

MATERIAL SAFETY DATA SHEET

MSDS Name: THURMALOX GREEN
MSDS Number: 240
Version Number
MSDS Date: JUL-15-2009
Page Number: 1 of 7

SECTION 1. PRODUCT AND COMPANY INFORMATION

Product Name: THURMALOX GREEN
CAS Number: N/A
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: INDUSTRIAL COATING
Trade Name: THURMALOX GREEN
Product Code: 240
DOT Hazard Class
UN Number: 1263
Shipping Name: PAINT
Technical Name

SECTION 2. INGREDIENT AND HAZARD INFORMATION

Ingredient Name	CAS Number	Percent	TSCA
TOLUENE (HAPS)	108-88-3	14.61	Y
XYLENE (HAPS)	1330-20-7	9.59	Y
ETHYL BENZENE (HAPS)	100-41-4	5.84	Y
BUTANOL	71-36-3	4.77	Y
NICKEL COMPOUNDS	N/A	0.21	Y
COBALT COMPOUND	N/A	0.19	Y

MATERIAL SAFETY DATA SHEET

MSDS Name: THURMALOX GREEN
MSDS Number: 240
Version Number
MSDS Date: JUL-15-2009
Page Number: 2 of 7

*** 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.

IARC has classified cobalt and cobalt compound as possible carcinogenic to humans (Group 2B, monograph #52).

ACGIH recommends a TWA of 50 ppm for toluene (skin).

SPECIAL REMARKS SPECIFIC TO THIS RAW MATERIAL

Cobalt pigment is the result of high temperature calcination of the component substances. Due to its unique crystalline structure, the properties of this finished pigment do not necessarily reflect the properties of the component metal or oxides.

IARC considers nickel compounds to be carcinogenic to humans.

=====

SECTION 3. PHYSICAL DATA

Form:	LIQUID
Appearance/Color:	GREEN
Odor:	AROMATIC
pH Value:	Not Applicable
Boiling Range:	230.°F - 290.°F
Melting Point:	Not Applicable
Evaporation Rate:	0.129 times Faster than n-Butyl Acetate
Vapor Density:	Heavier than air
Partition Coefficient	Not Available
% Volatile Weight	35.%
% Volatile	54.%
Specific Gravity:	1.338
Weight/Gallon:	11.14 lbs
VOC	3.9 LBS/GAL
Heavy Elements (ppm)	0.

=====

SECTION 4. FIRE AND EXPLOSION HAZARD DATA

Flammability Class	1B
--------------------	----

MATERIAL SAFETY DATA SHEET

MSDS Name: THURMALOX GREEN
MSDS Number: 240
Version Number
MSDS Date: JUL-15-2009
Page Number: 3 of 7

Flash Range: 48.°F - 97.°F
Explosive Range: 1.%
11.2%

EXTINGUISHING MEDIA:

Foam, alcohol foam, CO2, dry chemical, water fog may be ineffective but should be used to cool fire-exposed containers to prevent pressure build up and possible auto-ignition or explosion when exposed to extreme heat.

SPECIAL FIREFIGHTING PROCEDURES:

Use full protection equipment including self contained breathing apparatus (NIOSH approved) for respiratory protection in fighting fires in enclosed or confined spaces, or as otherwise needed. Minimize breathing gases, vapors, fumes or decomposition products.

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
TOLUENE (HAPS)		
Inhalation	Unknown	LD50 8000. PPM
Oral	Unknown	LD50 5. PPM
Skin	Unknown	LD50 14. PPM
XYLENE (HAPS)		
Inhalation	Unknown	LC50 26800. PPM
Oral	Unknown	LD50 4300. mg/kg
Skin	Unknown	LD50 2000. mg/kg
BUTANOL		
Inhalation	Rat	LD50 4 HOURS 8000. PPM
Oral	Rat	LD50 2500. mg/kg
Oral	Rabbit	LD50 3400. mg/kg
Skin	Rabbit	LD50 5300. mg/kg

PERMISSIBLE EXPOSURE LEVEL:

SEE SECTION VIII

EFFECTS OF OVEREXPOSURE:

MATERIAL SAFETY DATA SHEET

MSDS Name: THURMALOX GREEN

MSDS Number: 240

Version Number

MSDS Date: JUL-15-2009

Page Number: 4 of 7

Primary route(s) of entry:

(X) Dermal (X) Inhalation () Ingestion

Acute (short term) exposure:

Inhalation - excessive inhalation of vapors can cause nasal and respiratory irritation, cns effects including dizziness, weakness, nausea, headache, possible unconsciousness, and even death.

Skin contact - prolonged or repeated contact can cause moderate irritation, defatting, and dermatitis.

Eye contact - can cause severe irritation, redness, tearing, and blurred vision.

