Material Safety Data Sheet

For Coatings, Resins and Related Materials

•NOTE: CHEMTREC, CANUTEC and National Response Center emergency numbers to be used only in the event of chemical emergencies involving a spill, leak, fire, exposure or accident involving chemicals

•24 Hour Emergency: 1-800-123-4567 CHEMTREC: 1-800-424-9300
•National Response in Canada CANUTEC: 613-996-6666
•Outside U.S. and Canada Chemtrec: 202-483-7616

Section 1 - Chemical Product / Company Information

Product Name:	23X29, NONCOMPLIANT SEMI-GLOSS DEFTHANE	Revision Date:	12/14/2005
Identification Number:	023	Print Date:	04/21/2006
Product Use/Class:	POLYURETHANE		
Manufacturer:	Deft, Inc. (CAGE CODE 33461) 17451 Von Karman Ave Irvine, Ca. 92614	Information Phone: Emergency Phone:	(949) 474-0400 (800) 424-9300

Section 2 - Hazards Identification

*** Emergency Overview ***: Amber liquid with solvent odor. Harmful by inhalation, in contact with skin, and if swallowed. Contact with eyes or skin causes irritation.

Effects Of Overexposure - Eye Contact: Exposure to liquid, aerosol, or vapors may cause irritation, tearing, redness, and swelling accompanied by a stinging sensation. Direct eye contact may cause irritation. Damage may occur to the cornea or lens of the eye.

Effects Of Overexposure - Skin Contact: Prolonged and repeated skin contact may cause dermatitis, drying, and defatting due to the solvent properties. Direct skin contact may cause irritation. Symptoms may include swelling, redness, and rash.

Effects Of Overexposure - Inhalation: Inhalation may cause irritation to the respiratory tract (nose, mouth, mucous membranes) & acute nervous system depression characterized by the following progressive steps: headache, dizziness, staggering gait, confusion, unconsciousness, or coma. Inhalation may cause headaches, difficult breathing, and loss of consciousness. The lungs may permanently scar when repeated exposures occur. Respiratory depression, failure, or death may result from overexposure.

Effects Of Overexposure - Ingestion: Ingestion may cause a burning sensation in the mouth and esophagus. Vomiting may cause aspiration of the solvent, resulting in chemical pneumonitis. May result in possible corrosive action in the mouth, stomach tissue and digestive tract. Ingestion may cause gastrointestinal irritation, abdominal pain, nausea, vomiting and diarrhea. Harmful: may cause lung damage if swallowed.

Effects Of Overexposure - Chronic Hazards: Kidney damage may occur form inhalation, skin absorption, or ingestion. A component has been shown to cause blood abnormalities, lower activity of certain immune system cells, effects the hearing, mild reversible liver effects, central nervous damage, and cataracts in laboratory animals. Contains components listed as a Carcinogen: NTP? : No, IARC Monographs? : Yes, OSHA Regulated? : No. Prolonged contact will cause drying and cracking of the skin, due to defatting action. Skin sensitization, asthma or other allergic responses may develop. Symptoms of overexposure may occur for up to 48 hours after the original exposure occurred.

Primary Route(s) Of Entry: Skin Contact, Skin Absorption, Inhalation, Ingestion, Eye Contact

Section 3 - Composition / Information On Ingredients

Component	CAS Number	Weight % Reporting Ranges
MINERAL SPIRITS	8052-41-3	30-60
AROMATIC HYDROCARBON	64742-95-6	3-7
1,2,4 TRIMETHYLBENZENE	95-63-6	1-5
PAINT DRIER	22464-99-9	0.1-1.0
ANTI-SKIN AGENT	96-29-7	0.1-1.0
COBALT SALT	TRADE SECRET	0.0-0.1
COBALT CARBOXYLATE	TRADE SECRET	0.0-0.1

THE ABOVE LISTED PRODUCTS ARE ON THE TSCA INVENTORY LIST. ALSO ANY UNLISTED INGREDIENTS.

Section 4 - First Aid Measures

First Aid - Eye Contact: If eyes are irritated from airborne exposure, move to fresh air. If material gets into eyes, flush with water immediately for 15 minutes. Consult a physician. Hold eyelids open to rinse out the entire eye.

First Aid - Skin Contact: In case of contact, immediately flush skin with plenty of water and wash affected areas thoroughly with soap and water. Remove contaminated clothing and shoes.

First Aid - Inhalation: Move to fresh air in case of accidental inhalation of vapors. In the case of inhalation of aerosol/mist

consult a physician, if necessary. Asthmatic type symptoms may develop and maybe immediate or delayed by several hours.

First Aid - Ingestion: Do not induce vomiting. Do not give anything to an unconscious person. Obtain medical help.

