

# 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:	DEFT M22750G-1-H-A-17178 BASE COMPONENT	Revision Date:	12/18/2013
Identification Number:	01GY093	Print Date:	
Product Use/Class:	EPOXY TOPCOAT BASE COMPONENT/MIL-PRF-22750G, TYPE I, CLASS H, GRADE A	NSN:	
Manufacturer:	Deft, Inc. (CAGE CODE 33461) 17451 Von Karman Ave Irvine, Ca. 92614	Information Phone:	(949) 474-0400
		Emergency Phone:	(800) 424-9300

### Section 2 - Hazards Identification

\*\*\* Emergency Overview \*\*\*: Extremely Flammable! Harmful by inhalation, in contact with skin, and if swallowed. Eye irritant. Affects the central nervous system. 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. Contact with eyes may cause irritation. Damage may occur to the cornea or lens of the eye. Benzyl alcohol, a component of this formulation, can cause severe eye irritation and eye tissue injury as a result of direct eye contact.

**Effects Of Overexposure - Skin Contact:** Direct skin contact may cause irritation. Symptoms may include swelling, redness, pain, numbness, drying, rash, blistering, and skin burns. Material may pass through the skin and cause effects similar to breathing or ingestion. Prolonged or repeated skin contact may cause dermatitis, drying, and defatting due to the solvent properties. May cause allergic skin reaction. May cause severe skin irritation.

**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, weakness, fatigue, drowsiness, nausea, confusion, unconsciousness, coma, or possible death. Inhalation may cause irritation to the respiratory tract (nose, mouth, mucous membranes) & acute nervous system depression characterized by the following progressive steps: headache, dizziness, dullness, staggering gait, confusion, unconsciousness, or coma. Exposure may cause narcosis or coughing. Harmful by inhalation. Inhalation may cause headaches, difficult breathing, and loss of consciousness. Respiratory depression, failure, or death may result from overexposure. Exposure to benzyl alcohol, a component of this formulation, may aggravate preexisting medical conditions of the respiratory tract, lungs, and skin.

**Effects Of Overexposure - Ingestion:** Ingestion may cause gastrointestinal irritation, abdominal pain, nausea, vomiting, and diarrhea. May result in possible corrosive action in the mouth, stomach tissue, and digestive tract. Vomiting may cause aspiration of the solvent, resulting in chemical pneumonitis that may lead to possible death. Harmful or fatal if swallowed. Ingestion causes damage to the central nervous system. It may include, acute nervous system depression, which is characterized by the following progressive steps: headache, dizziness, staggering gait, confusion, drowsiness, unconsciousness, or coma. Ingestion may cause a burning sensation in the mouth and esophagus. The gastrointestinal tract lining may be damaged through the ingestion of a component.

**Effects Of Overexposure - Chronic Hazards:** Prolonged contact will cause drying and cracking of the skin, due to defatting action. Repeated or prolonged contact causes sensitization, asthma, and eczemas. Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin resulting in non-allergic contact dermatitis and absorption through the skin. May cause muscle weakness and loss of coordination. Purposely concentrating and inhaling solvent vapors may cause damage to the nervous system and brain. MINERAL SPIRITS, an ingredient of this formulation, has been shown to cause harm to the fetus in laboratory animal studies. Harm to the fetus occurs only at exposure levels that harm the pregnant animal. The relevance of these findings to humans is uncertain.

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

### Section 3 - Composition / Information On Ingredients

Component	CAS Number	Weight % Reporting Ranges
BENZENE, 1-CHLORO-4 TRIFLUOROMETHYL	98-56-6	15-40
BISPHENOL A EPOXY RESIN, AVG. MOL. WT. < 700	25085-99-8	10-30
ALUMINUM FLAKE	7429-90-5	5-10
ACETONE	67-64-1	1-5
TOLUENE	108-88-3	1-5
BENZYL ALCOHOL	100-51-6	1-5
SOLVENT NAPHTHA, LT. AROMATIC, PETROLEUM	64742-95-6	1-5
MINERAL SPIRITS (STODDARD SOLVENT)	8052-41-3	1-5
ETHYL 3-ETHOXYPROPIONATE	763-69-9	1-5

8. ALL INGREDIENTS ARE ON THE TSCA INVENTORY LIST, UNLESS OTHERWISE NOTED IN SECTION

### Section 4 - First Aid Measures

**First Aid - Eye Contact:** If material gets into eyes, flush with water immediately for 20 minutes. Hold eyelids open to rinse out the entire eye. Consult a physician. If eyes are irritated from airborne exposure, move to fresh air.

