



# MATERIAL SAFETY DATA SHEET

## BARINATE B-70

Version: 1.0  
Date of Issue: 09/07/2007  
Date printed: 01/18/2008

### 1. PRODUCT AND COMPANY IDENTIFICATION

**Product name :** BARINATE B-70

**Chemical name:** Oil Soluble Barium Sulfonate

**Use of substance/preparation:** Petroleum Additive

**Supplier:** Chemtura Corporation  
199 Benson Road  
Middlebury, CT 06749 USA

**Emergency telephone number:** CHEMTREC (24 hours) 800-424-9300, 703-527-3887  
Chemtura Corporation Emergency Response (24 hours) 800-292-5898

**Environmental, Health and Safety Department:** 866-430-2775

**Customer Service:** 800 325 6252

**Prepared by** Product Safety Department      Date of Issue: 09/07/2007  
(US) +1 866-430-2775  
(EU) +44 (0) 1753.603.000  
Email: MSDSRequest@chemtura.com

### 2. HAZARDS IDENTIFICATION

#### EMERGENCY OVERVIEW

NORMAL PRECAUTIONS COMMON TO SAFE MANUFACTURING PRACTICE SHOULD BE FOLLOWED IN HANDLING AND STORAGE.

### 3. COMPOSITION / INFORMATION ON INGREDIENTS

INGREDIENT	% BY WEIGHT
Barium Sulfonate CAS# Trade secret	40 - 45
Barium carbonate CAS# 513-77-9	10 - 15
One or more of the following: CAS# -	< 50
Distillates, Petroleum, Solvent-Refined Heavy Paraffinic CAS# 64741-00-1	



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CAS# 64741-88-4

Distillates (petroleum), hydrotreated heavy paraffinic  
CAS# 64742-54-7

Distillates (petroleum), solvent-refined heavy naphthenic  
CAS# 64741-96-4

Distillates (petroleum), hydrotreated heavy naphthenic  
CAS# 64742-52-5

Distillates, Petroleum, Solvent-Refined Light Paraffinic  
CAS# 64741-89-5

water soluble barium compounds < 0.5  
CAS# Trade secret

### 4. FIRST AID MEASURES

#### Swallowing

Obtain medical attention. Do not induce vomiting. Rinse mouth with water.

#### Inhalation

Remove to fresh air. Obtain medical attention. Aspiration may cause pulmonary edema or aspiration pneumonia.

#### Skin contact

Wash thoroughly with warm water using a mild soap. Remove contaminated clothing. Obtain medical attention if irritation persists.

#### Eye contact

Immediately flush eyes with water and continue washing for at least 15 minutes. Obtain medical attention if irritation persists.

#### Notes to physician

WHEN MOLTEN ONLY (molten product can cause thermal burns) -

### 5. FIRE-FIGHTING MEASURES

Flash point: > 356 °F > 180 °C

#### NFPA CLASSIFICATION

Health: 1	Flammability: 1	Reactivity: 0	Special provisions:
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#### Special fire fighting procedures

Do not discharge extinguishing waters into streams, rivers and lakes.

#### Special protective equipment for firefighters

Body covering protective clothing, full "turn-out" gear.  
Self-contained breathing apparatus.

#### Extinguishing media

Suitable: Extinguish with:  
- dry chemical  
- CO2  
- foam  
- water fog

Unsuitable: - water jets

#### Unusual fire and explosion hazards

Heat from fire can generate flammable vapor.



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### 6. ACCIDENTAL RELEASE MEASURES

#### Personal precautions

Wear suitable protective equipment., Eliminate sources of ignition.

#### Environmental precautions

Product has very low solubility in water., Prevent from entering sewer system, surface water or soil.

#### Methods for cleaning up

Small spill:

Absorb on inert material such as sand, earth, vermiculite.  
Collect for disposal.

Large spill:

Dike to contain spill.  
Pump product to salvage tank.

### 7. HANDLING AND STORAGE

#### HANDLING

##### Handling precautions

Electrically bond and ground all containers and equipment before transfer or use of material., Avoid contact with eyes, skin and clothing., Avoid breathing vapor, aerosol and mist., Use with adequate ventilation., Wash thoroughly after handling.

##### Other precautions

Electrically bond and ground all containers and equipment.

#### STORAGE

##### Storage requirements

Store in a cool, dry place., Keep container tightly closed.

##### Further information on storage

Keep away from strong oxidizing agents.

### 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

#### EXPOSURE LIMIT VALUES

<u>Component</u>	<u>Country</u>	<u>Type</u>	<u>Value</u>	<u>Remark</u>
water soluble barium compounds		TWA - ACGIH	0.5 mg/m3	as soluble barium compounds, calculated as barium
<u>Component</u> Mineral Oil Mist	<u>Type</u> TWA (mist), ACGIH	5.0 mg/m3	<u>Value</u>	<u>Remark</u> If used in way that generates a "mist" observe the limits for Mineral Oil Mist.
	STEL (mist), ACGIH	10.0 mg/m3		

#### PERSONAL PROTECTION

##### Respiratory protection

A approved respirator with dual organic vapor/mist and particulates cartridge if vapor concentration exceeds permissible exposure limit., Self-contained breathing apparatus in high vapor concentrations.

##### Hand protection / protective gloves

Neoprene type gloves.

##### Eye protection

Safety goggles.



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### Skin protection

Rubber or plastic apron

### Other protective equipment

Eye bath, Safety shower

### Industrial hygiene measures

Do not eat or drink at work.

