendations:

1. Aroclor 6062
2. Aroclor 5432
3. Phthalate ester (if not chem. resistance reg.)
4. Aroolor 5460/Santicizer 711 3/1 or 4/1



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WATER_PCB-00036457

## ACRYLIC LACQUER

Typical Formulation:

| | |
|---|---|
| Lucite 6011 or 6012 | 250 (~100 solids) |
| 1/2 sec. cellulose acetate butyrate | 0 to 40 |
| Plasticizer | 20 to 40 |

Properties Desired:

1. Good adhesion
2. Superior pigment wetting
3. Resistance to water and dilute alkalis
4. Excellent weatherability
5. Good abrasion resistance
6. Toughness over a broad temperature range
7. Low volatility of the plasticizer

Current Recommendations:

1. Santicizer 261
2. Aroclor 6062
3. Aroclor 5442
4. Santicizer 140
5. Santicizer 160



LEXOLDMON000991
WATER_PCB-00036458

## TYPICAL PHYSICAL PROPERTIES OF AROCLORS AND AROCLOR BLENDS

| | AROCLORS | | | | AROCLOR BLENDS | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Property | Aroclor 1221-B | Aroclor 5432 | Aroclor 5442 | Aroclor 5460 | Aroclor 6040 | Aroclor 6050 | Aroclor 6062 | Aroclor 6070 | Aroclor 6090 |
| Appearance | Clear, mobile oil | Clear, yellow viscous liquid | Clear, yellow sticky resin | Clear, yellow to amber brittle resin or flakes | Clear, light yellow mobile oil | Clear, light yellow mobile oil | Clear, yellow viscous liquid | Light yellow sticky resin | Light yellow resin |
| Color, Maximum | 100 APHA* | 2 NPA* (Molten) | 2 NPA* (Molten) | 2 NPA* (Molten) | 2 NPA* | 2 NPA* | 2 NPA* | 2 NPA* | 2 NPA* |
| Specific Gravity | 1.125 - 1.140 (25°/ 15.5° C) | 1.280* - 1.300 (90°/ 15.5° C) | 1.470 (25°/ 25° C) | 1.670 (25°/ 25° C) | 1.326* - 1.346 (25°/ 15.5° C) | 1.344* - 1.357 (65°/ 15.5° C) | 1.407* - 1.427 (65°/ 15.5° C) | 1.425* - 1.440 (90°/ 15.5° C) | - |
| Acidity, Maximum (Mg KOH/Gm) | 0.014* | - | .05* | .05* | 0.035* | .035* | 0.035* | .035* | .035* |
| Moisture ppm Maximum | - | - | - | - | 250* | 250* | 250* | 250* | - |
| Refractive Index 25° C | - | 1.658 - 1.660 | 1.659 - 1.662 | 1.660 - 1.665 | 1.6334 | 1.6390 | 1.6463 | 1.6567 | 1.6580 |



LEXOLDMON000992
WATER_PCB-00036459

## TYPICAL PHYSICAL PROPERTIES OF AROCLORS AND AROCLOR BLENDS

| | AROCLORS | | | | AROCLOR BLENDS | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Property | Aroclor 1221-B | Aroclor 5432 | Aroclor 5442 | Aroclor 5460 | Aroclor 6040 | Aroclor 6050 | Aroclor 6062 | Aroclor 6070 | Aroclor 6090 |
| Viscosity (ASTM D-88) | 38 (100° F SUS) | 50-60 (210° F SUS) | 300-400 (210° F SUS) | - | 106-146* (100° F SUS) | 110-125* (130° F SUS) | 54-64* (210° F SUS) | 82-102* (210° F SUS) | - |
| Flash Point ° F Minimum (Cleveland Open Cup) | 260 | 470° F | 477 | None to Boiling | 260 | 260 | 260 | 260 | 340 |
| Fire Point ° F Minimum (Cleveland Open Cup) | 280 | 660° F | > 662 | None to Boiling | 300 | 310 | 320 | 325 | 550 |
| Softening Point ° C | - | - | 46-52* | 98-105.5* | - | - | - | - | 64-70* |

*Monsanto Specification



LEXOLDMON000993
WATER_PCB-00036460

## Toxicity and Safe Handling

### Inhalation

At ordinary temperatures, the Aroclor chlorinated polyphenyls have not presented industrial toxicological problems. The hazard of potential toxic exposure varies with their volatility: the lower-chlorinated, more volatile ones present more of a potential problem from the standpoint of both inhalation and skin contact. When Aroclor plasticizers are used at elevated temperatures, engineering controls must be applied, either by the use of closed systems or by effective local-exhaust ventilation together with general workroom exhaust.

Vapor of the liquid Aroclor plasticizers at room temperature should not be breathed in a confined space, and no vapor of any Aroclor evolved at elevated temperatures should be allowed to be dispersed into the general workroom.

### Skin Contact

Continuous or repeated skin contact with the Aroclor plasticizers must be avoided by the use of gloves and protective garments, because of the possible occurrence of a condition called chloracne. Although reports of this condition caused by Aroclor are rare, it can be produced by excessive skin contact. If any Aroclor is spilled on the skin, the skin should be washed in the usual manner with a soap solution.

A burn caused by contact with a hot Aroclor should be treated like any ordinary burn. Aroclor plasticizer adhering to the burned area need not be removed immediately, unless treatment of the burn demands it, in which case either soap and water or repeated washings with a vegetable oil are recommended.



