GRACE

Material Safety Data Sheet

Printing date 02/06/2013

Version Number 1.2

Reviewed on 02/06/2013

1 Identification of the substance/mixture and of the company/undertaking

Product identifier

Trade name: *Bituthene Mastic*

MSDS ID Number: M-85912

Details of the supplier of the safety data sheet

Manufacturer/Supplier:

W.R. Grace & Co. -Conn. 62 Whittemore Avenue Cambridge, MA 02140 USA Grace Canada, Inc. 294 Clements Road W. Ajax, Ontario L1S 3C6 Canada

Other Country Contact Information:

For products distributed beyond the country Manufacturer/Supplier identified above Consult Section 16 for additional emergency contact information.

Information department:

Environmental Health & Safety USA: +1-617-876-1400 (24 hours) +1-800-354-5414 (8AM - 5PM) Not functional within Massachusetts CAN: 1-905-683-8561 (24 hours)

Transport Emergency: Chemtrec +1-800-424-9300 (24 hours)

2 Composition/information on ingredients

Chemical characterization: Mixtures

Description: Mixture of the substances listed below with nonhazardous additions.

Hazardous components:		
8052-42-4	Asphalt	25-30%
64742-95-6	Solvent naphtha (petroleum), light aromatic	10-20%
95-63-6	1,2,4-trimethylbenzene	10-20%
98-82-8	Isopropylbenzene	0.1-1.0%
1330-20-7	Xylene	0.1-1.0%

3 Hazards identification

Classification of the substance or mixture

Has a narcotizing effect.

The product has to be labeled in accordance with applicable regulations.

Information concerning hazards for human and environment:

May produce local skin tumors

Irritating to respiratory system.

Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment

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(Cont. from page 1) Vapors may cause drowsiness and dizziness Safety phrases: Do not breathe gas/fumes/vapor/spray. In case of fire, use sand, carbon dioxide or powdered extinguishing agent. Never use water. Use appropriate container to avoid environmental contamination. See Section 13 for disposal information. Keep away from sources of ignition - No smoking. Hazard description: Combusible Caution! Inhalation: Vapors concentrations in poorly ventilated areas can cause a burning sensation, shortness of breath, headache, nausea, coughing and wheezing. Prolonged or repeated overexposure may result in fluid in the lungs, chemical pneumonia and serious damage to lung tissue and respiratory tract. Absorption through the lungs may cause symptoms similar to those identified under ingestion. Causes respiratory tract irritation. Eve Contact: Causes eye irritation. **Skin Contact:** May produce local skin tumors. May be irritating to the skin on prolonged contact Skin Absorption: Harmful if absorbed through the skin. **Ingestion:** Chemicals contained in this product can affect the skin, heart, brain, liver, kidneys, lungs and spleen. This material may be harmful or fatal if swallowed. Ingestion may result in vomiting; aspiration (breathing) of vomitus into lungs must be avoided as even small quantities may result in aspiration pneumonitis. NFPA ratings (scale 0 - 4) Health = 2



Health = 2 Fire = 2 Reactivity = 0

HMIS-ratings (scale 0 - 4)

HEALTH12Health = *2FIRE2Flammability = 2REACTIVITY0Reactivity = 0

4 First aid measures

After inhalation:

If symptoms develop, supply fresh air. If required, provide artificial respiration and seek immediate medical treatment.

After skin contact:

Immediately wash contaminated skin with soap or mild detergent and water. If this chemical soaks clothing, immediately remove clothing and wash skin.

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After eye contact:

Rinse opened eye for several minutes under running water.

Seek immediate medical advice.

After swallowing: Do not induce vomiting; immediately call for medical help.

5 Firefighting measures

Special hazards arising from the substance or mixture No further relevant information available.

Additional information Collect contaminated fire fighting water separately. It must not enter the sewage system.

6 Accidental release measures

Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.

Methods and material for containment and cleaning up:

Contain and/or absorb spill with inert material (i.e. sand, vermiculite) then place in a suitable container.

Sweep up spilled product into receptacles.

Dispose contaminated material as waste according to section 13 of the MSDS.

Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

7 Handling and storage

Handling:

Precautions for safe handling

Open and handle receptacle with care.

Avoid contact with eyes, skin and clothing.