### ENGINEERING CONTROLS

### Ventilation

Special, local ventilation is needed at points where vapors can be expected to escape to the workplace air.

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

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### APPEARANCE

Physical state	Viscous liquid
Color	Brown
Odor	Mild petroleum

### OTHER PROPERTIES

Boiling point	No data available.
Specific gravity (H <sub>2</sub> O=1)	> 1 at 16 °C
Density	> 1 g/cm <sup>3</sup> at 16 °C
Vapor pressure	Negligible
Solubility in water	Insoluble
Solubility in organic solvents	Soluble
Partitioning coefficient	log POW: > 6 This product is soluble in oil.
Flash point	> 356 °F > 180 °C Method: Cleveland open cup ASTM D 92
Percent volatiles	Nil
Kinematic viscosity	> 30 mm <sup>2</sup> /s at 40 °C

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## 10. STABILITY AND REACTIVITY

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**Stability:** Stable.

### **Incompatible materials:**

Stable under normal conditions.

**Hazardous polymerization:** Will not occur.



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### 11. TOXICOLOGICAL INFORMATION

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#### SWALLOWING

Test results

Acute toxicity: LD50 Rat  
Result: > 2,000 mg/kg

#### SKIN CONTACT

Acute effects

May cause irritation.

#### EYE CONTACT

Acute effects

May cause irritation.

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### 12. ECOLOGICAL INFORMATION

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No information available.

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### 13. DISPOSAL CONSIDERATIONS

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**General:** Do not discharge to sewers and natural waters., Incinerate in a furnace where permitted under national and local regulations.

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### 14. TRANSPORT INFORMATION

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#### DOT Classification

Not regulated if shipped or transported at temperatures under 100°C (212 °F) or in containers less than 450 liter.

If shipped at temperatures  $\geq 100$  °C (212 °F) and in containers  $\geq 450$  liters (119 US gal), this product is regulated as: ELEVATED TEMPERATURE LIQUID, N.O.S., Class 9, UN 3257, PGIII, ERG 128.

#### IMDG Classification

Not regulated if shipped or transported at temperatures under 100°C (212 °F) or in containers less than 450 liter.

**Proper shipping name:** If shipped at temperatures  $\geq 100$  °C (212 °F) and in containers  $\geq 450$  liters (119 US gal), this product is regulated as: ELEVATED TEMPERATURE LIQUID, N.O.S., Class 9, UN 3257, PGIII, ERG 128.

#### ICAO Classification

This product is not regulated by ICAO @  $<100$ °C

FORBIDDEN BY AIR @  $\geq 100$ °C

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### 15. REGULATORY INFORMATION

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Superfund Amendments and Reauthorization Act of 1986 (SARA) Title III requires submission of annual reports of release of toxic chemicals that appear in 40CFR372 (for SARA 313). This information must be included in MSDS's that are copied and distributed for this material.



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### Components present in this product at a level which could require reporting under the statute are:

Chemical name	CAS#	Max weight %
Barium Sulfonate	Trade secret	40.00 - 45.00
Water Soluble Barium Compounds	-	< 0.50
Barium carbonate	513-77-9	10.00 - 15.00

### New Jersey Worker and Community Right-To-Know Act (Labeling Requirements)

Chemical name	CAS#	New Jersey TS Number
Barium Sulfonate	Trade secret	136411-5423P
Barium carbonate	513-77-9	
One or More of the Following Mineral Oils (Severely Treated)	-	64742-54-7, 64741-96-4, 64742-52-5, 64742-54-7, 64741-89-5
Oil soluble barium compounds	Trade secret	CHEM538

### CHEMICAL INVENTORY

**Canada:** This product is on the NDSL.  
**Europe:** The ingredients of this mixture are on the EINECS inventory.  
**United States:** This product is on the TSCA inventory.  
**Australia:** This product is on the AICS inventory.  
**China:** This product is on the IECSC Inventory.  
**Japan:** This product is on the ENCS inventory.  
**Korea:** This product is listed on the Existing Chemicals List (ECL).  
**Philippines:** This product is on the PICCS.

## 16. OTHER INFORMATION

### FURTHER INFORMATION

MAY BE ON THE INVENTORY LIST BUT NOT NECESSARILY REGISTERED, (Korea, China, New Zealand) CONSULT REGULATORY SPECIALIST.

### HMIS RATING

Health: 1	Flammability: 1	Reactivity: 0	PPI:
STP	Standard temperature and pressure		
W/W	Weight/Weight		
0 (HMIS)	0 (HMIS)		
1 (HMIS)	Slight hazard		
2 (HMIS)	Moderate hazard		
3 (HMIS)	Serious hazard		
4 (HMIS)	Severe hazard		
X (HMIS)	Personal protection rating to be supplied by user depending on use conditions		

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THE OPINIONS EXPRESSED HEREIN ARE THOSE OF QUALIFIED EXPERTS WITHIN CHEMTURA CORPORATION. WE BELIEVE THAT THE INFORMATION CONTAINED HEREIN IS CURRENT AS OF THE DATE OF THIS SAFETY DATA SHEET. SINCE THE USE OF THIS INFORMATION AND OF THESE OPINIONS AND THE CONDITIONS OF USE OF THIS PRODUCT



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ARE NOT WITHIN THE CONTROL OF CHEMTURA CORPORATION, IT IS THE USER'S OBLIGATION TO DETERMINE THE CONDITIONS OF SAFE USE OF THE PRODUCTS.