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**Textiles Division**

AKRON, OHIO 44313
3030 West Market St.
Tel. (216) 836-7941

ATLANTA, GEORGIA 30303
Atlanta Merchandise Mart
240 Peachtree St., N. W.
Tel. (404) 577-2260

CHARLOTTE, NORTH CAROLINA 28202
Wachovia Bank Building
129 West Trade St.
Tel. (704) 376-8871

ENGLEWOOD CLIFFS, N. J. 07631
881 Palisades Ave.
Tel. (201) 568-2151

NEW YORK, NEW YORK
350 Fifth Ave.
Tel. (201) 556-5100

**Hydrocarbons & Polymers Division-Lion Oil**

EL DORADO, ARKANSAS 71730
Lion Oil Building
Tel. (501) Union 3-3111

JACKSON, MISSISSIPPI 39209
P. O. Box 10937
Westland Station
Tel. (601) 352-3848

LITTLE ROCK, ARKANSAS 72203
1515 West Seventh St.
Tel. (501) Franklin 6-2437

MEMPHIS, TENNESSEE 38113
1023 Riverside Drive
P. O. Box 13248
Tel. (901) Whitehall 7-3151

**Organic Chemicals Division *(Rubber Industry)***

AKRON, OHIO 44311
920 Brown Street
P. O. Box 2307
Tel. (216) Hemlock 4-1921

***MONSANTO, 800 N. LINDBERGH BLVD., ST. LOUIS, MISSOURI 63166***

MCL000586

LEXOLDMON000995
WATER_PCB-00036462

| NAME | ADDRESS | DATE MAILED | PER |
|---|---|---|---|
| 1. Abco, Inc. | P. O. Box J<br>Irwin, Pa. 15642 | | |
| 2. Acme Chemicals and Insulation Co.<br>(Allied Products Corp.) | P. O. Box 1404<br>New Haven, Conn. 06505 | | |
| 3. Adelphi Paint and Color Works, Inc.<br>[illegible] | 8600 Dumont Ave.<br>Ozone Park LI, N. Y. 11417 | | |
| 4. Adhesives Research, Inc.<br>[illegible] | 161 East 9th Avenue<br>York, Pennsylvania 17404 | | |
| 5. The Allentown Paint Mfg Co<br>[illegible] | East Allen & Graham Streets<br>Allentown, Pa. 18105 | | |
| 6. Allegheny Solvents & Chemical Co<br>N.J. | P. O. Box 477<br>Carnegie, Pa. 15106 | | |
| 7. Allied Paint Manufacturing Company | 834 West Third Street<br>Lansdale, Pa. 19446 | | |
| 8. Allis-Chalmers Mfg Co<br>#261 | Pittsburgh Plant<br>Columbus And Preble Aves.<br>Pittsburgh, Pa. 15233 | | |
| 9. Amchem Products, Inc.<br>Benjamin Foster Division<br>[illegible] | Ambler, Pa. 19002 | | |
| 10. Amerson Corrosion Control Div. | 201 North Berry Street<br>Brea, California 92621 | | |
| 11. Amercoat Corporation<br>[illegible] | 201 North Betty Street<br>Brea, California 92621 | | |
| 12. American Enka Brand Rex Division | West Main Street<br>Willimantic, Conn. 06226 | | |

address list for [illegible] { July, 1970 thru Sept, 1970



EXHIBIT
WBP M-106.1

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LEXOLDMON000996
WATER_PCB-00036463

| | NAME | ADDRESS | DATE MAILED | PER |
|---|---|---|---|---|
| 13. | American Lacquer & Solvent Co | P. O. Box 11515<br>Tampa, Florida 33610 | | |
| 14. | American Chemical Service, Inc.<br>250, 241, #243, #245/248 | P. O. Box 190<br>Griffith, Indiana 46319 | | |
| 15. | Ames Rubber Corporation<br>f | Hamburg, N. J. 07419 | | |
| 16. | American Adhesive, Inc. | 30 Waverly Ave.<br>Brooklyn, N. Y. 11205 | | |
| 17. | AMF Voit, Inc. | P. O. Box 958<br>Santa Ana, Calif. 92702 | | |
| 18. | AMSCO | 14 Commerce Rd.<br>Cranford, N. J. 07016 | | |
| 19. | Amsco Solvents & Chemicals<br>Archer Co, Portsmouth, Va. | 4619 Reading Road<br>Cincinnati, Ohio 45229 | | |
| 20. | R. J.R. Archer, Inc.<br>A 260 | P. O. Box 2715<br>Winston-Salem, N.C.27102 | | |
| 21. | Arkansas Technical Industries, Inc. | Highway 167 North<br>Batesville, Ark. 72501 | | |
| 22. | John L. Armitage and Co.<br>Armour-Hoist-Memphis, Inc.<br>Armstrong Cork Co, Chicago, Ill. | 245 Thomas Street<br>Newark, N. J. 07114 | | |
| 23. | Armstrong Cork Co | Lancaster, PA. 17604 | ++ | |
| 24. | Arwood Corp. | Rockleigh Industrial Park<br>Rockleigh, N. J. 07647 | | |



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LEXOLDMON000997
WATER_PCB-00036464

| NAME | ADDRESS | DATE MAILED | PER |
|---|---|---|---|
| 25. Athens Rubber Company | 340 Waterman Ave.<br>Esmond, Rhode Island 02906 | | |
| 26. Atlas Chemical Industries, Inc. | Wilmington, Delaware 19899 | | |
| Atlantic Paint - Jacksonville, Fla. | | | |
| 27. Atlantic Varnish | 3000 N. Boulevard<br>Richmond, Virginia | | |
| 28. BASF Corporation | Borad and 14th Street<br>Carlstadt, N.J. 07072 | | |
| 29. Bel-Ray Company, Inc. | Box 526<br>Farmingdale, N. J. 07727 | | |
| 30. Betosia Corporation<br># 254 | 185 Foundry Street<br>Newark, New Jersey 07105 | | |
| 31. Blair Process | 363 North East Avenue<br>Tallmade, Ohio | | |
| 32. Borden Chemical | Div. Borden, Inc.<br>103 Foster Street<br>Peabody, Mass. 01960 | | |
| 33. Borden Chemical | Div. Borden, Inc.<br>Purchasing Department<br>Middlesex, N. J. 08846 | | |
| 34. Borden Company | Chemical Div.<br>58 Nostrand Ave.<br>Brooklyn, N. Y. 11205 | | |
| 35. C. E. Bradley Labs, Inc. | P. O. Box 811<br>Brattleboro, Vermont 05301 | | |
| 36. Brooks Glue Corp. | 875 Washington St.<br>Canton, Mass. 02021 | | |



