

# SAFETY DATA SHEET

## 1. Identification

**Product identifier** High Performance Backing Compound Resin

**Other means of identification**

**SKU#** 0400

**Recommended use** Not available.

**Recommended restrictions** None known.

**Manufacturer/Importer/Supplier/Distributor information**

**Company name** ITW Performance Polymers

**Address**  
35 Brownridge Rd  
Unit 1  
Halton Hills, ON L7G 0C6

**Contact person** Customer Service

**Telephone number** 978-777-1100

**Fax**

**E-mail**

**Emergency telephone number** 800-424-9300

**Supplier** Not available.

## 2. Hazard identification

**Physical hazards** Not classified.

**Health hazards**

Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2A
Sensitization, skin	Category 1
Germ cell mutagenicity	Category 1B
Carcinogenicity	Category 1B
Reproductive toxicity	Category 2

**Environmental hazards** Not classified.

**Label elements**



**Signal word** Danger

**Hazard statement** Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation. May cause genetic defects. May cause cancer. Suspected of damaging fertility or the unborn child.

**Precautionary statement**

**Prevention** Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wash thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Wear protective gloves/protective clothing/eye protection/face protection.

**Response** IF ON SKIN: Wash with plenty of water. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. IF exposed or concerned: Get medical advice/attention. If skin irritation or rash occurs: Get medical advice/attention. If eye irritation persists: Get medical advice/attention. Take off contaminated clothing and wash it before reuse.

**Storage** Store locked up.

**Disposal** Dispose of contents/container in accordance with local/regional/national/international regulations.

<b>Other hazards</b>	None known.
<b>Supplemental information</b>	None.

### 3. Composition/information on ingredients

#### Mixtures

Chemical name	Common name and synonyms	CAS number	%
FIBROUS GLASS		65997-17-3	30 - 60
Epoxy Resin:--reaction Product Of Bisphenol A And Epichlorohydrin (refer To Epichlorohydrin)	Epoxy resin	25068-38-6	15 - 40
Nepheline And Nepheline Syenite		37244-96-5	15 - 40
Butyl glycidyl ether		2426-08-6	1 - 5
ETHYLENE GLYCOL MONOBUTYL ETHER		111-76-2	0.1 - 1
Other components below reportable levels			1 - 5

All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

### 4. First-aid measures

<b>Inhalation</b>	Move to fresh air. Call a physician if symptoms develop or persist.
<b>Skin contact</b>	Remove contaminated clothing immediately and wash skin with soap and water. In case of eczema or other skin disorders: Seek medical attention and take along these instructions. Wash contaminated clothing before reuse.
<b>Eye contact</b>	Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.
<b>Ingestion</b>	Rinse mouth. Get medical attention if symptoms occur.
<b>Most important symptoms/effects, acute and delayed</b>	Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and pain. May cause an allergic skin reaction. Dermatitis. Rash.
<b>Indication of immediate medical attention and special treatment needed</b>	Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.
<b>General information</b>	IF exposed or concerned: Get medical advice/attention. If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance. Wash contaminated clothing before reuse.

### 5. Fire-fighting measures

<b>Suitable extinguishing media</b>	Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).
<b>Unsuitable extinguishing media</b>	Do not use water jet as an extinguisher, as this will spread the fire.
<b>Specific hazards arising from the chemical</b>	During fire, gases hazardous to health may be formed.
<b>Special protective equipment and precautions for firefighters</b>	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
<b>Fire fighting equipment/instructions</b>	Move containers from fire area if you can do so without risk.
<b>Specific methods</b>	Use standard firefighting procedures and consider the hazards of other involved materials.
<b>General fire hazards</b>	No unusual fire or explosion hazards noted.

### 6. Accidental release measures

<b>Personal precautions, protective equipment and emergency procedures</b>	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Avoid breathing mist/vapours. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.
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**Methods and materials for containment and cleaning up**

Prevent entry into waterways, sewer, basements or confined areas.

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills to original containers for re-use. Put material in suitable, covered, labeled containers. For waste disposal, see section 13 of the SDS.

**Environmental precautions**

Avoid discharge into drains, water courses or onto the ground.

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

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Avoid breathing mist/vapours. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. Pregnant or breastfeeding women must not handle this product. Should be handled in closed systems, if possible. Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.