Section 5 - Fire Fighting Measures

Flash Point (°F): 105 TCC LOWER EXPLOSIVE LIMIT (%): N.D. UPPER EXPLOSIVE LIMIT (%): N.D.

Extinguishing Media: Alcohol Foam, Carbon Dioxide, Dry Chemical, Foam, Water Fog, Water Spray, Dry Sand

Unusual Fire And Explosion Hazards: Remove all sources of ignition. Toxic gases may form when product burns. Fire or intense heat may cause violent rupture of packages. Keep containers tightly closed. Isolate from heat, sparks, electrical equipment and open flame. Vapors can form an ignitable mixture with air. Vapors can flow along surfaces to a distant ignition source and flashback. Application to hot surfaces requires special precautions.

Special Firefighting Procedures: In the event of fire, wear self-contained breathing apparatus. Cool fire-exposed containers using water spray. Firefighters should wear full protective clothing.

Section 6 – Accidental Release Measures

Steps To Be Taken If Material Is Released Or Spilled: Evacuate all non-essential personnel. Remove all sources of ignition. Ventilate area. Contain and remove spilled material with inert absorbent and non-sparking tools. Dike to prevent entering any sewer or waterway. Use personal protective equipment as necessary.

Section 7 - Handling and Storage

Handling: Handle in accordance with good industrial hygiene and safety practice. Do not drill, solder, pressurize, grind, cut, weld, or braze empty container. Do not expose empty container to static electricity, heat, flame, sparks, or any source of ignition. Use only in ventilated areas. Open doors and windows. Keep product and empty container away from heat, open flames, hot surfaces and sources of ignition.

Storage: Avoid storing near high temperatures, fire, open flames, and spark sources. Do not store with oxidizers. Store in buildings designed to comply with OSHA 1910.106. Keep containers upright to prevent leakage and tightly closed in a dry, cool and well-ventilated place.

Section 8 - Exposure Controls / Personal Protection

Component	ACGIH TLV	ACGIH STEL	OSHA PEL	OSHA STEL
MINERAL SPIRITS	100 ppm	N.E.	500 ppm	N.E.
AROMATIC HYDROCARBON	100 ppm	N.E.	N.E.	N.E.
1,2,4 TRIMETHYLBENZENE	25 ppm	150 mg/m3	100 ppm	N.E.
PAINT DRIER	N.E.	N.E.	N.E.	N.E.
ANTI-SKIN AGENT	N.E.	N.E.	N.E.	N.E.
COBALT SALT	0.02 mg/m3	N.E.	N.E.	N.E.
COBALT CARBOXYLATE	N.E.	N.E.	N.E.	N.E.

Notes

PAINT DRIER CAS# 22464-99-9 - OSHA 29 CFR 1910.1000, Table Z-1 lists Zirconium Compounds (as Zr). ACGIH TWA/TLV 5 mg/m3; TLV/STEL 10 mg/m3

COBALT SALT - Trade Secret - New Jersey Trade Secret Registry Number 5670570001-5015P. IARC Group 2B possibly carcinogenic to humans. ACGIH TLV-TWA is for exposure to cobalt and inorganic compounds.

COBALT CARBOXLATE - New Jersey Trade Secret Registry Number 56705700001-5697P. Contains Cobalt compounds. Cobalt compounds are listed by IARC as a 2B possibly carcinogenic to humans. ACGIH TLV-TWA is 0.02 mg/m3 based on content of Cobalt.

Engineering Controls: Local ventilation of emission sources may be necessary to maintain ambient concentrations below permissible OSHA exposure limits. Remove all ignition sources (heat, sparks, flame, and hot surfaces).

Respiratory Protection: A respirator that is recommended or approved for use in an organic vapor environment (air purifying or fresh air supplied) is necessary. Observe OSHA regulations for respirator use. Ventilation should be provided to keep exposure levels below the OSHA permissible limits.

Skin Protection: Chemical-resistant gloves (cotton, neoprene, rubber, polyethylene) should be used to prevent skin contact.

Eye Protection: Wear safety eyewear (safety glasses, safety glasses with side-shields, chemical goggles, or face shields) to prevent eye contact.

Other protective equipment: Safety shower and eyewash station should be located in immediate work area. Long sleeve and long leg clothing is recommended. Remove and wash contaminated clothing before reuse or discard.

Hygienic Practices: Wash hands before breaks, eating, smoking, and at the end of the workday.