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LEXOLDMON000998
WATER_PCB-00036465

| NAME | ADDRESS | MAILED | PER |
|---|---|---|---|
| 37. The Brown Bridge Mills Inc. | Troy, Ohio 45373 | | |
| 38. Bruning Paint Co, Inc. | Fleet and Haven Streets<br>Baltimore, Md 21224 | | |
| 39. M. A. Bruder & Sons, Inc. | 52nd St. and Grays Ferry Avenue<br>Philadelphia, Pa. 19143 | | |
| 40. Buffalo Solvents & Chemical Company | Box 73 Station B<br>Buffalo, N. Y; 14207 | | |
| 41. Quality Components, Inc. | Daguscahona, Pa. | | |
| 42. R. P. Cargill Labs | 55 Commerce Rd<br>Cedar Grove, N. J. | | |
| 43. Philip Carey Co | Smith St. & Victory Bridge<br>Perth Amboy, N. J. 08862 | | |
| 44. Carroll Products, Inc. | 150 Marine St<br>Farmingdale L.I. N.Y. 11735 | | |
| 45. Castrol Oils, Inc. | Continental Plaza<br>401 Hackensack Ave.<br>Hackensack, N. J. 07601 | | |
| 46. Cataphote Corporation | Jackson, Miss. 39205 | | |
| 47. Cellular Products Corp. | 18656 Fitzpatrick<br>Detroit, Mich. 48228 | | |
| 48. Celanese Coatings Co. | Delancy & Rutherford Streets<br>Newark, N. J. 07105 | | |
| 49. Central-Solvents & Chemicals Co. | 31702 Hayman Street<br>Hayward, Calif. 94544 | | |



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LEXOLDMON000999
WATER_PCB-00036466

| | NAME | ADDRESS | DATE MAILED | PER |
|---|---|---|---|---|
| 50. | Central Solvents & Chemical Company | 13900 Carmenita Road<br>Santa Fe Springs,<br>California 90670 | | |
| 51. | Central Solvents & Chemical Company | 7050 West 71st Street<br>Chicago, Illinois 60638 | | |
| 52. | Central Solvents & Chemical Company | P. O. Box 03158<br>Portland, Oregon 97302 | | |
| 53. | Central Solvents & Chemical Company | East 6308 Sharp Ave.<br>Spokane, Wash. 99206 | | |
| 54. | Chevron Research Co | 555 Market Street<br>San Francisco, Calif.<br>94120 | | |
| 55. | Chemical Products Corp | 125 Main Avenue<br>East Paterson, N.J.07407 | | |
| 56. | Cities Service Co | Albi Manufacturing Co<br>98 East Main Street<br>Rockville, Conn. 06066 | | |
| 57. | Codo Mfg. Corporation | Leetsdale, Pa. 15056 | | |
| 58. | Colonial Press Co | 1 Green Street<br>Clinton, Mass. 01510 | | |
| 59. | Columbia Paint & Varnish Co | 452 Communipaw Ave.<br>Jersey City, N. J. 07304 | | |
| 60. | Columbia Ribbon and Carbon Manufacturing Co | Glen Cove, N. Y. 11542 | | |
| 61. | Continental Can Company | 1200 West 76th St.<br>Chicago, Ill. 60620 | | |



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WATER_PCB-00036467

| | NAME | ADDRESS | DATE MAILED | PER |
|---|---|---|---|---|
| 62. | Con-Lux Paint Products Co | Tallmadge Road<br>Edison, N. J. 08817 | _____ | _____ |
| 63. | Construction Adhesives | 63 Governor St.<br>Patterson, N. J. | _____ | _____ |
| 64. | Continental Can Co, Inc. | 975 Glenn Street<br>Van Wert, Ohio 45891 | _____ | _____ |
| 65. | The Conley Corporation | 91st Street & Delaware Ave.<br>Tulsa, Oklahoma 74105 | _____ | _____ |
| 66. | Cosden Chemical Coatings Corp.<br>Picked up # 282 | P. O. Box 230<br>Norristown, Pa. 19405 | _____ | _____ |
| 67. | Credo Labs | 3449 North Southport<br>Chicago, Illinois 60657 | _____ | _____ |
| 68. | Crystal Kraft, Inc. | 900 4th Street<br>Palmetto, Florida 35611 | _____ | _____ |
| 69. | Curtis-Young Corp. | 2550 Haddonfield Road<br>Pennsauken, N. J. 08110 | _____ | _____ |
| 70. | Davis Paint Manufacturers Co | P. O. Box 4153<br>Lynchburg, Virginia 24502 | _____ | _____ |
| 71. | Delsey Sanitation | 24 South 41st Street<br>Camden, New Jersey 08105 | _____ | _____ |
| 72. | Del Paint Manufacturing Co | 3105 East Reno Street<br>Okla. City, Okla 73117 | _____ | _____ |
| 73. | Dennison Manufacturing Co | Framingham, Mass. 01702 | _____ | _____ |
| 74. | De Soto, Incorporated<br>Chemical Coatings Division | 4th and Cedar Streets<br>Berkeley, Calif. 94710 | _____ | _____ |



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LEXOLDMON001001
WATER_PCB-00036468

| NAME | ADDRESS | DATE MAILED | PER |
|---|---|---|---|
| 75. The Dexter Corporation | Midland Division<br>31500 Hayman Street<br>Hayward, Calif. 94544 | | |
| 76. Dixie Solvents & Chemicals Company | Dixie Highway at Appleton Lane<br>Louisville, Kentucky 40216 | | |
| 77. Doubleday & Co, Inc. | P. O. Box 272<br>Berryville, Virginia 22611 | | |
| 78. L. A. Dreyfus Company | P. O. Box 500<br>South Plainfield, N.J.<br>07080 | | |
| 79. E. I. DuPont DeNemours & Co<br>Durkee-Atwood, Mpls, Minn | Chestnut Run Location<br>Centre Road<br>Wilmington, Delaware 19898 | | |
| 80. Dynasurf Chemicals Corp. | 1411-13 Fleet Street<br>Baltimore, Md. 21231 | | |
| 81. Eastman Kodak Company | Kodak Park Works<br>Rochester, N. Y. 14650 | | |
| 82. Eaton Allen Corp. | 67 Kent Avenue<br>Brooklyn, N. Y. 11211 | | |
| 83. Emerson & Cuming, Inc. | 59 Walpole Street<br>Canton, Mass. 02021 | | |
| 84. Endicott Johnson Corp. | Endicott, N. Y. 13790 | | |
| 85. Engineered Yarns, Inc.<br>Ennigrogenics Co, Paramount, Ca.<br>To Onkir Inc. Bakersfield, Ca. | 372 Main Street<br>Coventry, Rhode Island,<br>02816 | | |
| 86. Epoxylite Corporation<br>Enterprize Paint, S. Plainfield, N.J.<br>Here # 242 | 1428 Santa Anita Ave.<br>South El Monte, Calif. 91733 | | |



