



INTERNAL CORRESPONDENCE

UNION CARBIDE CORPORATION

270 PARK AVENUE, NEW YORK, NEW YORK 10017

To (Name)	General Occupational	Date	February 12, 1979
Division	Health Committee	Originating Dept.	Health, Safety &
Location	(See Distribution List)		Environmental Affairs
Floor Number		Floor Number	22
Copy to	UCC Teratology Committee	Answering letter date	
		Subject	UCC Teratology Committee

Gentlemen:

The UCC Teratology Committee met on December 4, 1978.

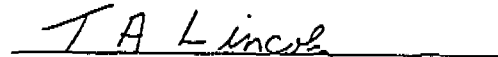
The two appended tables titled "List of Risks That May Have Adverse Effects on the Fetus and Appropriate Exposure Levels" and "List of Risks Considered by UCC Teratology Committee" have been updated to include the changes made December 4, 1978. The no exposure (NE) level for Fluorocarbon 22 has been changed to the present OSHA time weight average airborne concentration standard of 1000 parts per million. See table titled "List of Risks That May Have Adverse Effects on the Fetus and Appropriate Exposure Levels".

Substances Carbon Dioxide, Ethylenediaminetetraacetic Acid and Sodium Chloride were reviewed and listed as Not Industrial Teratogens.

These lists dated December 4, 1978 are current and replace the two previous lists dated July 10, 1978.

UCC Teratology Committee


T.W. Carmody
Corporate Director -
Occupational Health


T.A. Lincoln, M.D.
Corporate Medical Director

TWC/TAL/cjm
Attachments

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LIST OF RISKS THAT MAY HAVE ADVERSE EFFECTS ON THE FETUS AND APPROPRIATE EXPOSURE LEVELS

<u>RISK</u>	<u>SOURCE OF INFORMATION FOR IDENTIFICATION OF EFFECT AND FOR UCC LEVEL¹</u>									<u>EFFECT</u>	<u>UCC LEVELS FOR FERTILE WOMEN AND FETUS²</u>		<u>PRESENT ACCEPTED STANDARD³</u>
	DuPont	RTECS	UCC	NCRP	NIOSH CD	DOW	AAOG	OSHA Standard	ACGIH	Anoxia Agent Teratogen Carcinogen	Ceiling	8 Hr. TWA	
-ACETYLAMINOFLUORENE								X		X X	NE	NE	NE(PS)
CRYLONITRILE								X		X X	10 PPM	2	TWA 2 PPM (TS)
NILINE									X	X	5 PPM	5	TLV 5 PPM
ENZENE					X X					X X	5 PPM	1	TWA 1 PPM (PS)
ADMIUM				X		X				X X	200 $\mu\text{g}/\text{M}^3$	40	TLV 50 $\mu\text{g}/\text{M}^3$
ARBON MONOXIDE								X		X	50 PPM	50	TLV 50 PPM
ARBON TETRACHLORIDE	X			X						X X	4 PPM	2	TLV 10 PPM
HLOROFORM	X			X						X X	4 PPM	2	TLV 10 PPM
DMETHYLACETAMIDE	X X							X		X	10 PPM ASC	10 ASC	TLV 10 PPM
DMETHYL FORMAMIDE	X							X		X	10 PPM ASC	10 ASC	TLV 10 PPM
DMETHYLSULFOXIDE		X X								X	10 PPM ASC	10 ASC	NS
IOXIN		X			X					X	NE	NE	NE
ENE THIOUREA	X									X X	NE	NE	NS
IDE	X X							X		X	20 PPM NSC	20 NSC	TLV 20 PPM
LUOROCARBON 22	X						X			X	1000 PPM	1000 PPM	TLV 1000 PPM
XAFLUOROACETONE	X							X		X	0.1 PPM NSC	0.1 NSC	TLV 0.1 PPM
YDROGEN SULFIDE								X		X	10 PPM	10	TLV 10 PPM
EAD ⁴			X							X	50 $\mu\text{g}/\text{M}^3$		TLV 150 $\mu\text{g}/\text{M}^3$
MERCURY, ALKYL COMPOUNDS				X				X		X	NE	NE	TLV 0.001 PPM
ITRIC OXIDE (NO)								X		X	25 PPM	25	TLV 25 PPM
ITROBENZENE								X		X	1 PPM	1	TLV 1 PPM
-NITROSODIMETHYLAMINE								X		X X	NE	NE	NE (PS)
CAH								X		X X	600 $\mu\text{g}/\text{M}^3$ ASC	200 ASC	TLV 200 $\mu\text{g}/\text{M}^3$
CB				X						X X	3 $\mu\text{g}/\text{M}^3$ ASC	1 $\mu\text{g}/\text{M}^3$ ASC	NS 500 $\mu\text{g}/\text{M}^3$
ERCHLOROETHYLENE					X					X X	15 PPM	10	TLV 100 PPM
ADIATION				X						X	-	0.5 RADS	Footnote 1
ETRAMETHYLTHIOUREA	X										NE	NE	NS
ETRAMETHYLUREA	X										NE	NE	NS
INYL CHLORIDE								X		X X	5 PPM	1	TWA 1 PPM (PS)
INYL TOLUENE	X							X		X	30 PPM	20	TLV 100 PPM

NCRP - National Council of Radiation Protection. For Radiation
NCRP 53 standard - 0.5 RADS for X-Ray gamma total during pregnancy.