Section 9 - Physical and Chemical Properties

Boiling Range (°F):	N.D. - N.D.	Vapor Density:	Heavier than air
Odor:	Solvent odor	Odor Threshold:	N.D.
Appearance:	Amber liquid	Evaporation Rate:	0.11 x n-Butyl Acetate
Solubility in H2O:	Insoluble		
Freeze Point:	N.D.	Specific Gravity:	0.899
Vapor Pressure:	N.D.	PH:	N.A.
Physical State:	Liquid	Viscosity:	Thin liquid to heavy

viscous material

(See section 16 for abbreviation legend)

Section 10 - Stability and Reactivity

Conditions To Avoid: Do not breathe vapors or spray mist. Avoid high temperatures, sparks, or open flames.
Incompatibility: Keep away from strong oxidizing agents, heat and open flames.
Hazardous Decomposition: Metal oxides when burned. Thermal decomposition can lead to the generation and release of gases and vapors including carbon monoxide, carbon dioxide, oxides of nitrogen, and hydrocarbons.
Hazardous Polymerization: Will not occur.
Stability: Stable under recommended storage conditions.

Section 11 - Toxicological Information

Product LD50: N.E. Product LC50: N.E.

Section 12 - Ecological Information

Ecological Information: No Information.

Section 13 - Disposal Information

Disposal Information: EPA Hazardous Waste Number/Code: D001, F003, F005. Dispose of waste in accordance with federal, state, and local environmental regulations. Empty containers will contain product residue and flammable vapors. Handle as hazardous material. Do not incinerate closed containers. Hazardous Waste Characteristics: Ignitability and Reactivity.

Section 14 - Transportation Information

DOT Proper Shipping Name:	Consumer Commodity	Packing Group:	N.A.
DOT Technical Name:	N.A.	Hazard Subclass:	N.A.
DOT Hazard Class:	ORM-D	Resp. Guide Page:	N.A.
DOT UN/NA Number:	N.A.		

Section 15 - Regulatory Information

CERCLA – SARA Hazard Category
This product has been reviewed according to the EPA 'Hazard Categories' promulgated under Sections 311and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories: IMMEDIATE HEALTH HAZARD, CHRONIC HEALTH HAZARD, FIRE HAZARD

SARA Section 313:
This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendment and Reauthorization Act of 1986 and 40 CFR part 372:

Component	CAS Number	Percent By Weight
1,2,4 TRIMETHYLBENZENE	95-63-6	1.42
PAINT DRIER	22464-99-9	0.59
COBALT SALT	TRADE SECRET	0.1
COBALT CARBOXYLATE	TRADE SECRET	0.1

Toxic Substances Control Act:
This product contains the following chemical substances subject to the reporting requirements of TSCA 12(B) if exported from the United States:

Component	CAS Number
SOLVENT - NJTSR # 56705700001-5127P	TRADE SECRET

U.S. State Regulations: As follows –
New Jersey Right-to-Know:
The following materials are non-hazardous, but are among the top five components in this product.

Component	CAS Number
ALKYD RESIN	TRADE SECRET
URALKYD	TRADE SECRET

Pennsylvania Right-to-Know:
The following non-hazardous ingredients are present in the product at greater than 3%.

Component	CAS Number
ALKYD RESIN	TRADE SECRET

California Proposition 65:
Warning: The following ingredients present in the product are known to the state of California to cause Cancer:

Component	CAS Number
ETHYL BENZENE	100-41-4
ETHYL BENZENE	100-41-4

BENZENE	71-43-2
NAPTHALENE	91-20-3
BENZENE	71-43-2

Warning: The following ingredients present in the product are known to the state of California to cause birth defects, or other reproductive hazards.

Component	CAS Number
TOLUENE	108-88-3
BENZENE	71-43-2
BENZENE	71-43-2

International Regulations: As follows –

CANADIAN WHMIS: This MSDS has been prepared in compliance with Controlled Product Regulations except for the use of the 16 headings.

CANADIAN WHMIS CLASS: N.A.

Section 16 - Other Information

HMIS Ratings:

Health: 3 Flammability: 2 Reactivity: 1 Personal Protection: I

VOLATILE ORGANIC COMPOUNDS, GR/LTR: 437.0

VOLATILE ORGANIC COMPOUNDS, LB/GAL: 3.6

VOLATILE ORGANIC COMPOUNDS MIXED, GR/LTR: <= N.D.

VOLATILE ORGANIC COMPOUNDS MIXED, LB/GAL: <= N.D.

REASON FOR REVISION: New Computer System. Information in Sections 2, 3, 4, 5, 6, 7, 8, 10, 14, 15, and 16 have been updated.

REGULATORY CODE: 023

LAYOUT CODE: A2004R

Legend: N.A. - Not Applicable, N.E. - Not Established, N.D. - Not Determined

The information contained on this MSDS has been checked and should be accurate. However, it is the responsibility of the user to comply with all Federal, State, and Local laws and regulations.