

Material Safety Data Sheet

Printing date 09/05/2013

Version Number 1.2

Reviewed on 09/05/2013

1 Identification**Product identifier**Trade name: *Bituthene System 4000 Surface Conditioner or Perm-A-Barrier Surface Conditioner*

MSDS ID Number: 60176

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:**

67-56-1	Methanol	2.0-5.0%
---------	----------	----------

3 Hazard(s) identification**Classification of the substance or mixture**

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

Information concerning hazards for human and environment:

Harmful by inhalation, in contact with skin and if swallowed.

Harmful: possible risk of irreversible effects through inhalation, in contact with skin and if swallowed.

Safety phrases:

Keep container in a well-ventilated place.

(Cont. on page 2)

USA

Material Safety Data Sheet

Printing date 09/05/2013

Version Number 1.2

Reviewed on 09/05/2013

Trade name: *Bituthene System 4000 Surface Conditioner or Perm-A-Barrier Surface Conditioner*

(Cont. from page 1)

Do not breathe gas/fumes/vapor/spray.
Wear suitable protective clothing and gloves.
See Section 13 for disposal information.

Hazard description: Caution!**Inhalation:**

Material is irritating to mucous membranes and upper respiratory tract.
High levels may cause stupor, headache, nausea, vomiting, dizziness, weakness, digestive and visual disturbances, unconsciousness, central nervous system depression, blindness and death. Methanol may also cause liver and kidney damage. Repeated inhalation may cause impairment of lung function and permanent lung damage.

Eye Contact:

Causes eye irritation.
Causes serious eye damage.

Skin Contact:

Causes skin irritation, scaling, reddening, drying, and cracking of the skin. Prolonged and repeated contact may lead to defatting dermatitis. Liquid can be absorbed in toxic amounts through intact skin. See ingestion and inhalation.

Skin Absorption: Harmful if absorbed through the skin.

Ingestion:

Poisonous or fatal if swallowed. Can affect the optic nerve resulting in blindness.
Can cause mental sluggishness, nausea, vomiting, dyspnea, abdominal pain, diarrhea, convulsions, central nervous system depression, coma and death.

NFPA ratings (scale 0 - 4)

Health = 2
Fire = 2
Reactivity = 0

HMIS-ratings (scale 0 - 4)

Health = *2
Flammability = 2
Reactivity = 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.

After eye contact:

Rinse opened eye for several minutes under running water.

Seek immediate medical advice.

(Cont. on page 3)

USA

Material Safety Data Sheet

Printing date 09/05/2013

Version Number 1.2

Reviewed on 09/05/2013

Trade name: *Bituthene System 4000 Surface Conditioner or Perm-A-Barrier Surface Conditioner*

(Cont. from page 2)

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

5 Fire-fighting measures

Suitable extinguishing agents:

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

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

Electrostatic accumulation hazard, use proper grounding procedure. Adequate ventilation should be provided during the extrusion process.

Prevent formation of aerosols.

Information about protection against explosions and fires:



Keep ignition sources away - Do not smoke.

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

(Cont. on page 4)

USA

Material Safety Data Sheet

Printing date 09/05/2013

Version Number 1.2

Reviewed on 09/05/2013

Trade name: *Bituthene System 4000 Surface Conditioner or Perm-A-Barrier Surface Conditioner*

(Cont. from page 3)

Storage:

Information about storage in one common storage facility: No special measures required.

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:

67-56-1 Methanol

PEL	Long-term value: 260 mg/m ³ , 200 ppm
REL	Short-term value: 325 mg/m ³ , 250 ppm Long-term value: 260 mg/m ³ , 200 ppm Skin
TLV	Short-term value: 328 mg/m ³ , 250 ppm Long-term value: 262 mg/m ³ , 200 ppm Skin; BEI

Ingredients with biological limit values:

67-56-1 Methanol

BEI	15 mg/L Medium: urine Time: end of shift Parameter: Methanol (background, nonspecific)
-----	-------------------------------------------------------------------------------------------------

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:

A chemical cartridge respirator with organic vapor cartridge is required. A dust/mist cartridge or prefilter may be needed in addition to control exposure to mist. Supplied air respirator (SCBA) is required at exposure levels above the capabilities of a chemical cartridge respirator.