Control exposures to the above noted risks to the UCC levels noted
herein; in the event that attainment of lower levels is feasible,
further reduce exposures to these lower levels.

Footnote: 50 $\mu\text{g}/\text{M}^3$ is ceiling level. Pregnant women with blood levels
over 30 $\mu\text{g}/100$ gms. of blood should be removed from exposure.

³ASC - Avoid Skin Contact
NSC - No Skin Contact
NS - No Standard
NE - No Exposure
PS - Permanent Standard
TS - Temporary Standard

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LISTS OF RISKS CONSIDERED BY UCC TERATOLOGY COMMITTEE

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<u>RISKS</u>	<u>DECISION ON WHETHER TO INCLUDE ON LIST OF RISKS TO FETUS, DECEMBER 4, 1978</u>
Acetylaminofluorene	OL
Acrylic Acid	NIT
Acrylonitrile	OL
Aniline	OL
Arsenic Trioxide	NLAT
Asbestos	NLAT
Benzene	OL
Benzidine	NLAT
Benzoyl Peroxide	NLAT
Beryllium Compounds (Beryllium oxide)	NLAT
Butylated Hydroxytoluene	NIT
t-Butyl Peroxide	NLAT
Cadmium Compounds	OL
Carbaryl (SEVIN)	NIT
Carbon Dioxide	NIT
Carbon Disulfide	NIT
Carbon Monoxide	OL
Carbon Tetrachloride	OL
bis-2-Chloroethylether Clorex	NLAT
Chloroform	OL
bis-Chloromethylether	NLAT
Chloroprene	NLAT
Chromium VI	NLAT
Croton Oil	NLAT
Cumene Hydroperoxide	NLAT
Dibutyl Phthalate	NIT
Dichlorobenzenes	NLAT
Dichlorobenzidine	NLAT
Diethyl Sulfate	NLAT
Diethyl Phthalate	NIT
Dioxane	NLAT
Dioxin (TCDD)	OL
Dimethylacetamide	OL
Dimethylformamide	OL
Dimethylsulfoxide	OL
Ethyl Alcohol	NIT
Epichlorohydrin	NLAT
Epoxide 201	NLAT
Ethylenediaminetetraacetic Acid	NIT
Ethylene Dibromide	NLAT
Ethylene Oxide	NLAT
Ethylene Thiourea	OL
fluorocarbon 22 - Chlorodifluoromethane	OL
Formaldehyde	NLAT
Formamide	OL

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DECISION ON WHETHER TO INCLUDE ON LIST
OF RISKS TO FETUS, DECEMBER 4, 1978

Glycidaldehyde	NLAT
Heat	No decision made at this time.
Hexafluoracetone	OL
Hydrazine	NLAT
Hydrogen Sulfide	OL
Lauroyl Peroxide	NLAT
Lead	OL
Methylenedianiline	NLAT
Methyl Mercury	OL
Methyl Styrene (Vinyl Toluene)	OL
beta Naphthylamine	NLAT
Nickel	NLAT
Nitric Oxide	OL
Nitrobenzene	OL
Nitrosodimethylamine	OL
Ozone	NLAT
PCAH	OL
PCB	OL
Perchloroethylene	OL
Phenol	NLAT
Polychlorinated Biphenyls	NLAT
Beta-Propiolactone	NLAT
Propyleneimine	NLAT
Radiation	OL
Sodium Chloride	NIT
Styrene Oxide	NLAT
Tetramethylthiourea	OL
Tetramethylurea	OL
Toluenediamine	NLAT
Trichloroethylene	NLAT
Vinyl Chloride	OL
Vinylcyclohexene Dioxide (EP206)	NLAT

- 1.
- OL = Is on the 12/04/78 list of risks to fetus.
- NIT = Animal teratogen data indicates it is Not an Industrial Teratogen. For example, butylated hydroxytoluene was considered and not added to the list. The committee concluded that the animal data which showed terata developed as a result of high animal doses, was such that this material is Not an Industrial Teratogen.
- NLAT = Not list as teratogenic to animals in the 1976 Registry of Toxic Effects of Chemical Substances. It should be noted that materials so listed have been tested for other toxic effects. However, these materials may not and probably have not been tested at all for teratogenic effects.

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