Ingestion - can cause gastrointestinal irritation, nausea, vomiting, and diarrhea. Aspiration of material into the lungs can cause chemical pneumonitis which can be fatal.

Damage to humans: chronic overexposure of Butanol may aggravate pre-existing disorders, affect the hearing, anemia. Overexposure to Butanol has been found to cause the following effects in laboratory animals: anemia, liver abnormalities, kidney damage, eye and lung damage.

Butanol 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 the findings to humans is uncertain.

EMERGENCY AND FIRST AID PROCEDURES:

Eyes - flush thoroughly with running water for 15 minutes, including under 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. If breathing is difficult, administer oxygen, or artificial respiration if breathing has stopped. Keep person warm and quiet and get medical attention.

Ingestion - if swallowed, call a physician immediately. Only induce vomiting at the instructions of a physician. Never give anything by mouth to an unconscious person. Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal.

MEDICAL CONDITIONS PRONE TO AGGRAVATION BY EXPOSURE:

Pre-existing eye, skin, liver and/or kidney disorders may be

MATERIAL SAFETY DATA SHEET

MSDS Name: THURMALOX GREEN

MSDS Number: 240

Version Number

MSDS Date: JUL-15-2009

Page Number: 5 of 7

aggravated by exposure to this product.

Chronic (long term) exposure:

In laboratory animals - overexposure to this material (or its components) has been found to cause the following effects; anemia, liver abnormalities, kidney, lung and spleen damage.

In humans - liver and cardiac abnormalities.

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.

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.

CONDITIONS TO AVOID:

Avoid heat, open flames.

HAZARDOUS DECOMPOSITION PRODUCTS:

Carbon monoxide and unidentified organics may be formed.

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. Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed.

Large spills - notify safety personnel. Eliminate potential sources of ignition. Wear appropriate respirator and protective clothing. Soak up with an absorbent, I.E. 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

MATERIAL SAFETY DATA SHEET

MSDS Name: THURMALOX GREEN
MSDS Number: 240
Version Number
MSDS Date: JUL-15-2009
Page Number: 6 of 7

skin contact. Keep product out of sewers and water courses by diking and impounding. Observe precautions for volatile, combustible vapors from absorbed material.

Small spills - take up with absorbent material and place in non-leaking containers 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
TOLUENE (HAPS)	50.00 PPM	N/est	100.00 PPM	100.00 PPM	100.00 PPM
XYLENE (HAPS)	100.00 PPM	N/est	150.00 PPM	150.00 PPM	100.00 PPM
ETHYL BENZENE (HAPS)	100.00 PPM	N/est	125.00 PPM	125.00 PPM	100.00 PPM
BUTANOL	50.00 PPM	N/est	N/est	N/est	50.00 PPM
NICKEL COMPOUNDS	0.20 mg/M3	N/est	N/est	N/est	1.00 mg/M3
COBALT COMPOUND	0.02 mg/M3	N/est	N/est	N/est	0.05 mg/M3

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.

Confined spaces - use a constant flow air-line respirator such as NIOSH approved NO. TC-19C.

VENTILATION:

Traces of Benzene and Formaldehyde may form when this product is heated above 300 degrees F. Evolution rate is highest during the

MATERIAL SAFETY DATA SHEET

MSDS Name: THURMALOX GREEN
MSDS Number: 240
Version Number
MSDS Date: JUL-15-2009
Page Number: 7 of 7

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. 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.

PROTECTIVE GLOVES:

Use chemical-resistant gloves to prevent skin contact.

EYE PROTECTION:

Use chemical 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.

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 I 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.

SECTION 10. REGULATORY INFORMATION

SARA TITLE III SECTION 313:

This product contains the following toxic chemicals subject to

MATERIAL SAFETY DATA SHEET

MSDS Name: THURMALOX GREEN
MSDS Number: 240
Version Number
MSDS Date: JUL-15-2009
Page Number: 8 of 7

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
TOLUENE (HAPS)	108-88-3	14.61
XYLENE (HAPS)	1330-20-7	9.59
ETHYL BENZENE (HAPS)	100-41-4	5.84
BUTANOL	71-36-3	4.77
NICKEL COMPOUNDS	N/A	0.21
COBALT COMPOUND	N/A	0.19

-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	5.84
NICKEL COMPOUNDS	N/A	0.21
COBALT COMPOUND	N/A	0.19
CRYSTALLINE SILICA	14808-60-7	0.01

-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	14.61

The information and recommendations contained herein are based on data believed to be correct. However, Dampney makes no warranty

MATERIAL SAFETY DATA SHEET

MSDS Name: THURMALOX GREEN

MSDS Number: 240

Version Number

MSDS Date: JUL-15-2009

Page Number: 9 of 7

express 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 damaged 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.