**Conditions for safe storage, including any incompatibilities**

Store locked up. Store in tightly closed container. Store away from incompatible materials (see Section 10 of the SDS).

**8. Exposure controls/personal protection****Occupational exposure limits****US. ACGIH Threshold Limit Values**

Components	Type	Value
BUTYL GLYCIDYL ETHER (CAS 2426-08-6)	TWA	3 ppm
ETHYLENE GLYCOL MONOBUTYL ETHER (CAS 111-76-2)	TWA	20 ppm

**Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2)**

Components	Type	Value	Form
BUTYL GLYCIDYL ETHER (CAS 2426-08-6)	TWA	16 mg/m <sup>3</sup>	
		3 ppm	
ETHYLENE GLYCOL MONOBUTYL ETHER (CAS 111-76-2)	TWA	97 mg/m <sup>3</sup>	
		20 ppm	
FIBROUS GLASS (CAS 65997-17-3)	TWA	0.2 fibers/cm <sup>3</sup>	Fiber.
		5 mg/m <sup>3</sup>	Total particulate.
		5 mg/m <sup>3</sup>	Fiber, total

**Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended)**

Components	Type	Value	Form
BUTYL GLYCIDYL ETHER (CAS 2426-08-6)	TWA	3 ppm	
ETHYLENE GLYCOL MONOBUTYL ETHER (CAS 111-76-2)	TWA	20 ppm	
FIBROUS GLASS (CAS 65997-17-3)	TWA	0.2 fibers/cm <sup>3</sup>	Fiber.
		5 mg/m <sup>3</sup>	Inhalable fibers.

**Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act)**

Components	Type	Value	Form
BUTYL GLYCIDYL ETHER (CAS 2426-08-6)	TWA	3 ppm	

**Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act)**

Components	Type	Value	Form
ETHYLENE GLYCOL MONOBUTYL ETHER (CAS 111-76-2)	TWA	20 ppm	
FIBROUS GLASS (CAS 65997-17-3)	TWA	5 mg/m3	Inhalable fraction.

**Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents)**

Components	Type	Value	Form
BUTYL GLYCIDYL ETHER (CAS 2426-08-6)	TWA	3 ppm	
ETHYLENE GLYCOL MONOBUTYL ETHER (CAS 111-76-2)	TWA	20 ppm	
FIBROUS GLASS (CAS 65997-17-3)	TWA	0.5 fibers/ml	Respirable fibers.
		5 mg/m3	Inhalable fraction.
Nepheline And Nepheline Syenite (CAS 37244-96-5)	TWA	10 mg/m3	Total dust.

**Canada. Quebec OELs. (Ministry of Labor - Regulation respecting occupational health and safety)**

Components	Type	Value	Form
BUTYL GLYCIDYL ETHER (CAS 2426-08-6)	TWA	133 mg/m3	
		25 ppm	
ETHYLENE GLYCOL MONOBUTYL ETHER (CAS 111-76-2)	TWA	97 mg/m3	
		20 ppm	
FIBROUS GLASS (CAS 65997-17-3)	TWA	1 fibers/cm3n	Fiber.
		10 mg/m3	fibers, total dust

**Canada. Saskatchewan OELs (Occupational Health and Safety Regulations, 1996, Table 21)**

Components	Type	Value	Form
BUTYL GLYCIDYL ETHER (CAS 2426-08-6)	15 minute	6 ppm	
	8 hour	3 ppm	
ETHYLENE GLYCOL MONOBUTYL ETHER (CAS 111-76-2)	15 minute	30 ppm	
	8 hour	20 ppm	
FIBROUS GLASS (CAS 65997-17-3)	15 minute	10 mg/m3	Inhalable fraction.
	8 hour	0.2 fibers/cc	Respirable fibers.
		5 mg/m3	Inhalable fraction.

**Biological limit values****ACGIH Biological Exposure Indices**

Components	Value	Determinant	Specimen	Sampling Time
ETHYLENE GLYCOL MONOBUTYL ETHER (CAS 111-76-2)	200 mg/g	Butoxyacetic acid (BAA), with hydrolysis	Creatinine in urine	*

\* - For sampling details, please see the source document.

