

MATERIAL SAFETY DATA SHEET

MSDS Name: THURMALOX 210 PRIMER
MSDS Number: 210
Version Number
MSDS Date: MAR-23-2007
Page Number: 1

SECTION 1. PRODUCT AND COMPANY INFORMATION

Product Name: THURMALOX 210 PRIMER
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: PART A OF A TWO PART SYSTEM
Trade Name: THURMALOX 210 PRIMER
Product Code: 210A

SECTION 2. INGREDIENT AND HAZARD INFORMATION

Ingredient Name	CAS Number	Percent	TSCA
XYLENE (HAPS)	1330-20-7	33.05	Y
ZINC COMPOUND	1314-13-2	14.75	Y
MINERAL SPIRITS	8052-41-3	12.20	Y
CRYSTALLINE SILICA	14808-60-7	4.14	Y
VM&P	64742-89-8	3.80	Y
DIACETONE ALCOHOL	123-42-2	2.31	Y
ETHYL BENZENE (HAPS)	100-41-4	1.77	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

MATERIAL SAFETY DATA SHEET

MSDS Name: THURMALOX 210 PRIMER
MSDS Number: 210
Version Number
MSDS Date: MAR-23-2007
Page Number: 2

100-41-4 and is subject to reporting requirements of SECTION 313 of SARA TITLE III.

VM&P (typical benzene content, estimated): <0.1% by weight.

VM&P also contains 4% toluene, 8% xylene, 3% ethyl benzene.

SPECIAL REMARKS SPECIFIC TO THIS RAW MATERIAL

NTP and IARC concludes that crystalline silica, (respirable) may reasonably be anticipated to be a carcinogen. National Institute for Occupational Safety and Health (NIOSH) recommends maximum permissible concentration 0.05 mg/m3 as determined by a full shift sample up to 10 hour working day, 40 hour work week.

NTP concludes that silica, crystalline (respirable) may be anticipated to be a carcinogen, IARC CLASS 2A.

SECTION 3. PHYSICAL DATA

Form: GREY LIQUID
Odor: AROMATIC
pH Value: Not Applicable
Boiling Range: 239.°F - 400.°F
Melting Point: Not Applicable
Evaporation Rate: 0.274 times Slower than n-Butyl Acetate

Vapor Density: Heavier than air

Partition Coefficient: Not Available
% Volatile Weight: 54.2%
% Volatile: 71.8%
Specific Gravity: 1.124
Weight/Gallon: 9.36 lbs
VOC: 4.88 LBS/GAL
Heavy Elements (ppm): 0.

SECTION 4. FIRE AND EXPLOSION HAZARD DATA

Flammability Class: 1C
Flash Range: 50.°F - 138.°F
Explosive Range: 1.%
7.%

EXTINGUISHING MEDIA:

MATERIAL SAFETY DATA SHEET

MSDS Name: THURMALOX 210 PRIMER
MSDS Number: 210
Version Number
MSDS Date: MAR-23-2007
Page Number: 3

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
XYLENE (HAPS)		
Inhalation	Unknown	LC50 26800. PPM
Oral	Unknown	LD50 4300. mg/kg
Skin	Unknown	LD50 2000. mg/kg
DIACETONE ALCOHOL		
Oral	Rat	LC50 4000. mg/kg
Skin	Rabbit	LD50 13000. mg/kg

PERMISSIBLE EXPOSURE LEVEL:

SEE SECTION VIII
SEE SECTION VIII

EFFECTS OF OVEREXPOSURE:

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.

MATERIAL SAFETY DATA SHEET

MSDS Name: THURMALOX 210 PRIMER

MSDS Number: 210

Version Number

MSDS Date: MAR-23-2007

Page Number: 4

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

Pulmonary functions may be reduced by inhalation of respirable crystalline silica. Lung scarring produced by such inhalation may lead to progressive massive fibrosis of the lung which may aggravate other pulmonary conditions and diseases and which increased susceptibility to pulmonary tuberculosis. Progressive massive fibrosis may be accompanied by right heart enlargement, heart failure, and pulmonary failure. Smoking aggravates the effects of exposure.

Overexposure of diacetone alcohol has apparently been found to cause the following effects in laboratory animals: anemia, liver abnormalities, and kidney damage.