Do not take internally. Practice good personal hygiene to avoid ingestion.Use only with adequate ventilation.Wash clothing before reuse. Do not apply where odors may penetrate living areas. To avoid skin contact, use gloves or barrier creams. Wear work clothes with long sleeves if skin contact is possible. Promptly cleanse hands with waterless hand cleaner, clean fingernails and wash withsoap and water after handling. Do not use solvents to clean skin.FOR PROFESSIONAL USE ONLY. KEEP OUT OF CHILDREN'S REACH.

Flammable mixtures with air can be formed in emptied containers. Do not puncture, cut, drill, heat or weld uncleaned drums.

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Information about protection against explosions and fires:



Keep ignition sources away - Do not smoke.

Empty containers may retain hazardous residue, both liquid and vapor.

Storage:

Further information about storage conditions: Keep receptacle tightly sealed.

Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

Additional information about design of technical systems: No further data; see item 7.

Components with limit values that require monitoring at the workplace:

8052-42-4 Asphalt

- REL Short-term value: C 5* mg/m³
 - *15-min; See Pocket Guide App. A
- TLV 0.5* mg/m³
 - *inh. fraction; as benzene-soluble aerosol; BEIp

95-63-6 1,2,4-trimethylbenzene

REL 125 mg/m³, 25 ppm

TLV 123 mg/m³, 25 ppm

Ingredients with biological limit values:

- 8052-42-4 Asphalt
- BEI -

Medium: urine

Time: end of shift at end of workweek

Parameter: 1-Hydroxypyrene with hydrolysis (nonquantitative)

Additional information: The lists that were valid during the creation were used as basis.

Personal protective equipment:

General protective and hygienic measures: Avoid contact with the eyes and skin.

Breathing equipment:

Respiratory protection is not normally required. If exposures exceed PELs use a NIOSH approved organic vapor respirator.

In case of brief exposure or low pollution use respiratory filter device.

Protection of hands:

Gloves should be worn to prevent skin contact and should be impermeable and resistant to the product.

Material of gloves

Gloves should be worn to prevent skin contact and should be impermeable and resistant to the product.

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Eye protection:



Safety glasses with side shield protection.

Safety glasses with side shields should be worn to prevent contact due to splashing. Under high vapor mist concentrations, tightly sealed goggles should be worn.



A face shield should also be worn if there is potential exposure to splash or spray.

Body protection: Protective work clothing

General Information			
Appearance:			
Form:	Liquid		
Color:	According to product specification		
Odor:	Characteristic		
Odour threshold:	Not determined.		
pH-value (~):	Not determined.		
Change in condition			
Melting point/Melting range:	Undetermined.		
Flash point:	41 °C (106 °F)		
Flammability (solid, gaseous):	Not applicable.		
Decomposition temperature:	Not determined.		
Auto igniting:	Product is not selfigniting.		
Danger of explosion:	In use, may form flammable/explosive vapor-air mixture.		
Explosion limits:			
Lower:	Not determined.		
Upper:	Not determined.		
VOC Content (max):	Not determined.		
Vapor pressure:	Not determined.		
Density: (~) at 20 °C (68 °F)	1.3 g/cm^3 (10.849 lbs/gal)		
Vapour density	Not determined.		
Evaporation rate	Not determined.		
Solubility in / Miscibility with			
Water:	Not miscible or difficult to mix.		

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Viscosity:		
Dynamic:	Not determined.	
Kinematic:	Not determined.	
Other information	No further relevant information available.	

10 Stability and reactivity

Thermal decomposition: No decomposition if used according to specifications.

Incompatible materials: No further relevant information available.

Hazardous decomposition products:

Carbon monoxide and carbon dioxide Other potentially hazardous products may also be formed.

Additional information: See section 7 for information on handling, storage and conditions to be avoided.

11 Toxicological information

Acute toxicity:

LD/LC50	LD/LC50 values relevant for classification: 95-63-6 1,2,4-trimethylbenzene						
95-63-6 1,							
		3160 mg/kg (rabbit)					
		>3500 mg/kg (rat) 18 mg/l (rat)					
Inhalative	LC50/4 h	18 mg/l (rat)					
Primary i	rritant eff	ect:					
on the ski	n: May be	irritating to the skin on prolonged contact					

inhalation: Irritating to respiratory system.

Ingestion: Harmful if swallowed.

Additional toxicological information:

Additional Toxicological Information:

Has a narcotizing effect.

Chemicals contained in this product can affect the skin, heart, brain, liver, kidneys, lungs and spleen. Over exposure by inhalation may be fatal due to pulmonary edema (fluid in lungs). This material may be harmful or fatal if swallowed. Ingestion may result in vomiting; aspiration (breathing) of vomitus into lungs must be avoided as even small quantities may result in aspiration pneumonitis. Some harmful effects are also possible through skin absorption.