**Exposure guidelines****Canada - Alberta OELs: Skin designation**

Butyl glycidyl ether (CAS 2426-08-6)

Can be absorbed through the skin.

**Canada - British Columbia OELs: Skin designation**

Butyl glycidyl ether (CAS 2426-08-6)	Can be absorbed through the skin.
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**Canada - Manitoba OELs: Skin designation**

Butyl glycidyl ether (CAS 2426-08-6)	Can be absorbed through the skin.
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**Canada - Ontario OELs: Skin designation**

Butyl glycidyl ether (CAS 2426-08-6)	Can be absorbed through the skin.
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**Canada - Saskatchewan OELs: Skin designation**

Butyl glycidyl ether (CAS 2426-08-6)	Can be absorbed through the skin.
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**US ACGIH Threshold Limit Values: Skin designation**

Butyl glycidyl ether (CAS 2426-08-6)	Can be absorbed through the skin.
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<b>Appropriate engineering controls</b>	Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Provide eyewash station and safety shower.
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**Individual protection measures, such as personal protective equipment**

<b>Eye/face protection</b>	Chemical respirator with organic vapour cartridge and full facepiece.
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**Skin protection**

<b>Hand protection</b>	Wear appropriate chemical resistant gloves.
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<b>Other</b>	Wear appropriate chemical resistant clothing. Use of an impervious apron is recommended.
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<b>Respiratory protection</b>	Chemical respirator with organic vapour cartridge and full facepiece.
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<b>Thermal hazards</b>	Wear appropriate thermal protective clothing, when necessary.
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<b>General hygiene considerations</b>	Observe any medical surveillance requirements. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Contaminated work clothing should not be allowed out of the workplace.
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**9. Physical and chemical properties**

<b>Appearance</b>	Viscous. Liquid.
<b>Physical state</b>	Liquid.
<b>Form</b>	Viscous. Liquid.
<b>Colour</b>	Red.
<b>Odour</b>	Slight.
<b>Odour threshold</b>	Not available.
<b>pH</b>	Not available.
<b>Melting point/freezing point</b>	Not available.
<b>Initial boiling point and boiling range</b>	320 °C (608 °F) estimated
<b>Flash point</b>	129.4 °C (265.0 °F) estimated
<b>Evaporation rate</b>	Not available.
<b>Flammability (solid, gas)</b>	Not applicable.
<b>Upper/lower flammability or explosive limits</b>	
<b>Flammability limit - lower (%)</b>	Not available.
<b>Flammability limit - upper (%)</b>	Not available.
<b>Explosive limit - lower (%)</b>	Not available.
<b>Explosive limit - upper (%)</b>	Not available.
<b>Vapour pressure</b>	< 1 mm Hg @ 70 F
<b>Vapour density</b>	Not available.
<b>Relative density</b>	Not available.
<b>Solubility(ies)</b>	
<b>Solubility (water)</b>	Not available.

<b>Partition coefficient (n-octanol/water)</b>	Not available.
<b>Auto-ignition temperature</b>	Not available.
<b>Decomposition temperature</b>	Not available.
<b>Viscosity</b>	Not available.
<b>Other information</b>	
<b>Density</b>	1.16 g/cm <sup>3</sup> estimated
<b>Explosive properties</b>	Not explosive.
<b>Flammability class</b>	Combustible IIIB estimated
<b>Oxidising properties</b>	Not oxidising.
<b>Specific gravity</b>	1.16 estimated

## 10. Stability and reactivity

<b>Reactivity</b>	The product is stable and non-reactive under normal conditions of use, storage and transport.
<b>Chemical stability</b>	Material is stable under normal conditions.
<b>Possibility of hazardous reactions</b>	No dangerous reaction known under conditions of normal use.
<b>Conditions to avoid</b>	Contact with incompatible materials.
<b>Incompatible materials</b>	Strong oxidising agents.
<b>Hazardous decomposition products</b>	No hazardous decomposition products are known.

## 11. Toxicological information

### Information on likely routes of exposure

<b>Inhalation</b>	Prolonged inhalation may be harmful.
<b>Skin contact</b>	Causes skin irritation. May cause an allergic skin reaction.
<b>Eye contact</b>	Causes serious eye irritation.
<b>Ingestion</b>	Knowledge about health hazard is incomplete.