Protection of hands:

PVA gloves

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

Material of gloves

PVA gloves

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

(Cont. on page 5)

USA

Material Safety Data Sheet

Printing date 09/05/2013

Version Number 1.2

Reviewed on 09/05/2013

Trade name: *Bituthene System 4000 Surface Conditioner or Perm-A-Barrier Surface Conditioner*

(Cont. from page 4)

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**9 Physical and chemical properties****General Information****Appearance:**

Form:	Liquid
Color:	According to product specification
Odor:	Characteristic
Odour threshold:	Not determined.

pH-value (~) at 20 °C (68 °F): 8**Change in condition**

Melting point/Melting range:	Undetermined.
Flash point:	> 61 °C (> 142 °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.
Lower:	Not determined.
Upper:	Not determined.
VOC Content (max):	Not determined.
Density: (~)	Not determined.
Vapour density	Not determined.
Evaporation rate	Not determined.

Solubility in / Miscibility with**Water:** Fully miscible.**Partition coefficient (n-octanol/water):** Not determined.**Viscosity:**

Dynamic:	Not determined.
Kinematic:	Not determined.

(Cont. on page 6)

USA

Material Safety Data Sheet

Printing date 09/05/2013

Version Number 1.2

Reviewed on 09/05/2013

Trade name: *Bituthene System 4000 Surface Conditioner or Perm-A-Barrier Surface Conditioner*

(Cont. from page 5)

Molecular weight not applicable.

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

Formaldehyde

Additional information: See section 7 for information on handling, storage and conditions to be avoided.**11 Toxicological information****Acute toxicity:**

May be fatal by ingestion, inhalation or skin absorption. Irritant. Onset of symptoms may be delayed 1-30 hours.

Target

organs: heart, blood, central nervous system, liver, kidneys, spleen, eyes, skin, cardiovascular system, gastrointestinal system, respiratory system, lungs. 6000 ppm (METHANOL) is immediately dangerous to life or health.

LD/LC50 values relevant for classification:**67-56-1 Methanol**

Oral	LD50	5628 mg/kg (rat)
Dermal	LD50	15800 mg/kg (rabbit)

Primary irritant effect:**on the skin:** Harmful in contact with skin.**on the eye:** Irritating effect.**inhalation:** May be irritating to the respiratory system.**Ingestion:** Harmful if swallowed.**IARC (International Agency for Research on Cancer) Human Carcinogenicity:****Group 1- Positive, Group 2A- Probable, Group 2B- Possible, Group 3- Not Classifiable**

None of the ingredients is listed.

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

None of the ingredients is listed.

USA

(Cont. on page 7)

Material Safety Data Sheet

Printing date 09/05/2013

Version Number 1.2

Reviewed on 09/05/2013

Trade name: *Bituthene System 4000 Surface Conditioner or Perm-A-Barrier Surface Conditioner*

(Cont. from page 6)

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.**Additional ecological information:****General notes:**

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

Slightly hazardous for water

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.

UN proper shipping name

DOT, ADR, IMDG, IATA

Not applicable.

Transport hazard class(es)DOT, ADR, ADN, IMDG, IATA
Class

Not applicable.

Packing group

DOT, ADR, IMDG, IATA

Not applicable.

Environmental hazards:**Marine pollutant:**

No

Special precautions for user

Not applicable.

(Cont. on page 8)

USA

Material Safety Data Sheet

Printing date 09/05/2013

Version Number 1.2

Reviewed on 09/05/2013

Trade name: *Bituthene System 4000 Surface Conditioner or Perm-A-Barrier Surface Conditioner*

(Cont. from page 7)

Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code Not applicable.

Transport/Additional information:

DOT Remarks: Not Regulated.

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):

67-56-1	Methanol	3.6%
---------	----------	------

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:**

None of the ingredients is listed.

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:

67-56-1	Methanol
---------	----------

WHMIS Classification(s):

D2B - Toxic material causing other toxic effects



(Cont. on page 9)

USA

Material Safety Data Sheet

Printing date 09/05/2013

Version Number 1.2

Reviewed on 09/05/2013

Trade name: *Bituthene System 4000 Surface Conditioner or Perm-A-Barrier Surface Conditioner*

(Cont. from page 8)

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

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**

None of the ingredients is listed.

NIOSH-Cancer (National Institute for Occupational Safety and Health)

None of the ingredients is listed.

OSHA-Cancer (Occupational Safety & Health Administration)

None of the ingredients is listed.

Volatile Organic Compounds (VOC) reported per the Emission Standards for Architectural Coatings: 92 g/l**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

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

Non-hazardous Ingredients

25951-38-6	2-Propenoic acid, 2-methyl-, methyl ester, polymer with butyl 2-propenoate and 2-hydroxyethyl 2-propenoate
------------	------------------------------------------------------------------------------------------------------------

7732-18-5	Water
-----------	-------

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."

The first date of preparation 03/29/2012**Number of revision times and the latest revision date** 1.2 / 09/05/2013

USA