

MATERIAL SAFETY DATA SHEET

MSDS Name: THURMALOX 280 ALUMINUM
MSDS Number: 280
Version Number
MSDS Date: MAY-14-2008
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SECTION 1. PRODUCT AND COMPANY INFORMATION

Product Name: THURMALOX 280 ALUMINUM
Hazard Rating: Health: 2 Fire: 3 Reactivity: 0 PPI:

Company Identification: DAMPNEY CO INC.
85 PARIS ST
EVERETT MA 02149-4411

Contact: CONRAD FOO
Telephone/Fax: (617) 389-2805 (617) 389-0484
Chemtrec (24 Hour): (800) 424-9300

Product Class: SILICONE INDUSTRIAL COATING
Trade Name: THURMALOX 280 ALUMIN
Product Code: 280
DOT Hazard Class
UN Number: 1263
Shipping Name: PAINT
Technical Name

SECTION 2. INGREDIENT AND HAZARD INFORMATION

Ingredient Name	CAS Number	Percent	TSCA
XYLENE (HAPS)	1330-20-7	19.15	Y
ALUMINIUM FLAKE	7429-90-5	17.99	Y
TOLUENE (HAPS)	108-88-3	15.72	Y
ZINC COMPOUND	1314-13-2	9.34	Y
MINERAL SPIRITS	8052-41-3	8.47	Y
ETHYL BENZENE (HAPS)	100-41-4	5.97	Y

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(1) AROMATIC HYDROCARBON 64742-95-6 5.26 Y
68855-54-9 2.59 Y

*** ALL Ingredients in this product are listed in the T.S.C.A. Inventory

** SPECIAL REMARKS ON ABOVE LISTED INGREDIENTS **

Technical grade xylene contains 18-20% ethyl benzene CAS # is 100-41-4 and is subject to reporting requirements of SECTION 313 of SARA TITLE III.

(1) TLV not established for this material. This item contains approximately 3% xylene (CAS 1330-20-7) which has a PEL and TLV 100 ppm and an STEL of 150 ppm; approximately 1.5% cumene (CAS 98-82-8), which has a PEL and TLV of 50 ppm skin; approximately 32% trimethylbenzene (CAS 25551-13-7), which has a PEL and TLV of 25 ppm. (TRIMETHYLBEN-zene may contain 50% pseudocumene 1,2,4- or 1,2,5-trimethylbenzene (CAS 95-63-6 and 22.5% mesitylene 1,3,5-trimethylbenzene (CAS 108-67-8). The PEL listed for this item is for coal tar naphtha, based on the ACGIH documentation for coal tar naphtha (since deleted). Xylene, cumene and 1,2,4-trimethylbenzene are subject to the reporting requirements of Section 313 of Sara Title III. ACGIH recommends a TWA of 50 ppm for toluene (skin).

===== SECTION 3. PHYSICAL DATA =====

Form: LIQUID
Appearance/Color: ALUMINUM
Odor: AROMATIC
pH Value: Not Applicable
Boiling Range: 230.°F - 400.°F
Melting Point: Not Applicable
Evaporation Rate: 0.069 times Faster than n-Butyl Acetate

Vapor Density: Heavier than air

Partition Coefficient: Not Available
% Volatile Weight: 53.6%
% Volatile: 72.6%
Specific Gravity: 1.157
Weight/Gallon: 9.63 lbs
VOC: 5.3 LBS/GAL
Heavy Elements (ppm): 0.

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SECTION 4. FIRE AND EXPLOSION HAZARD DATA

Flammability Class 1B
Flash Range: 48.°F - 108.°F
Explosive Range: 1.%
7.%

EXTINGUISHING MEDIA:

Use CLASS B extinguisher, inert granular material like dry sand, CLASS D extinguisher with low velocity nozzle, CLASS D extinguishing agent, regular protein foam or AFFF. Do not use a water hose stream. Do not use halogenated extinguishing agents.

SPECIAL FIREFIGHTING PROCEDURES:

When closed containers are exposed to excessive heat, there is a possibility of pressure build-up inside the container. This could result in the rupture of the container. Use water fog to keep fire-exposed containers cool. Minimize breathing gases, vapors, fumes or decomposition products during a fire. Trained fire fighters should use supplied-air breathing apparatus for enclosed or confined spaces. After the organic material has burned, aluminum particles suspended in the air may form an explosive mixture; avoid any disturbance which could cause a dust cloud, such as gas propelled fire extinguishers, in the burning material. Direct the CLASS B extinguishing agent, such as dry chemicals, above the fire, to rain down on the burning material. Care should be taken when applying a CLASS B extinguishing agent because some agents can accelerate a fire. When most of the organics have been consumed, the metal will glow bright if burning, if this happens isolate the fire with dry inert granular material, or CLASS D extinguishing agent, then leave it alone. Allow material to become cool before disposal.