**Symptoms related to the physical, chemical and toxicological characteristics** Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and pain. May cause an allergic skin reaction. Dermatitis. Rash.

### Information on toxicological effects

**Acute toxicity** Not known.

Components	Species	Test Results
Butyl glycidyl ether (CAS 2426-08-6)		
<b>Acute</b>		
<b>Dermal</b>		
LD50	Rabbit	0.788 g/kg

**Skin corrosion/irritation** Causes skin irritation.

**Serious eye damage/eye irritation** Causes serious eye irritation.

### Respiratory or skin sensitisation

#### ACGIH sensitisation

N-BUTYL GLYCIDYL ETHER (BGE) (CAS 2426-08-6) Dermal sensitization

#### Canada - Alberta OELs: Irritant

ETHYLENE GLYCOL MONOBUTYL ETHER Irritant

(CAS 111-76-2)

FIBROUS GLASS (CAS 65997-17-3) Irritant

#### Canada - British Columbia OELs: Respiratory or skin sensitiser

Butyl glycidyl ether (CAS 2426-08-6) Capable of causing respiratory, dermal or conjunctival sensitization.

#### Canada - Manitoba OELs Hazard: Dermal sensitization

Butyl glycidyl ether (CAS 2426-08-6) Dermal sensitization

**Canada - Saskatchewan OELs Hazard Data: Sensitiser**

Butyl glycidyl ether (CAS 2426-08-6) Sensitiser.

**Respiratory sensitisation** Due to partial or complete lack of data the classification is not possible.**Skin sensitisation** May cause an allergic skin reaction.**Germ cell mutagenicity** May cause genetic defects.**Carcinogenicity** May cause cancer.**ACGIH Carcinogens**

ETHYLENE GLYCOL MONOBUTYL ETHER (CAS 111-76-2) A3 Confirmed animal carcinogen with unknown relevance to humans.

FIBROUS GLASS (CAS 65997-17-3) A2 Suspected human carcinogen.

**Canada - Alberta OELs: Carcinogen category**

FIBROUS GLASS (CAS 65997-17-3) Suspected human carcinogen.

**Canada - Manitoba OELs: carcinogenicity**

ETHYLENE GLYCOL MONOBUTYL ETHER (CAS 111-76-2) Confirmed animal carcinogen with unknown relevance to humans.

FIBROUS GLASS (CAS 65997-17-3) Suspected human carcinogen.

**Canada - Quebec OELs: Carcinogen category**

FIBROUS GLASS (CAS 65997-17-3) Detected carcinogenic effect in animals.

**IARC Monographs. Overall Evaluation of Carcinogenicity**

ETHYLENE GLYCOL MONOBUTYL ETHER (CAS 111-76-2) 3 Not classifiable as to carcinogenicity to humans.

**Reproductive toxicity** Suspected of damaging fertility or the unborn child.**Specific target organ toxicity - single exposure** Due to partial or complete lack of data the classification is not possible.**Specific target organ toxicity - repeated exposure** Due to partial or complete lack of data the classification is not possible.**Aspiration hazard** Due to partial or complete lack of data the classification is not possible.**Chronic effects** Prolonged inhalation may be harmful.**12. Ecological information****Ecotoxicity** The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.**Persistence and degradability** No data is available on the degradability of any ingredients in the mixture.**Bioaccumulative potential****Partition coefficient n-octanol / water (log Kow)**

Butyl glycidyl ether 0.63

ETHYLENE GLYCOL MONOBUTYL ETHER 0.83

**Mobility in soil** No data available.**Other adverse effects** No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.**13. Disposal considerations****Disposal instructions** Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of contents/container in accordance with local/regional/national/international regulations.**Local disposal regulations** Dispose in accordance with all applicable regulations.**Hazardous waste code** The waste code should be assigned in discussion between the user, the producer and the waste disposal company.**Waste from residues / unused products** Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).**Contaminated packaging** Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.**14. Transport information****TDG**

Not regulated as dangerous goods.

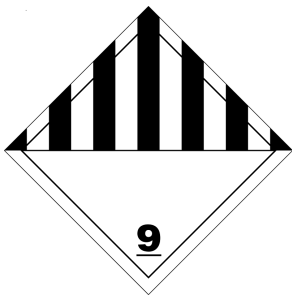
**IATA**

Not regulated as dangerous goods.