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LEXOLDMON001002
WATER_PCB-00036469

| | NAME | ADDRESS | MAILED | PER |
|---|---|---|---|---|
| 87. | Essex Chemical Corp. | 1401 Broad Street<br>Clifton, New Jersey 07013 | | |
| 88. | Essex Chemical Corp. | Chemical Division<br>1401 Broad Street<br>Clifton, N. J. 07015 | | |
| 89. | Exacto Products Corp.<br>Excello Paint, Cochocton, O., | 3333 Hammond Avenue<br>Elkhart, Indiana | | |
| 90. | Fasson Products<br>Brown Addressing, Columbus Ohio | 250 Chester Street<br>Painesville, Ohio 44077 | | |
| 91. | Federal Color Laboratories | Sun Chemical Co<br>4526 Chickering Ave.<br>Cincinnati, Ohio 45232 | | |
| 92. | Felt Products Mfg. Co<br>Fiberfill, Inc, Evansville, Ind. | 7450 No. McCormick Road<br>Skokie, Ill. 60076 | | |
| 93. | Ferro Corp.<br>Interlake Corp, Winona, Minn; | 4150 E. 56 Street<br>Cleveland, Ohio 44105 | | |
| 94. | University of Florida<br>Firestone Inc., Akron, Oh, Acct # 252 | Gainesville, Florida<br>32601 | | |
| 95. | Ford Paint & Varnish Co<br>Ford Motor Co #285 | 601 Crosby Street NW<br>Grand Rapids, Mich.<br>49504 | | |
| 96. | Form-Eze Systems, Inc. | P. O. Box 3646<br>Albuquerque, N.M.87110 | | |
| 97. | Fort Pitt Chemical Co<br>Foundry Equipment Prod, Inc. Pa. | 26th & Smallman St.<br>Pittsburgh, Pa. 15222 | | |
| 98. | Fox Valley Marking Systems | 4-N 671 Route 59<br>Bartlett, Ill. 60103 | | |
| 99. | The Franklin Glue Co | 2020 Bruck St.<br>Columbus, Ohio 43207 | | |



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LEXOLDMON001003
WATER_PCB-00036470

| | NAME | ADDRESS | DATE MAILED | PER |
|---|---|---|---|---|
| 100. | Freeman Manufacturing | 1315 Main Avenue<br>Cleveland, Ohio 44113 | | |
| 101. | Frye Manufacturing Co | P. O. Box 854<br>Des Moines, Iowa 50304 | | |
| 102. | H. B. Fuller Co. | 57 So. Linden Ave.<br>So. San Francisco, Calif.<br>94080 | | |
| 103. | The H. B. Fuller Co | 315 South Hicks Road<br>Palatine, Ill. 60067 | | |
| 104. | H. B. Fuller Co | 4819 Industrial Court<br>Cincinnati, Ohio 45217 | | |
| 105. | The H. B. Fuller Co | Industrial Division<br>2400 Kasota Avenue<br>St. Paul, Minn. 55108 | | |
| 106. | Fusite Corp.<br>Burdett Rd., Elk Grove, Ill. | 6000 Fernview Ave.<br>Cincinnati, Ohio 45212 | | |
| 107. | General Electric Co | Ballast Department<br>1430 East Fairchild St.,<br>Danville, Illinois | | |
| 108. | General Electric Co | 305 Eastern Ave.<br>Chelsea, Mass. 02150 | | |
| 109. | General Mills, Inc. | James Ford Bell Tech Center<br>9000 Plymouth Ave. North<br>Minneapolis, Minn. 55427 | | |
| 110. | General-Electric Co | Laminated Products Dept.<br>Coshocton, Ohio 43812 | | |
| 111. | Gentex Corporation | Maine and Simpson Streets<br>Carbondale, Pa. 18407 | | |



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LEXOLDMON001004
WATER_PCB-00036471

| | NAME | ADDRESS | DATE MAILED | PER |
|---|---|---|---|---|
| 112. | General Printing Ink Co., Inc. | 390 Central Avenue<br>East Rutherford,<br>New Jersey | | |
| 113. | The P. D. George Co<br>Georgia - Pont. - Tech - Atlanta, Ga. | 5200 North 2nd St.<br>St. Louis, Mo. 63147 | | |
| 114. | Gibson Homans Co | 2366 Woodhill Road<br>Cleveland, Ohio 44106 | | |
| 115. | Gillan Construction Co | P. O. Box 212<br>Westfield, Mass. 01085 | | |
| 116. | The Gilbert Spruance Co | Richmond & Tioga Streets<br>Philadelphia, Pa 19134 | | |
| 117. | Glidden Durkee Div. of SCM | Pigments & Color Div.<br>5601 Eastern Avenue<br>Baltimore, Md 21224 | | |
| 118. | Glidden Durkee | Division of SCM Corp<br>3rd and Bern Streets<br>Reading, Pa 19603 | | |
| 119. | Golden Star Polish Mfg Co.<br>B. F. Goodrich & Co.<br>Goodyear Tire, St. Mary, Ch. | 400 East 10th Ave.<br>North Kansas City,<br>Missouri 64115 | | |
| 120. | W. R. Grace & Co<br>Goodyear Tire, Niagara Falls, N. Y. | Marco Chem. Div.<br>1605 W. Elizabeth Ave<br>Linden, N. J. 07036 | | |
| 121. | W. R. Grace & Co.<br>Graniteville Co, S.C. | Dewey & Almy Chem. Div.<br>2133 85th Street<br>North Bergen, N. J. 07047 | | |
| 122. | Sherwin Williams Co | 1450 Sherwin Ave.<br>Oakland, Calif. | | |
| 123. | Great Western Chemical Co | 860 Wharf Street<br>Richmond, Calif. 94804 | | |