UNUSUAL FIRE & EXPLOSION HAZARDS:

During emergency conditions, overexposure to decomposition products may cause a health hazard. Symptoms may not be immediately apparent. Obtain medical attention.

SECTION 5. HEALTH HAZARD DATA

Route	Species	Exposure and Dose
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XYLENE (HAPS)

Inhalation	Unknown	LC50 26800. PPM
Oral	Unknown	LD50 4300. mg/kg
Skin	Unknown	LD50 2000. mg/kg

TOLUENE (HAPS)

Inhalation	Unknown	LD50 8000. PPM
Oral	Unknown	LD50 5. PPM
Skin	Unknown	LD50 14. PPM

(1) AROMATIC HYDROCARBON

Inhalation	Unknown	LC50 99. PPM
Oral	Unknown	LD50 5. PPM
Skin	Unknown	LD50 3.16 PPM

PERMISSIBLE EXPOSURE LEVEL:

SEE SECTION VIII

EFFECTS OF OVEREXPOSURE:

High vapor concentrations are irritating to the eyes and the respiratory tract, may cause headaches and dizziness, are anesthetic, and have other central nervous system effects.

PRIMARY ROUTE(S) OF ENTRY:

(X) Dermal (X) Inhalation () Ingestion

EMERGENCY AND FIRST AID PROCEDURES:

Eyes - flush thoroughly with running water for 15 minutes, including under the eyelids. Get medical attention.

Skin - promptly remove contaminated clothing and wash affected areas thoroughly with soap and water. If irritation occurs get medical attention. Wash contaminated clothing thoroughly before re-use.

Inhalation - if overcome by vapor, remove to an area free from risk of further exposure and call a physician immediately. Administer oxygen or artificial respiration as needed. Inhalation of excessive concentrations of vapors or mists may cause irritation of the nose and throat. Signs of nervous system depression (drowsiness, dizziness, loss of coordination, and fatigue). Prolonged or repeated exposure to vapors or mist may cause liver and kidney damage.

Ingestion - if swallowed, call a physician immediately. Only induce vomiting at the instruction of a physician. Never give anything by mouth to an unconscious person. Intentional misuse by deliberately concentrating and

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inhaling the contents may be harmful or fatal.

MEDICAL CONDITIONS PRONE TO AGGRAVATION BY EXPOSURE:

Preexisting eye, skin, liver and/or kidney disorders may be aggravated by exposure to this product.

Toluene may be harmful to the fetus based on laboratory animal studies. Repeated exposure to toluene has been associated with high frequency hearing loss based on evidence in laboratory animals. The human health consequences of this finding is uncertain.

Chronic overexposure to xylene has been suggested to cause cardiac abnormality in humans.

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SECTION 6. STABILITY AND REACTIVITY MEASURES

Stability: This product is stable
Hazardous Polymerization: Hazardous polymerization will not occur

INCOMPATIBILITY:

Avoid contact with strong oxidizing agents, acids or bases.
Avoid contact with water which can generate hydrogen gas that can build-up pressure in sealed drums. Aluminum flakes can react violently with halogenated hydrocarbons.

CONDITIONS TO AVOID:

Avoid heat, open flames.

HAZARDOUS DECOMPOSITION PRODUCTS:

Carbon monoxide, carbon dioxide and aluminum oxide.

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SECTION 7. SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:

Before attempting cleanup, refer to hazard caution information in other sections of this sheet.

LARGE SPILLS - notify safety personnel. Eliminate potential sources of ignition. Wear appropriate respirator and protective clothing. Soak up with absorbent such as sand, clay, or other suitable material. Place in non-leaking containers and seal tightly for proper disposal. Ventilate confined spaces. Minimize breathing vapors. Open all windows and doors. Minimize skin contact. Keep product out of sewers and water courses by diking and impounding.

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Observe precautions for volatile, combustible vapors from absorbed material.

SMALL SPILLS - take up with absorbent material and place in non-leaking container for proper disposal.

