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:	23X20 GLOSS DEFTHANE, 450 VOC	Revision Date:	05/09/2006
Identification Number:	020	Print Date:	08/31/2006
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. Combustible liquid. Contact with eyes or skin causes irritation.

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

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, itching, 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, drowsiness, unconsciousness, coma, or possible death. Inhalation may cause headaches, difficult breathing, and loss of consciousness. Exposure may cause a sore throat or a runny nose. 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. Ingestion may cause gastrointestinal irritation, abdominal pain, nausea, vomiting, and diarrhea. Ingestion may cause nervous system effects, which may include headache, dizziness, numbness, staggering gait, or confusion. Harmful: may cause lung damage if swallowed. 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.

Effects Of Overexposure - Chronic Hazards: Prolonged contact will cause drying and cracking of the skin, due to defatting action. Skin sensitization, asthma or other allergic responses may develop. A component(s) 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. Kidney damage may occur form inhalation, skin absorption, or ingestion. 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
VM & P NAPHTHA	64742-89-8	1-5
1,2,4 TRIMETHYLBENZENE	95-63-6	1-5
PAINT DRIER	22464-99-9	0.1-1.0
2-BUTANONE, OXIME	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. Hold eyelids open to rinse out the entire eye. If material gets into eyes, flush with water immediately for 15 minutes. Consult a physician.

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: Asthmatic type symptoms may develop and maybe immediate or delayed by several hours. In the case of inhalation of aerosol/mist consult a physician, if necessary. Move to fresh air in case of accidental inhalation of vapors.

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 (%): 0.9UPPER EXPLOSIVE LIMIT (%): 7.0

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

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

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

Section 6 – Accidental Release Measures

Steps To Be Taken If Material Is Released Or Spilled: Use personal protective equipment as necessary. 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.

Section 7 - Handling and Storage

Handling: Always use grounding leads when transferring from one container to another. Handle in accordance with good industrial hygiene and safety practice. Use only in ventilated areas. Open doors and windows. 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. Do not handle until the manufacturers safety precautions have been read and understood. 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. 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. Do not store with oxidizers.

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.
VM & P NAPHTHA	300 ppm	N.E.	300 ppm	400 ppm
1,2,4 TRIMETHYLBENZENE	25 ppm	150 mg/m3	100 ppm	N.E.
PAINT DRIER	N.E.	N.E.	N.E.	N.E.
2-BUTANONE, OXIME	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 CAS# 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 CAS# TRADE SECRET - 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 or NIOSH certified respirator for organic vapors, mists or fumes) is necessary. Ventilation should be provided to keep exposure levels below OSHA permissible limits. If TLV limits can be maintained and documented below the OSHA/ACGIH limits, an air supplied respirator may not be required. However, other OSHA/NIOSH approved respirators may be used.

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:	0.15 x n-Butyl Acetate

Solubility in H2O:	Insoluble		
Freeze Point:	N.D.	Specific Gravity:	0.886
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: Avoid high temperatures, sparks, or open flames. Do not breathe vapors or spray mist.
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: 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. EPA Hazardous Waste Number/Code: D001, F003, F005. 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	1.40
PAINT DRIER	22464-99-9	0.60
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
p-XYLENE OR PARA-XYLENE	106-42-3

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
URALKYD	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
BENZENE	71-43-2
TOLUENE	108-88-3
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: G

VOLATILE ORGANIC COMPOUNDS, GR/LTR: 442.9
VOLATILE ORGANIC COMPOUNDS, LB/GAL: 3.71
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, 7, 8, 15, and 16 have been updated.
REGULATORY CODE: 020
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.