**First Aid - Skin Contact:** Remove contaminated clothing and shoes. In case of contact, immediately flush skin with plenty of water and wash affected areas thoroughly with soap and water. Wash contaminated clothing thoroughly before reuse or discard. If rash or irritation develops, consult a physician.

**First Aid - Inhalation:** Move to fresh air in case of accidental inhalation of vapors. Give oxygen or artificial respiration if needed. Asthmatic type symptoms may develop and maybe immediate or delayed by several hours. In the case of inhalation of aerosol/mist, call 911 immediately.

**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): -4 LOWER EXPLOSIVE LIMIT UPPER EXPLOSIVE LIMIT (%): ND  
(%): ND

Extinguishing Media: Carbon Dioxide, Dry Chemical, Foam, Water Fog, Dry Sand, Dry Powder, Water Mist

Unusual Fire And Explosion Hazards: Keep containers tightly closed. Isolate from heat, sparks, electrical equipment and open flame. Fire or intense heat may cause violent rupture of packages. Application to hot surfaces requires special precautions. Toxic gases may form when product burns. Remove all sources of ignition. Vapors may form an ignitable mixture with air. Vapors may flow along surfaces to a distant ignition source and flashback. Do not use a cutting or welding torch near or on a drum of product, because vapors may ignite explosively, even if the drum is empty and contains only product residue.

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

### 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. Use personal protective equipment as necessary. Dike to prevent entering any sewer or waterway.

### Section 7 - Handling and Storage

Handling: Prevent prolonged breathing of vapors or spray mist. Avoid contact with eyes and skin. Do not take internally. Do not handle until the manufacturers safety precautions have been read and understood. Handle in accordance with good industrial hygiene and safety practice. Keep away from heat and sources of ignition. Use only in ventilated areas. Use safety precautions with empty containers. Empty containers may contain hazardous materials (product residues) in the form of solids, liquids, or vapors. Do not reuse empty containers without commercial cleaning or reconditioning. Always use grounding leads when transferring from one container to another. 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. IF CONTAINER IS DISTORTED OR BULGING, THE CONTENTS ARE UNDER PRESSURE DUE TO REACTION OF THE ALUMINUM FLAKE WITH MOISTURE. PLACE CONTAINER IN A LARGER CONTAINER FOR DISPOSAL. Protect container against physical damage.

Storage: Store in buildings designed to comply with OSHA 1910.106. Avoid storing near high



temperatures, fire, open flames, and spark sources. 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
BENZENE, 1-CHLORO-4 TRIFLUOROMETHYL	2.5 mg/m <sup>3</sup>	N.E.	2.5 mg/m <sup>3</sup>	N.E.
BISPHENOL A EPOXY RESIN, AVG. MOL. WT. < 700				
ALUMINUM FLAKE				
ACETONE	500 ppm	750 ppm	750 ppm	1000 ppm
TOLUENE	50 ppm	N.E.	100 ppm	150 ppm
BENZYL ALCOHOL	N.E.	N.E.	N.E.	N.E.
SOLVENT NAPHTHA, LT. AROMATIC, PETROLEUM	100 ppm	N.E.	N.E.	N.E.
MINERAL SPIRITS (STODDARD SOLVENT)	100 ppm	N.E.	500 ppm	N.E.
ETHYL 3-ETHOXYPROPIONATE	N.E.	N.E.	N.E.	N.E.

### Notes

BENZENE, 1-CHLORO-4 TRIFLUOROMETHYL CAS# 98-56-6 prolonged or repeated exposure to large amount through breathing or swallowing has been shown cause damage to the liver and kidneys in animal studies.  
 BENZYL ALCOHOL CAS# 100-51-6 - In laboratory studies, Benzyl alcohol has been shown to cause harm to the fetus of animals. Significance of these findings in humans is unknown.  
 ETHYL 3-ETHOXYPROPIONATE CAS# 763-89-9 - Manufacturer recommends a workplace exposure limit of 50 ppm-TWA; 100 ppm-STEL. This component has been shown to cause harm to the fetus in laboratory animals. It only caused harm at levels of overexposure that would also harm the pregnant animal. The relevance to humans is unknown. It also has been shown to cause mild, reversible liver effects in laboratory animals.

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: Solvent-resistant gloves.