WASTE DISPOSAL METHOD:

Assure conformity with applicable federal, state and local regulations.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational Exposure Limits

	ACGIH TLV	ACGIH TLV-C	ACGIH STEL	OSHA STEL	OSHA PEL
XYLENE (HAPS)	100.00 PPM	N/est	150.00 PPM	150.00 PPM	100.00 PPM
ALUMINIUM FLAKE	15.00 mg/M3	N/est	N/est	N/est	N/est
TOLUENE (HAPS)	50.00 PPM	N/est	100.00 PPM	100.00 PPM	100.00 PPM
ZINC COMPOUND	10.00 mg/M3	5.00 mg/M3	N/est	N/est	N/est
MINERAL SPIRITS	100.00 PPM	N/est	N/est	N/est	100.00 PPM
ETHYL BENZENE (HAPS)	100.00 PPM	N/est	125.00 PPM	125.00 PPM	100.00 PPM
(1) AROMATIC HYDROCARBON	100.00 PPM	N/est	N/est	N/est	100.00 PPM
	N/est	N/est	N/est	N/est	N/est

RESPIRATORY PROTECTION:

Use NIOSH approved respirator as required to prevent overexposure.

UNCONFINED SPACES - use a vapor/particulate respirator such as NIOSH approved No. TC-23C.

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CONFINED SPACES - use a constant flow air-line respirator such as
NIOSH approved No. TC-19C.

VENTILATION:

Provide sufficient ventilation to keep air contaminant concentration below current applicable OSHA Permissible Exposure Limit or ACGIH's TLV Limit. No smoking or open lights. Traces of Benzene and Formaldehyde may form when this product is heated above 300 degrees F. Evolution rate is highest during the first few hours, then subsequently approaches zero. Personnel should wear organic vapor respirators until workplace exposure levels have been determined. Review the OSHA Benzene regulations for detailed information on safe handling requirements. OSHA PEL for Formaldehyde is 0.75 ppm. OSHA PEL for Benzene is 10 ppm.

PROTECTIVE GLOVES:

Use chemical-resistant gloves to prevent skin contact.

EYE PROTECTION:

Use splash goggles or face shield to prevent eye contact.

OTHER PROTECTIVE EQUIPMENT:

Use chemical-resistant or other protective outerwear to protect against clothing contamination and skin contact.

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SECTION 9. SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING, TRANSPORTATION, AND STORING:

CAUTION! FLAMMABLE. Handling and storage conditions must be suitable for OSHA CLASS 2 flammable liquid. Store in cool, well ventilated, fire resistant storage area. Protect containers against physical damage. Keep away from heat, flame, and strong oxidizing agents. Do not store above 100 degrees F. Use only with adequate ventilation. Keep containers closed when not in use. Do not breathe vapor or mist. Avoid contact with eyes, skin and clothing. Do not take internally. Bond and ground containers of this material when pouring to avoid static sparks which create a fire hazard.

OTHER PRECAUTIONS:

Contact lenses pose a special hazard; soft lenses may absorb and all lenses concentrate irritants.

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SECTION 10. REGULATORY INFORMATION

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SARA TITLE III SECTION 313:

This product contains the following toxic chemicals subject to the reporting requirements of Section 313 of the Emergency Planning and Community Right to Know Act of 1986 and of 40 CFR 372:

Ingredient Name	CAS Number	Percent
XYLENE (HAPS)	1330-20-7	19.15
TOLUENE (HAPS)	108-88-3	15.72
ZINC COMPOUND	1314-13-2	9.34
ETHYL BENZENE (HAPS)	100-41-4	5.97

-PROP 65 (CARCINOGEN)

WARNING: this product contains a chemical known to the state of California to cause cancer.

Ingredient Name	CAS Number	Percent
ETHYL BENZENE (HAPS)	100-41-4	5.97
BENZENE	71-43-2	0.03

-PROP 65 (BOTH CARCINOGEN AND TERATOGEN)

WARNING: This product may contain a chemical known to the state of California to cause cancer and birth defects, or other reproductive harm.

Ingredient Name	CAS Number	Percent
TOLUENE (HAPS)	108-88-3	15.72

The information and recommendations contained herein are based on data believed to be correct. However, Dampney makes no warranty expressed or implied regarding the accuracy of these data or results to be obtained from the use thereof. Dampney assumes no responsibility for personal injury or property damage caused by use of the material described herein. It is the responsibility of the purchaser or user to ensure that this material is properly and safely used.