

Material Safety Data Sheet

Printing date 06/22/2012

Version Number 1.7

Reviewed on 06/22/2012

* **1 Identification of the substance/mixture and of the company/undertaking****Product identifier**Trade name: Bituthene Liquid Membrane Part A

MSDS ID Number: M-85899

Replaces MSDS ID Number: M-85822

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.
62 Whittemore Avenue
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)

CAN: 1-905-683-8561 (24 hours)

+1-800-354-5414 (8AM - 5PM) Not functional within Massachusetts

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	20-25%
64742-04-7	Extracts (petroleum), heavy paraffinic distillate solvent	10-20%

* **3 Hazards identification****Information concerning hazards for human and environment:** May produce local skin tumors**Safety phrases:**

Avoid exposure - obtain special instructions before use.

When using do not eat or drink.

Do not breathe gas/fumes/vapor/spray.

Wear suitable protective clothing and eye/face protection.

In case of accident or if you feel unwell, seek medical advice immediately.

See Section 13 for disposal information.

Additional information: Mixed A and B components contain MDI which is a respiratory and skin sensitizer.**Hazard description:** Harmful

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Inhalation:

May cause respiratory tract irritation. Prolonged inhalation may cause sensitization. Effects include: Nausea, headache, dizziness, irritation, bronchitis, pulmonary edema (fluid in the lungs) and reduced lung function.

Eye Contact:

Eye contact can cause severe irritation.

Prolonged eye contact can result in redness and itching.

Skin Contact:

Skin contact causes irritation.

Prolonged skin contact can result in irritation causing redness and itching.

Petroleum oils in this product, have caused serious toxic effects including skin cancer, liver damage, blood effects and effects on the unborn based on tests with laboratory animals. These effects are not likely to occur in humans if good personal hygiene practices are used.

Effects include: redness, swelling, rash scaling or blistering.

May produce local skin tumors.

Skin Absorption:

Product can be absorbed through the skin upon prolonged contact resulting in systemic effects such as nausea, headache, and general discomfort.

Ingestion:

Single dose oral toxicity is believed to be low.

If ingested, causes irritation to the linings of the mouth, esophagus and stomach.

Effects include: Nausea, vomiting, diarrhea, sneezing, coughing, labored breathing and burns.

Additional target organ effects:

May cause teratogenic effects

May cause blood effects

May cause liver damage

NFPA ratings (scale 0 - 4)

Health = 2

Fire = 1

Reactivity = 1

HMIS-ratings (scale 0 - 4)

Health = *2

Flammability = 1

Reactivity = 1

Other hazards Contact with residue from adhesive may cause eye and skin irritation.

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.

If residue remains, clean with waterless handcream or abrasive soap. Never use solvents.

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After eye contact:

If contact with residue causes eye irritation, flush eyes with water for at least 15 minutes while holding eyelids open.

Seek immediate medical advice.

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

* **5 Firefighting measures****Suitable extinguishing agents:**

CO₂, extinguishing powder or water spray. Fight larger fire with alcohol resistant foam.

Special hazards arising from the substance or mixture

Wear self-contained breathing apparatus and complete personal protective equipment when potential for exposure to vapors or products of combustion exist. Water may be used to cool containers to prevent pressure build-up and possible auto-ignition or explosion. Avoid breathing hazardous vapors or products of combustion. Keep upwind. Isolate area and keep unnecessary people away. Prevent run-off from fire control or dilution from entering streams or drinking water supplies.

Additional information

Cool endangered receptacles with water spray.

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.

Environmental precautions: Do not allow product to reach sewage system or any water course.

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.

Pick up mechanically.

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.

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7 Handling and storage**Handling:****Precautions for safe handling**

Prevent formation of aerosols.

Avoid eye and skin contact with residue from adhesive.

To avoid skin contact, use gloves. Clean hands after contact with adhesive residue.

Information about protection against explosions and fires: Keep respiratory protective device available.**Storage:****Information about storage in one common storage facility:** Keep respiratory protective device available.**Further information about storage conditions:** -**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/m ³ *15-min; See Pocket Guide App. A
TLV	0.5* mg/m ³ *inh. fraction; as benzene-soluble aerosol; BEIp

Additional information: The lists that were valid during the creation were used as basis.**Appropriate engineering controls**

Provide local exhaust ventilation to prevent vapor build-up during application. This is particularly important in enclosed or confined areas where natural ventilation may not be adequate. Provide enough ventilation to maintain exposure levels below regulatory limits.

Personal protective equipment:**General protective and hygienic measures:**

Avoid contact with the eyes and skin.

Store protective clothing separately.

Breathing equipment:

MDI contained in mixed A and B components, has a very low vapor pressure and is not likely to exceed the permissible exposure limit (PEL) in unconfined spaces. Therefore, respiratory protection is not normally required in well ventilated areas except for individuals who are hypersensitive to isocyanates.

It should also be noted that although chemical cartridge respirators may provide protection against isocyanate exposure, they are not approved for such use by NIOSH. This is because MDI has poor warning properties. (The level at which it can be detected by odor is significantly above the PEL.)

In confined areas, indoors or where there is inadequate ventilation, supplied air (NIOSH Type TC-19C-XXX) or self-contained breathing apparatus (NIOSH Type TC-13-XXX) may be required.