Chronic effects of VM&P:

VM&P contains n-hexane. Overexposure to n-hexane may cause progressive and potentially irreversible damage to the peripheral nervous system, particularly in the arms and legs. Simultaneous exposure to the vapors of n-hexane and methyl ethyl ketone or methyl isobutyl ketone above the recommended workplace limits increases the risk of adverse effects from n-hexane.

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 aggravated by exposure to this product.

Chronic (long term) exposure:

MATERIAL SAFETY DATA SHEET

MSDS Name: THURMALOX 210 PRIMER
MSDS Number: 210
Version Number
MSDS Date: MAR-23-2007
Page Number: 5

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.

Acute and chronic prolonged exposure to respirable crystalline quartz may cause delayed lung injury, (silicosis). Silicosis is a form of disabling pulmonary fibrosis which can be progressive and may lead to death.

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

MATERIAL SAFETY DATA SHEET

MSDS Name: THURMALOX 210 PRIMER
MSDS Number: 210
Version Number
MSDS Date: MAR-23-2007
Page Number: 6

Small spills - take up with absorbent material and place in non-leaking containers for proper disposal. Use dustless methods (vacuum), or flush with water. Do not dry sweep.

WASTE DISPOSAL METHOD:

Assure conformity with applicable federal, state and local regulations. Dispose in accordance with 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
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
CRYSTALLINE SILICA	0.10 mg/M3	N/est	0.05 mg/M3	0.05 mg/M3	0.10 mg/M3
VM&P	100.00 PPM	N/est	125.00 PPM	125.00 PPM	100.00 PPM
DIACETONE ALCOHOL	50.00 PPM	N/est	75.00 PPM	N/est	50.00 PPM
ETHYL BENZENE (HAPS)	100.00 PPM	N/est	125.00 PPM	125.00 PPM	100.00 PPM

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.

MATERIAL SAFETY DATA SHEET

MSDS Name: THURMALOX 210 PRIMER
MSDS Number: 210
Version Number
MSDS Date: MAR-23-2007
Page Number: 7

Up to 5 X PEL any dust respirator
Up to 10 X PEL any fume respirator or efficiency particulate
filter respirator.
Up to 50 X PEL a high efficiency particulate filter respirator
with full facepiece. Any air supplied respirator with
full facepiece helmet or hood.
Up to 500 X PEL a powered air purifying respirator with a high
efficiency particulate filter.
> than 500 X PEL a self contained breathing apparatus with a
full facepiece operated in pressure demand or other
positive pressure mode.

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.

PROTECTIVE GLOVES:

Use chemical-resistant gloves to prevent skin contact.

EYE PROTECTION:

Use chemical splash goggles or face shield to prevent eye
contact.
Wear protective safety glasses when exposed to dust particles.

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

MATERIAL SAFETY DATA SHEET

MSDS Name: THURMALOX 210 PRIMER
MSDS Number: 210
Version Number
MSDS Date: MAR-23-2007
Page Number: 8

all lenses concentrate irritants.

=====

SECTION 10. REGULATORY INFORMATION

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	33.05
ZINC COMPOUND	1314-13-2	14.75
ETHYL BENZENE (HAPS)	100-41-4	1.77

-PROP 65 (CARCINOGEN)

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

Ingredient Name	CAS Number	Percent
CRYSTALLINE SILICA	14808-60-7	4.14
VM&P	64742-89-8	3.80
ETHYL BENZENE (HAPS)	100-41-4	1.77

=====

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

MATERIAL SAFETY DATA SHEET

MSDS Name: ZINC DUST COMPONENT
MSDS Number: 2452
Version Number
MSDS Date: MAR-23-2007
Page Number: 1

SECTION 1. PRODUCT AND COMPANY INFORMATION

Product Name: ZINC DUST COMPONENT
CAS Number: N/A
Hazard Rating: Health: 0 Fire: 1 Reactivity: 1 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: ZINC DUST FOR 210 & 245 PRIMER
Trade Name: ZINC DUST COMPONENT
Product Code: 2452

SECTION 2. INGREDIENT AND HAZARD INFORMATION

Ingredient Name	CAS Number	Percent	TSCA
*ZINC DUST	7440-66-6	100.00	Y

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

SECTION 3. PHYSICAL DATA

Form: GRAY POWDER
Odor: NONE
pH Value: Not Applicable
Boiling Range: Not Applicable
Melting Point: Not Applicable
Evaporation Rate: Non Volatile
Vapor Density: Heavier than air

MATERIAL SAFETY DATA SHEET

MSDS Name: ZINC DUST COMPONENT
MSDS Number: 2452
Version Number
MSDS Date: MAR-23-2007
Page Number: 2

Partition Coefficient Not Available
% Volatile Weight Not Applicable
% Volatile Not Applicable
Specific Gravity: 7.101
Weight/Gallon: 59.17 lbs
VOC NONE
Heavy Elements (ppm) 0.