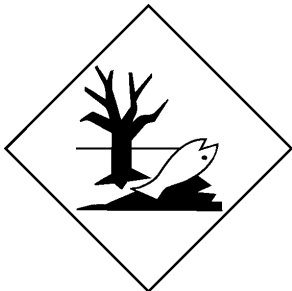
**IMDG**

**UN number** UN3082  
**UN proper shipping name** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Epoxy Resin:--reaction Product Of Bisphenol A And Epichlorohydrin (refer To Epichlorohydrin)), MARINE POLLUTANT  
**Transport hazard class(es)**  
**Class** 9  
**Subsidiary risk** -  
**Packing group** III  
**Environmental hazards**  
**Marine pollutant** Yes  
**EmS** F-A, S-F  
**Special precautions for user** Read safety instructions, SDS and emergency procedures before handling.  
**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** Not established.

**IMDG**



**Marine pollutant**



**General information** IMDG Regulated Marine Pollutant.

**15. Regulatory information**

**Canadian regulations** This product has been classified in accordance with the hazard criteria of the HPR and the SDS contains all the information required by the HPR.

**Controlled Drugs and Substances Act**

Not regulated.

**Export Control List (CEPA 1999, Schedule 3)**

Not listed.

**Greenhouse Gases**

Not listed.

**Precursor Control Regulations**

Not regulated.

**International regulations**

**Stockholm Convention**

Not applicable.

**Rotterdam Convention**

Not applicable.



**Kyoto Protocol**

Not applicable.

**Montreal Protocol**

Not applicable.

**Basel Convention**

FIBROUS GLASS (CAS 65997-17-3)

**International Inventories**

<b>Country(s) or region</b>	<b>Inventory name</b>	<b>On inventory (yes/no)*</b>
Australia	Australian Inventory of Chemical Substances (AICS)	No
Canada	Domestic Substances List (DSL)	No
Canada	Non-Domestic Substances List (NDSL)	Yes
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	No
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	No
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	No
Taiwan	Taiwan Chemical Substance Inventory (TCSI)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

\*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

<b>16. Other information</b>
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**Issue date** 31-May-2019

**Revision date** 04-May-2020

**Version No.** 03

**Disclaimer**

ITW Performance Polymers cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release.

# SAFETY DATA SHEET

## 1. Identification

**Product identifier** HP Backing Compound Hardener

**Other means of identification**

**SKU#** 5719

**Recommended use** Not available.

**Recommended restrictions** None known.

**Manufacturer/Importer/Supplier/Distributor information**

**Company name** ITW Performance Polymers

**Address** 35 Brownridge Rd

Unit 1

Halton Hills, ON L7G 0C6

**Contact person** Customer Service

**Telephone number** 978-777-1100

**Fax**

**E-mail**

**Emergency telephone number** 800-424-9300

**Supplier** Not available.

## 2. Hazard identification

**Physical hazards** Not classified.

**Health hazards**

Acute toxicity, oral	Category 4
Acute toxicity, dermal	Category 3
Skin corrosion/irritation	Category 1
Serious eye damage/eye irritation	Category 1
Sensitization, respiratory	Category 1
Sensitization, skin	Category 1A

**Environmental hazards** Not classified.

**Label elements**



**Signal word** Danger

**Hazard statement** Harmful if swallowed. Toxic in contact with skin. Causes severe skin burns and eye damage. May cause an allergic skin reaction. Causes serious eye damage. May cause allergy or asthma symptoms or breathing difficulties if inhaled.

**Precautionary statement**

**Prevention** Do not breathe mist/vapours. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Contaminated work clothing should not be allowed out of the workplace. Wear protective gloves/protective clothing/eye protection/face protection. Wear respiratory protection.

**Response** IF SWALLOWED: rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. IF INHALED: Remove person to fresh air and keep comfortable for breathing. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTRE/doctor. If skin irritation or rash occurs: Get medical advice/attention. Take off immediately all contaminated clothing and wash it before reuse.