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LEXOLDMON001005
WATER_PCB-00036472

| | NAME | ADDRESS | DATE MAILED | PER |
|---|---|---|---|---|
| 124. | Great Western Chemical Co | 11440 S.W. Tiedeman St.<br>Portland, Oregon 97223 | | |
| 125. | Great Western Chemical Co | 6900 Fox Avenue<br>Seattle, Wash. 98108 | | |
| 126. | Gulton Industries<br>Hanna Assn. Columbia, S.C. | 212 Durham Avenue<br>Metuchen, N. J. 08840 | | |
| 127. | Hardman Incorporated<br>Harris Co, Inc. Trenton, Pa | 600 Cortlandt Street<br>Belleville, N. J. 07109 | | |
| 128. | Hartin Paint & Filler Co.<br>Haskell Chem. Richmond, Va. | 590 Belleville Turnpike<br>Kearny, N. J. 07032 | | |
| 129. | Hi-Strand Chemicals, Inc. | P. O. Box 368<br>Lenoir, North Carolina<br>28645 | | |
| 130. | Hightemp Resins, Inc. | 225 Greenwich Ave.<br>Stamford, Conn. 06902 | | |
| 131. | Hoosier Solvents &<br>Chemicals Co<br>PBM - Lawrenceburg, Ky. | P. O. Box 283<br>New Haven, Indiana 46774 | | |
| 132. | Illinois Adhesives<br>Products Co<br>Hevea Rubber Co. Ft. Wayne, Ind. | 3101 South California Ave.<br>Chicago, Ill. 60608 | | |
| 133. | Indurall Coatings, Inc. | P. O. Box 2371<br>Birmingham, Alabama 35201 | | |
| 134. | Industrial Latex Co<br>Inertech Systems, Clifton, Va. | 306 Mount Pleasant Ave.<br>Wallington, New J. 07057 | | |
| 135. | Inmont Corporation | Finishes Division<br>P. O. Box 3938<br>Anaheim, Calif. 92803 | | |
| 136. | Inmont Corp. | Presstite Div.<br>P. O. Box 3938<br>Anaheim, Calif. 92803 | | |



LEXOLDMON001006
WATER_PCB-00036473

| NAME | ADDRESS | DATE MAILED | PER |
|---|---|---|---|
| 137. Inmont Corp. | P. O. Box 659<br>Newark, N. J. 07101 | | |
| 138. Insulcoustic Corp.<br>Inertech Systems, Clifton, Va. | Jernee Mill Road<br>Sayerville, N. J. 08872 | | |
| 139. The University of Iowa<br>I22 Supremont, Clinton, Mass. | Iowa City, Iowa 52240 | | |
| 140. Jet-Shapes, Inc.<br>Jamestown Finishes, Jamestown, N.J. | Rockleigh Industrial Park<br>Rockleigh, N. J. 07647 | | |
| 141. John-Manville Products Corp | Research & Engineering Center<br>P. O. Box 159<br>Manville, N. J. 08835 | | |
| 142. Jordan Paint Co | 7250 Franklin<br>Forest Park, Ill. 60130 | | |
| 143. Joslyn Mfg. & Supply Co | 969 West 37th Place<br>R & D Division<br>Chicago, Ill. 60609 | | |
| 144. Kaiser Gypsum | Wilber Avenue<br>Antioch, Calif. 94509 | | |
| 145. Kansas Paint & Color Co | 132 North Mosley St.<br>Wichita, Kansas 67202 | | |
| 146. Keeper Chemical Corp. | 1688 Fifth Street<br>Trenton, N. J. 08638 | | |
| 147. Kee Lox Mfg Co | 10 Kee Lox Place<br>Rochester, N. Y. 14608 | | |
| 148. Kendall Company | 309 West Jackson Blvd.<br>Chicago, Ill. 60606 | | |
| 149. Kohler McLister Paint Co | P. O. Box 546<br>Denver, Col. 80201 | | |

| NAME | ADDRESS | DATE MAILED | PER |
|---|---|---|---|
| 150. Koppers Co., Inc. | 3501 Collins Ave.<br>Richmond, Calif. 94804 | | |
| 151. Koppers Co., Inc. | Organic Materials Div.<br>480 Freylinghuysen Ave.<br>Newark, N. J. 07114 | | |
| 152. Koppers Company | Organic Materials Div.<br>P. O. Box 759<br>Westfield, N. J. 07091 | | |
| 153. Koppers Company | Koppers Building<br>Pittsburgh, Pa. | | |
| 154. Liquid Nitrogen Processing Corp<br>LNP Solomons, Thorndale, Pa. | 412 East King Street<br>Malvern, Pa. 19355 | | |
| 155. The Lubrizol Corp.<br>Ludlow Paper, Ware, Mass. | 29400 Lakeland Blvd.<br>Cleveland, Ohio 44117 | | |
| 156. M. R. Plastics & Coatings, Inc.<br>Mc I Chem, Hunington, Ky | 11460 Dorsett Road<br>Maryland Heights, Mo.<br>63042 | | |
| 157. Maas & Waldstein Co | 2121 McCarter Highway<br>Newark, N. J. 07104 | | |
| 158. Magie Brothers Oil Co | 9101 Fullerton Ave.<br>Franklin Park, Ill 60131 | | |
| 159. Magid Corp.<br>Walter Maguire - Peekskill N.Y. | 350 Cantor Avenue<br>Linden, N. J. 07036 | | |
| 160. Manhattan Adhesives Corp. | 425 Greenpoint Avenue<br>Brooklyn, N. Y. 11222 | | |
| 161. Markem Corp. | 150 Congress Street<br>Keene, New Hampshire<br>03431 | | |

check to see if [illegible] as LNP

Here pick up # 255 + # 283

Master Builders, Buffalo, N. Y.