=====

SECTION 4. FIRE AND EXPLOSION HAZARD DATA

Flammability Class
Flash Range: Not Applicable
Explosive Range: 0.5 oz/ft3 0.%
 0.%

EXTINGUISHING MEDIA:

CLASS D Extinguisher. Dry powder type. Avoid water.
AVOID WATER

SPECIAL FIREFIGHTING PROCEDURES:

Dry zinc dust will not ignite spontaneously; but once ignited may burn readily in air. Do not spread material. Smother and allow fire to go out. Wear self-contained breathing apparatus.

UNUSUAL FIRE & EXPLOSION HAZARDS:

Bulk dust in contact with water or damp air evolves hydrogen. The heat produced during this reaction could ignite the hydrogen. An explosive condition may exist if this happens in a confined space. Dry dust forms explosive mixtures with air.

=====

SECTION 5. HEALTH HAZARD DATA

Route	Species	Exposure and Dose
*ZINC DUST		
Inhalation	Unknown	LD50 124. PPM

PERMISSIBLE EXPOSURE LEVEL:

15 mg/m3

EFFECTS OF OVEREXPOSURE:

None. However zinc oxide fume may result from combustion of zinc

MATERIAL SAFETY DATA SHEET

MSDS Name: ZINC DUST COMPONENT
MSDS Number: 2452
Version Number
MSDS Date: MAR-23-2007
Page Number: 3

dust. Excessive inhalation of this fume may produce symptoms known as fume fever or "zinc shakes".

EMERGENCY AND FIRST AID PROCEDURES:

Symptoms usually disappear within 24 hours. Symptomatic treatment such as bed rest, possibly aspirin, to afford relief from fever and chills. Obtain medical attention.

MEDICAL CONDITIONS PRONE TO AGGRAVATION BY EXPOSURE:

None known.

SECTION 6. STABILITY AND REACTIVITY MEASURES

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

INCOMPATIBILITY:

Avoid contact with water, acids, and alkalis.

CONDITIONS TO AVOID:

Moisture, heat, flame, other sources of ignition.

HAZARDOUS DECOMPOSITION PRODUCTS:

Hydrogen gas when in contact with water.

SECTION 7. SPILL OR LEAK PROCEDURES

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

Prohibit smoking, avoid all ignition sources, and avoid dusting.
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
*ZINC DUST	10.00 mg/M3	N/est	N/est	N/est	10.00 mg/M3

MATERIAL SAFETY DATA SHEET

MSDS Name: ZINC DUST COMPONENT
MSDS Number: 2452
Version Number
MSDS Date: MAR-23-2007
Page Number: 4

RESPIRATORY PROTECTION:

Use NIOSH approved respirator as required to prevent overexposure.

VENTILATION:

Provide sufficient ventilation to keep air contaminant concentration below current applicable OSHA permissible exposure limit or ACGIS's TLV limit.

PROTECTIVE GLOVES:

Recommended.

EYE PROTECTION:

Use splash goggles or face shield to prevent eye contact.

OTHER PROTECTIVE EQUIPMENT:

Fire resistant coveralls are recommended.

SECTION 9. SPECIAL PRECAUTIONS

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

Protect against physical damage. Store in cool, dry, ventilated space, separate from acids and alkalis.

OTHER PRECAUTIONS:

Keep areas where zinc dust is stored and/or used free from all ignition sources.

SECTION 10. REGULATORY INFORMATION

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
*ZINC DUST	7440-66-6	100.00

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

MATERIAL SAFETY DATA SHEET

MSDS Name: ZINC DUST COMPONENT

MSDS Number: 2452

Version Number

MSDS Date: MAR-23-2007

Page Number: 5

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.