IARC (International Agency for Research on Cancer) Human Carcinogenicity:

Group 1- Positive, Group 2A- Probable, Group 2B- Possible, Group 3- Not Classifiable

8052-42-4 Asphalt

9003-55-8 Styrene-butadiene rubber

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1330-20-7 Xylene

NTP (National Toxicology Program)

K-Known to be carcinogenic, R-May reasonably be anticipated to be carcinogenic

None of the ingredients is listed.

12 Ecological information

Aquatic toxicity: No further relevant information available.

Persistence and degradability No further relevant information available.

Behavior in environmental systems:

Bioaccumulative potential No further relevant information available.

Ecotoxical effects:

Remark: Toxic for fish

Additional ecological information:

General notes:

Danger to drinking water if even small quantities leak into the ground.

Also poisonous for fish and plankton in water bodies.

Toxic for aquatic organisms

13 Disposal considerations

Waste treatment methods Comply with Federal, State and local regulations.

Recommendation:



Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

Uncleaned packagings:

Recommendation: Disposal must be made according to official regulations.

14 Transport information

UN proper shipping name DOT

Material not regulated (ground or rail)

Special precautions for user

Not applicable.

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15 Regulatory information

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12,9%

Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

SARA (Superfund Amendments and Reauthorization Act)

Not applicable.

Transport/Additional information:

DOT

Remarks:

Note: this transportation classification is for over the road shipments. Shipments by other modes need to be evaluated.

Section 302/304 (extremely hazardous substances): None of the ingredients is listed. Section 313 Reportable Ingredients (Chemicals present below reporting threshold are exempt): 95-63-6 1,2,4-trimethylbenzene SARA Section 312/Tier I & II Hazard Categories: Health Delayed (chronic) Yes Health Immediate (acute) Yes Flammable No Reactive No Pressure No North America Chemical Inventory Status **TSCA (Toxic Substances Control Act - United States):** All ingredients are listed or exempt from listing unless otherwise noted below. **CEPA** (Canadian DSL): All ingredients are listed or exempt from listing unless otherwise noted below. **California Proposition 65** Chemicals known to cause cancer: 98-82-8 Isopropylbenzene Chemicals known to cause reproductive toxicity for females: None of the ingredients is listed.

Chemicals known to cause reproductive toxicity for males:

None of the ingredients is listed.

Chemicals known to cause developmental toxicity:

None of the ingredients is listed.

Carcinogenicity Categories

EPA (Environmental Protection Agency)

98-82-8 Isopropylbenzene

1330-20-7 Xylene

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TLV-ACGIH (THE American Conference of Governmental Industrial Hygienists)	
Human Carcinogen - A1 Confirmed, A2 Suspected, A3 Unknown Relevance, A4 Not Classif	iable
Natural aluminosilicate (Kaolin)	А
Asphalt	A
NIOSH-Cancer (National Institute for Occupational Safety and Health)	
8052-42-4 Asphalt	
OSHA-Cancer (Occupational Safety & Health Administration)	
None of the ingredients is listed.	
Volatile Organic Compounds (VOC) reported per the Emission Standards for Architectural	l Coatings: 244 g/I
European EINECS	
All ingredients are listed.	
Philippines Inventory of Chemicals and Chemical Substances PICCS	
All ingredients are listed.	
Inventory of Existing Chemical Substances manufactured or imported in China IECSC	
All ingredients are listed.	
Australian Inventory of Chemical Substances AICS	
All ingredients are listed.	
Japan Existing and New Chemical Substance List ENCS	
Inventory listing could not be confirmed for one or more substances.	
Korean Existing Chemical Inventory	
All ingredients are listed.	
Non-hazardous Ingredients	
1332-58-7 Natural aluminosilicate (Kaolin)	
9003-55-8 Styrene-butadiene rubber	
64742-52-5 Distillates (petroleum), hydrotreated heavy naphthenic	
112945-52-5 Amorphous Silica Dioxide	

16 Other information

"The data included herein are presented in accordance with various environment, health and safety regulations. It is the responsibility of a recipient of the data to remain currently informed on chemical hazard information, to design and update its own program and to comply with all national, federal, state and local laws and regulations applicable to safety, occupational health, right-to-know and environmental protection."

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Number of revision times and the latest revision date 1.2 / 02/06/2013