MCL000599

LEXOLDMON001008
WATER_PCB-00036475

| NAME | | ADDRESS | DATE MAILED | PER |
|---|---|---|---|---|
| 162. | McCloskey Varnish Co | 7600 State Road<br>Philadelphia, Pa. 19136 | | |
| 163. | Meloy Laboratories | Springfield, Va. | | |
| 164. | Mereco Products<br>Metal Cladding N. Tonawanda, N.Y. | Div. Metachem Resins Corp.<br>1530 Wellington Ave<br>Cranston, R. I. 02910 | | |
| 165. | Minnesota Mining & Mfg Co<br>Midland Ind, Hawthorne, Ill | P. O. Box 3121<br>St. Paul, Minn. 55101 | | |
| 166. | Missouri Solvents & Chemicals Company | 25522 Nicholson Ave.<br>Kansas City, Mo. 64120 | | |
| 167. | Mobil Chemical Co | P. O. Box 1388<br>Plainsfield, N. J. | | |
| 168. | Mobay Chemical Co<br>Benjamin Moore, Newark NJ | New Martinsville,<br>West Virginia 26155 | | |
| 169. | Morgan Adhesives<br>Motorola, Inc. Phoenix Ariz. | 4560 Darrow Road<br>Stow, Ohio 44225 | | |
| 170. | Mashua Corp. | 44 Franklin St.<br>Nashua, N. H. 03060 | | |
| 171. | National Bronze Powder Co | 9945 Franklin Ave.<br>Franklin Park, Ill. | | |
| 172. | The National Chemical & Plastics Co,<br>National Lithographing, Elizabeth N.C. | 1424 Philpot Street<br>Baltimore, Md. 21231 | | |
| 173. | The Nazar Rubber Co<br>New York Bronze, Elizabeth N. C. | Box 3316 - Station C<br>2727 Avondale<br>Toldeo, Ohio 43607 | | |
| 174. | Niles Chemical Paint Co | Third and Fort Streets<br>Niles, Mich. 49120 | | |



MCL000600

LEXOLDMON001009
WATER_PCB-00036476

*From the desk of*
J. M. SCHIFFERDECKER



LEXOLDMON001010
WATER_PCB-00036477

| | NAME | ADDRESS | DATE MAILED | PER |
|---|---|---|---|---|
| 175. | North American Paint Corp.<br>North Electric, Galion, Pa. | 3504 Rose Avenue<br>Suburb of Asbury Park<br>Wanamassa, N. J. 07072 | _____ | _____ |
| 176. | N.V.F. Company | Lafayette & Cedar St.<br>Kennett Square, Pa.<br>19348 | _____ | _____ |
| 177. | Ohio Solvents & Chemicals Company | 3470 West 140th St.<br>Cleveland, Ohio 44111 | _____ | _____ |
| 178. | Orelube Corp. | 126-06 18th Avenue<br>College Point, N.Y.<br>11356 | _____ | _____ |
| 179. | Paisley Products, Inc. | Div. Standard Brands, Inc.<br>29 Mack Drive<br>Edison, N. J. 08817 | _____ | _____ |
| 180. | Park Name Plate Co. | 34-10 Linden Place<br>Flushing, N. Y. 11354 | _____ | _____ |
| 181. | Pennsylvania Refining Co<br>Permacel, New Brunswick, N.J. | 2686 Libson Rd.<br>Cleveland, Ohio 44104 | _____ | _____ |
| 182. | Phillips Petroleum Co<br>Pierce-Stevens, Kenilworth, Pa. | Purchasing Dept.<br>Bartlesville, Okla 74004 | _____ | _____ |
| 183. | Photolastic, Inc.<br>Polychem Corp, Afton, Va. | 67 Lincoln Highway<br>Malvern, Pa. 19355 | _____ | _____ |
| 184. | Polyplastex United, Inc. | 870 Springfield Road<br>Union, New Jersey 07083 | _____ | _____ |
| 185. | The polymel Corporation<br>Polymer Sc Engrg., Amherst, Ma. | 514-516 Ensor Street<br>Baltimore, Md. 21202 | _____ | _____ |
| 186. | Polytech Co, Inc.<br>J. H. Potter, Front Royal, Va. | 175 Greenpond Rd.<br>Rockaway, N. J. 07866 | _____ | _____ |



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LEXOLDMON001011
WATER_PCB-00036478

| NAME | | ADDRESS | DATE MAILED | PER |
|---|---|---|---|---|
| 187. | PPG Industries, Inc. | Adhesive Products Div.<br>225 Belleville Ave<br>Bloomfield, N. J. 07003 | | |
| 188. | Princeton Chemical Research, Inc. | P. O. Box 652<br>Princeton, N. J. 08540 | | |
| 189. | Products Research and Chemical Corp.<br>Protective Treatment, Dayton, Ohio | 2919 Empire Avenue<br>Burbank, Calif. 91504 | | |
| 190. | Purex Corp. Ltd<br>Here pick up # 244 + 284 | I & I Products Group<br>2400 South Main Street<br>Wilmington, Calif. 90745 | | |
| 191. | Randolph Products Co | Carlstadt, N.J. 07072 | | |
| 192. | Raybestos Manhattan<br>Raybestos Tubes, Menlo Pk. Co.<br>Refined Prod. Div. - Lynd. N.J. | Raybestos Division<br>P. O. Box 1021<br>Stratford, Conn. 06497 | | |
| 193. | Reilly Tar & Chemical Co<br>Red Spot Paint, Evansville, Ind. | 11 South Meridian Ave.<br>Merchants Bank Building<br>No. 1615<br>Indianapolis, Indiana | | |
| 194. | I. Reiss Co, Inc. | 120 Bayway Street<br>Elizabeth, N. J. 07202 | | |
| 195. | Reliance Universal, Inc. | Box 4155<br>Roanoke, Va. 24015 | | |
| 196. | Republic Powdered Metals | 2628 Pearl Road<br>Medina, Ohio 44256 | | |
| 197. | Richardson Paint Company<br>Riegel Paper, Riegelsville, N.J. | 4821 Garden Street<br>Philadelphia, Pa 19137 | | |
| 198. | G. P. Roeser, Inc. | P. O. Box 92<br>Lahaska, Bucks County,<br>Pennsylvania 18931 | | |