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

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

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

### Section 9 - Physical and Chemical Properties

Boiling Range (°F):	133 - 402	Vapor Density:	Heavier than air
Odor:	PARACHLOROBENZOTRIFLUORIDE, BENZYL ALCOHOL, & ACETONE SOLVENTS	Odor Threshold:	N.A.V.
Appearance:	Gray liquid	Evaporation Rate:	ND
Solubility in H <sub>2</sub> O:	ND	Specific Gravity:	1.184
Freeze Point:	ND	PH:	NA
Vapor Pressure, mm Hg:	17.	Viscosity:	> 20 cps (mPa-s)
Physical State:	Liquid		
(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. Avoid uncontrolled reactions with amines.

Incompatibility: Material is incompatible (reacts) with strong oxidizing agents, strong acids (Lewis and mineral). Reacts with amines and mercaptans. Also, is incompatible with reducing agents, chromic anhydride, chromyl alcohol, hexachloromelamine, and hydrogen peroxide, permonosulfuric acid, chloroform, alkalis, chlorine compounds, potassium t-butoxide, and thioglycol. Material is incompatible with acids and bases. Reacts with amines and mercaptans.

Hazardous Decomposition: Thermal decomposition can lead to the generation and release of gases and vapors including carbon monoxide, carbon dioxide, aldehydes, and acids (organic). May produce gases

containing fluorine or chlorine.

Hazardous Polymerization: Will not occur.

Stability: Stable under recommended storage conditions. Benzyl alcohol, a component of this formulation, is incompatible with aluminum, iron, strong mineral acids, and strong oxidizing agents.

#### 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, F005.

Hazardous Waste Characteristics: Ignitability.

#### Section 14 - Transportation Information

DOT Proper Shipping Name: Paint

Packing Group: II

DOT Technical Name: NA

Hazard Subclass: NA

DOT Hazard Class: FLAMMABLE LIQUID 3

Resp. Guide Page: N.A.P.

DOT UN/NA Number: UN-1263

IATA: REGULATED

#### Section 15 - Regulatory Information

#### CERCLA - SARA Hazard Category

This product has been reviewed according to the EPA 'Hazard Categories' promulgated under Sections 311 and 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:

<u>Component</u>	<u>CAS Number</u>	<u>Percent By Weight</u>
TOLUENE	108-88-3	2.6936

#### 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:  
None

#### 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.

<u>Component</u>	<u>CAS Number</u>
EPOXY RESIN-DEHYDRATED CASTOR OIL FATTY ACIDS ESTER	68513-59-7
EPOXY RESIN	25036-25-3

##### Pennsylvania Right-to-Know:

The following non-hazardous ingredients are present in the product at greater than 3%.

<u>Component</u>	<u>CAS Number</u>
EPOXY RESIN-DEHYDRATED CASTOR OIL FATTY ACIDS ESTER	68513-59-7
EPOXY RESIN	25036-25-3

#### California Proposition 65:

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

<u>Component</u>	<u>CAS Number</u>	<u>Percent By Weight</u>
NAPHTHALENE	91-20-3	0.0242
FORMALDEHYDE	50-00-0	0.0003
ETHYL ACRYLATE	140-88-5	0.0000

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

<u>Component</u>	<u>CAS Number</u>	<u>Percent By Weight</u>
TOLUENE	108-88-3	2.6936

**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:** B2, D2A, D2B

**Section 16 - Other Information****HMIS Ratings:**

Health: 1

Flammability: 3

Reactivity: 1

Personal Protection: G

**NFPA Fire Rating:** 3**NFPA Health Rating:** 2**NFPA Specific Hazard Rating:** NA**NFPA Stability Rating:** 1**VOLATILE ORGANIC COMPOUNDS, GR/LTR:** 197**VOLATILE ORGANIC COMPOUNDS, LB/GAL:** 1.64**VOLATILE ORGANIC COMPOUNDS MIXED, GR/LTR:** <= 340**VOLATILE ORGANIC COMPOUNDS MIXED, LB/GAL:** <= 2.83**VOLATILE ORGANIC COMPOUNDS, LB/LB-SOLID:** <= 0.21**VOLATILE ORGANIC COMPOUNDS OF MATERIAL (SCAQMD RULE 443.1), GR/LTR:** 128**VOLATILE ORGANIC COMPOUNDS OF MATERIAL (SCAQMD RULE 443.1), LB/GAL:** 1.07**VOLATILE HAPs PER WEIGHT SOLIDS, LB/LB.** 0.05521**REASON FOR REVISION:** UPDATED PROPOSITION 65**REGULATORY CODE:** 01GY093**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.