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Protection of hands:

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

Material of gloves

The following glove materials are acceptable: Nitrile or Butyl rubber gloves should be worn to protect against MDI and oils contained in the mixed A and B components.

Eye protection:

Safety glasses with side shield protection.



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

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.

Body protection: Protective work clothing* **9 Physical and chemical properties****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:** 200°C (392 °F)**Flammability (solid, gaseous):** Not applicable.**Decomposition temperature:** Not determined.**Auto igniting:** Product is not selfigniting.**Danger of explosion:** Product does not present an explosion hazard.**Explosion limits:****Lower:** Not determined.**Upper:** Not determined.**VOC Content (max):** Not determined.**Vapor pressure:** Not determined.**Density at 20°C (68 °F):** ~1.1 g/cm³ (~9.18 lbs/gal)**Vapour density** Not determined.

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Evaporation rate	Not determined.
Solubility in / Miscibility with Water:	Not miscible or difficult to mix.
Segregation coefficient (n-octanol/water):	Not determined.
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:** Strong acids, strong bases and strong oxidising agents.**Hazardous decomposition products:**

Carbon monoxide and carbon dioxide

Sulfur 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:****Primary irritant effect:****on the skin:** Irritant to skin and mucous membranes.**on the eye:** Irritating effect.**Additional toxicological information:** Carcinogenic.**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.

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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-Number DOT, ADR, IMDG, IATA	Not applicable.
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UN proper shipping name DOT, ADR, IMDG, IATA	Not applicable.
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Transport hazard class(es) DOT, ADR, ADN, IMDG, IATA Class	Not applicable.
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Packing group DOT, ADR, IMDG, IATA	Not applicable.
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Environmental hazards: Marine pollutant:	No
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Special precautions for user	Not applicable.
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Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.
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Transport/Additional information: DOT Remarks:	Not Regulated.
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15 Regulatory information**SARA (Superfund Amendments and Reauthorization Act)****Section 302/304 (extremely hazardous substances):**

None of the ingredients is listed.

Section 313 Reportable Ingredients (Chemicals present below reporting threshold are exempt):

None of the ingredients is listed.

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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:**

64742-04-7	Extracts (petroleum), heavy paraffinic distillate solvent
130498-29-2	Polycyclic Aromatic Hydrocarbons
14808-60-7	Quartz (SiO ₂)
100-40-3	4-vinylcyclohexene
106-99-0	1,3-Butadiene

Chemicals known to cause reproductive toxicity for females:

100-40-3	4-vinylcyclohexene
106-99-0	1,3-Butadiene

Chemicals known to cause reproductive toxicity for males:

100-40-3	4-vinylcyclohexene
106-99-0	1,3-Butadiene

Chemicals known to cause developmental toxicity:

149-57-5	2-ethylhexanoic acid
106-99-0	1,3-Butadiene

WHMIS Classification(s):

D2A - Very toxic material causing other toxic effects

**Carcinogenicity Categories****EPA (Environmental Protection Agency)**

None of the ingredients is listed.

**IARC (International Agency for Research on Cancer) Human Carcinogenicity:
Group 1- Positive, Group 2A- Probable, Group 2B- Possible, Group 3- Not Classifiable**

69012-64-2	Silica, fume	3
8052-42-4	Asphalt	3

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64742-04-7 Extracts (petroleum), heavy paraffinic distillate solvent

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NTP (National Toxicology Program)**K–Known to be carcinogenic, R–May reasonably be anticipated to be carcinogenic**

None of the ingredients is listed.

TLV-ACGIH (THE American Conference of Governmental Industrial Hygienists)**Human Carcinogen - A1 Confirmed, A2 Suspected, A3 Unknown Relevance, A4 Not Classifiable**

8052-42-4 Asphalt

A4

1332-58-7 Natural aluminosilicate (Kaolin)

A4

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 Coatings:
(gr/L) 10 gr/L (as applied)**European EINECS**

All ingredients are listed.

Philippines Inventory of Chemicals and Chemical Substances PICCS

Inventory listing could not be confirmed for one or more substances.

Inventory of Existing Chemical Substances manufactured or imported in China IECSC

Inventory listing could not be confirmed for one or more substances.

Australian Inventory of Chemical Substances AICS

Inventory listing could not be confirmed for one or more substances.

Japan Existing and New Chemical Substance List ENCS

Inventory listing could not be confirmed for one or more substances.

Korean Existing Chemical Inventory

Inventory listing could not be confirmed for one or more substances.

National regulations:**Information about limitation of use:**Workers are not allowed to be exposed to the hazardous carcinogenic materials contained in this preparation.
Exceptions can be made by the authorities in certain cases.**Non-hazardous Ingredients**

69012-64-2 Silica, fume

69102-90-5 1,3-Butadiene, homopolymer, hydroxy-terminated

25791-96-2 Poly[oxy(methyl-1,2-ethanediy)], .alpha.,.alpha.',.alpha."-1,2,3-propanetriyltris[.omega.-hydroxy-

8001-78-3 Castor oil, hydrogenated

1332-58-7 Natural aluminosilicate (Kaolin)

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."