| | NAME | ADDRESS | DATE MAILED | PER |
|---|---|---|---|---|
| 199. | Rohm and Haas Co Rubber Mailer Richmond, Ind. Quality Components Inc. | Independence Mall West Philadelphia, Pa 19105 Jamesonford, Va. | | |
| 200. | Sampson Paint Mfg Co | 301 Hull Street Richmond, Virginia | | |
| 201. | Eli Sandman Co. | 280 Greenwood St. Worchester, Mass. 01601 | | |
| 202. | Schjeldahl Company | Northfield, Minn. 55057 | | |
| 203. | Schwartz Chemical Co | 50-01 2nd Street Long Island City, N. Y. 11101 | | |
| 204. | Seaboard Products Co | Products Drive Texas, Maryland 21030 | | |
| 205. | Sherwin Williams Co pick up # 122 | P. O. Box 6027 Cleveland, Ohio | | |
| 206. | Silibond Products Inc. | 96 Summer Street Arlington, Mass. 02174 | | |
| 207. | Smith Construction Supply | P. O. Box 671 Jonesboro, Ga. 30236 | | |
| 208. | The Smith-Alsop Paint & Varnish Co | 630 North Third Street Terre Haute, Ind. 47801 | | |
| 209. | Solar Compounds Inc. | P. O. Box 227 Linden, New Jersey | | |
| 210. | Sonneborn Building Products, Inc. | Hancox Avenue Belleville, N. J. 07109 | | |
| 211. | Southern Solvents & Chemicals Corp. | P. O. Box 4067 Carrollton Station New Orleans, La. 70118 | | |

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| NAME | | ADDRESS | DATE MAILED | PER |
|---|---|---|---|---|
| 212. | Southern Adhesives Corp.<br>Southland Chem. San Antonio, Tex | P. O. Box 3498<br>Richmond, Va. 23234 | | |
| 213. | Sovereign Chemical Corp. | 180 East Railway Ave.<br>Patterson, N. J. | | |
| 214. | Specialty Coatings Co | 2500 North Delta Lane<br>Elk Grove Village, Ill.<br>60007 | | |
| 215. | Standard Brands Chemical Ind. Inc. | Cheswold, Delaware 19936 | | |
| 216. | Standard Brands Chemical Ind. Inc. | P. O. Drawer K<br>Dover, Delaware 19901 | | |
| 217. | Staley Chemical Co<br>Star Chem Co, Dallas, Tex | 320 Schuyler Avenue<br>Kearny, N. J. 07032 | | |
| 218. | St. Regis Paper Co | 150 East 42nd Street<br>New York, N. Y. 10017 | | |
| 219. | Standard T Chemicals, Inc. | 2600 Richmond Terrace<br>Staten Island, N. Y.10303 | | |
| 220. | Standard T Chemical | P. O. Box 47483<br>Dallas, Texas 75247 | | |
| 221. | Stresen-Reuter International<br>Sullivan Co, Memphis, Tenn | International Minerals<br>& Chemical Corp.<br>400 West Roosevelt Ave.<br>Bensenville, Ill. 60106 | | |
| 222. | Sun Chemical Corp. | General Printing Ink Div.<br>390 Central Avenue<br>East Rutherford, N.J.07073 | | |
| 223. | Sun Flo Paint Co | 212 Forest Avenue<br>Amsterdam, N. Y. 12010 | | |



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| NAME | ADDRESS | DATE MAILED | PER |
|---|---|---|---|
| 224. Sun Oil Company Refinery | P. O. Box 395<br>Marcus Hook, Pa. 19061 | | |
| 225. Superior Lacquer Co, Inc. | P. O. Box 508<br>Toccoa, Ga. 30577 | | |
| 226. Super Tire Engineering Co | 7255 Crescent Blvd.<br>Camden, N. J. 08101 | | |
| 227. Superior Varnish & Drier Co<br>Sutherland Co, Memphis, Tenn. | Box 1310<br>Merchantville, N.J.08109 | | |
| 228. Swift Chemical Company | Adhesives & Coatings Div.<br>P. O. Box 58007<br>Vernon, Calif. 90058 | | |
| 229. Swift Chemical Co | Division of Swift & Co.<br>8 Farish Drive<br>Madison, Ill. 62060 | | |
| 230. Taurus Chemical Corp. | Canoga & Bradley Streets<br>Auburn, New York 13021 | | |
| 231. Technical Coatings Co | 134 Lister Avenue<br>Newark, N. J. 07105 | | |
| 232. Technical Tape Corp<br>Teledyne Coast Fraseal Comp. Ca. | 240 North Avenue<br>New Rochelle, N.Y.10801 | | |
| 233. Tennessee Eastman Company<br>Tenneco Inc. Hazleton, Pa. | Div. of Eastman Kodak<br>Kingsport, Tenn. 37662 | | |
| 234. Terrell Corp<br>Texas Eastern Trans. Longwood, Tex. | 820 Woburn Street<br>Wilmington, Mass. 01887 | | |
| 235. Texas Solvents & Chemicals Company | 2500 Vinson Street<br>Dallas, Texas | | |

Textone Exacto, Elkhart, Ind.



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| NAME | ADDRESS | DATE MAILED | PER |
|---|---|---|---|
| 236. Thiokol Chemical Corp. | P. O. Box 1296<br>Trenton, N. J. 08607 | | |
| 237. Tibbals Flooring Inc. T.D 760 Park, Oneida, Ken. | Oneida, Tenn. 37841 | | |
| 238. Titanine, Inc. Treatment Plt - Titusville, Pa. | Div. of Seagram Corp.<br>P. O. Box 405<br>Union, N. J. 07083 | | |
| 239. Tremco Mfg Co. | 10701 Shaker Blvd.<br>Cleveland, Ohio44104 | | |
| 240. Ultrachem Inc. | 1400 North Walnut Street<br>Wilmington, Delaware 19899 | | |
| ✓241. American Mineral Park | 17 Executive Park Dr NE<br>Atlanta, Ga 30329 | ✓ | |
| ✓242. Eranel Services | 285 Wellsville Ave<br>New Milford, Conn. | | |
| ✓243. American Mineral Spirits Co | 3033 N. W. North River Drive<br>Miami, Florida 33142 | | |
| ✓244. Protective Coatings | 807 N. Fremont Ave.<br>Tampa, Florida | | |
| ✓245. American Mineral Spirits Co | 2275 Tucker Industrial Blvd.<br>Tucker, Ga. | | |
| 246. Universal Oil Products Corp. | Des Plaines, Ill.60016 | | |
| 247. Union Carbide Corp. | Southwest Accounting Center<br>P. O. Box 471<br>Texas City, Texas 77591 | | |
| ✓248. American Mineral Spirits Co | 2335 Thrift Road<br>Charlotte, N.C. | | |



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| NAME | ADDRESS | DATE MAILED | PER |
|---|---|---|---|
| 249. Union Carbide Corp. | Plastics Division<br>River Road<br>Bound Brook, N. J.08805 | | |
| 250. American Metal Seal Co | 509 Washington Ave<br>Carlstadt, N.J. | | |
| 251. Union-Amsco, Amsco Div | Div Union Oil Co of Calif.<br>350 Roosevelt Ave.<br>Carteret, N. J. | | |
| 252. Flintkote Co | Oak and Central Ave.<br>East Rutherford, N. J. | | |
| 253. Tex-Chem Co | 20-21 Wagaraw Rd<br>Pair Lawn, N. J. | | |
| 254. Birk Paint Co | 236 Kearny Avenue<br>Jersey City, N. J. | | |
| 255. Mahid Corporation | 350 Cantor Avenue<br>Linden, N. J. | | |
| 256. United Lacquer Manufacturing | 1001 West Elizabeth Ave.<br>Linden, N. J. 07036 | | |
| 257. Construction Compounds Inc. | 55 Micola Place<br>Nutley, N. J. | | |
| 258. United Resin Products, Inc. | 100 Sutton Street<br>Brooklyn, N. Y. 11222 | | |
| 259. Cloverleaf Paint | 43-43 Vernon Blvd.<br>Long Island City, N. Y. | | |
| 260. Argueso and Co., Inc. | 442 Waverly Avenue<br>Mamaroneck, N. Y. | | |

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| NAME | ADDRESS | DATE MAILED | PER |
|---|---|---|---|
| 261. Alloys Unlimited Inc. | 320 Long Island Expressway Sq.<br>Millville, N.Y.11746 | | |
| 262. Union Carbide Corp. | Carbon Products Div.<br>P. O. Box 6087<br>Cleveland, Ohio 44101 | | |
| 263. Union-Amsco, Amsco Div. | Colwells Lane<br>Conshohocken, Pa. | | |
| 264. Harleco Chemicals | 60th & Woodland Ave.<br>Philadelphia, Pa. | | |
| 265. Union Amsco, Amsco Div.<br>United Shoe Machine, Kenton, Tenn. | Div. of Union Oil of Calif.<br>255 Allens Avenue<br>Providence, Rhode, Island 02905 | | |
| 266. The United Paint Co<br>Unirayal, Mishawaka, Ind. | Paintmakers<br>P. O. Box 9037<br>Memphis, Tenn. 38109 | | |
| 267. Urecal Corporation<br>Urecon Corp. Detroit, Mich. | 562 Vista Avenue<br>Addison, Ill. 60101 | | |
| 268. U.S. Govt-Edgewood Arsenal | Finance & Accounting Officer<br>Bldg. 5238<br>Edgewood, Md. 21010 | | |
| 269. USM Corporation | Chemical Division<br>Middleton, Mass. 01949 | | |
| 270. USS Chemicals | Div. of United States Steel Corp.<br>Pittsburgh, Pa. 15225 | | |
| 271. The Valspar Corp. | 200 Sayre Street<br>Rockford, Ill. 61101 | | |



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| | NAME | ADDRESS | DATE MAILED | PER |
|---|---|---|---|---|
| 272. | Valspar Corp. | 1101 South Third St.<br>Minneapolis, Minn. 55415 | | |
| 273. | Vitricon, Inc. | 25-29 50th Street<br>Woodside, N.Y. 11377 | | |
| 274. | Warsaw Chemical Co | Argonne Road<br>Warsaw, Indiana | | |
| 275. | Western Electric Co, Inc.<br>John W. Mitte & Son, | Manufacturing Division<br>Voucher Dept. 3157<br>Hawthorne Station<br>Chicago, Ill. 60623<br>Burlington, Iowa | | |
| 276. | The Bruce Williams Laboratories | P. O. Box 169<br>Joplin, Missouri | | |
| 277. | Bostrum Division<br>Universal Oil Products<br>Hallow - Erickson, Chicago, Ill. | 133 West Oregon Street<br>Milwaukee, Wisconsin | | |
| 278. | Wisconsin Solvents & Chemicals Corp. | 1719 South 83rd St.<br>Milwaukee, Wis. 53214 | | |
| 279. | Wolverine Solvents & Chemicals Corp. | 2940 Stafford Ave. S.W.<br>Grand Rapids, Mich. 49508 | | |
| 280. | World Carpets Inc. | 431 South Green Street<br>Dalton, Georgia 30720 | | |
| 281. | Yates Manufacturing Co | 1615 West 15th Street<br>Chicago, Illinois 60608 | | |
| 282. | Cosmo Wheel Incorporated | 651 South Market St.<br>Waukegan, Ill. 60085 | | |
| 283. | Malter International Corp. | P. O. Box 6099<br>New Orleans, La. 70114 | | |



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