**Storage** Store locked up.

<b>Disposal</b>	Dispose of contents/container in accordance with local/regional/national/international regulations.
<b>Other hazards</b>	None known.
<b>Supplemental information</b>	None.

### 3. Composition/information on ingredients

#### Mixtures

Chemical name	Common name and synonyms	CAS number	%
N-(2-AMINOETHYL)PIPERAZINE		140-31-8	60 - 100
DIETHYLENETRIAMINE		111-40-0	15 - 40
Carbon Black		1333-86-4	0.1 - 1
Other components below reportable levels			0.1 - 1

All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

### 4. First-aid measures

<b>Inhalation</b>	If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing. Oxygen or artificial respiration if needed. Do not use mouth-to-mouth method if victim inhaled the substance. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. If experiencing respiratory symptoms: Call a poison center or doctor/physician.
<b>Skin contact</b>	Remove contaminated clothing immediately and wash skin with soap and water. Call a physician or poison control centre immediately. Chemical burns must be treated by a physician. Wash contaminated clothing before reuse.
<b>Eye contact</b>	Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician or poison control centre immediately.
<b>Ingestion</b>	Call a physician or poison control centre immediately. Rinse mouth. Do not induce vomiting. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.
<b>Most important symptoms/effects, acute and delayed</b>	Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. Coughing. Difficulty in breathing.
<b>Indication of immediate medical attention and special treatment needed</b>	Provide general supportive measures and treat symptomatically. Chemical burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital. Keep victim warm. Keep victim under observation. Symptoms may be delayed.
<b>General information</b>	Take off immediately all contaminated clothing. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance. Wash contaminated clothing before reuse.

### 5. Fire-fighting measures

<b>Suitable extinguishing media</b>	Alcohol resistant foam. Powder. Carbon dioxide (CO <sub>2</sub> ).
<b>Unsuitable extinguishing media</b>	Do not use water jet as an extinguisher, as this will spread the fire.
<b>Specific hazards arising from the chemical</b>	During fire, gases hazardous to health may be formed.
<b>Special protective equipment and precautions for firefighters</b>	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
<b>Fire fighting equipment/instructions</b>	Move containers from fire area if you can do so without risk.
<b>Specific methods</b>	Use standard firefighting procedures and consider the hazards of other involved materials.
<b>General fire hazards</b>	No unusual fire or explosion hazards noted.

### 6. Accidental release measures

<b>Personal precautions, protective equipment and emergency procedures</b>	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Do not breathe mist/vapours. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.
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**Methods and materials for containment and cleaning up**

Use water spray to reduce vapours or divert vapour cloud drift.

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.

**Environmental precautions**

Avoid discharge into drains, water courses or onto the ground.

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

Do not breathe mist/vapours. Do not get in eyes, on skin, or on clothing. Do not taste or swallow. Avoid prolonged exposure. When using, do not eat, drink or smoke. Provide adequate ventilation. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Wash contaminated clothing before reuse. Observe good industrial hygiene practices.

**Conditions for safe storage, including any incompatibilities**

Store locked up. Store in tightly closed container. Store in a well-ventilated place. Store away from incompatible materials (see Section 10 of the SDS).

**8. Exposure controls/personal protection****Occupational exposure limits****US. ACGIH Threshold Limit Values**

Components	Type	Value	Form
CARBON BLACK (CAS 1333-86-4)	TWA	3 mg/m <sup>3</sup>	Inhalable fraction.
DIETHYLENETRIAMINE (CAS 111-40-0)	TWA	1 ppm	

**Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2)**

Components	Type	Value	Form
CARBON BLACK (CAS 1333-86-4)	TWA	3.5 mg/m <sup>3</sup>	
DIETHYLENETRIAMINE (CAS 111-40-0)	TWA	4.2 mg/m <sup>3</sup>	
		1 ppm	

**Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended)**

Components	Type	Value	Form
CARBON BLACK (CAS 1333-86-4)	TWA	3 mg/m <sup>3</sup>	Inhalable
DIETHYLENETRIAMINE (CAS 111-40-0)	TWA	1 ppm	

**Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act)**

Components	Type	Value	Form
CARBON BLACK (CAS 1333-86-4)	TWA	3 mg/m <sup>3</sup>	Inhalable fraction.
DIETHYLENETRIAMINE (CAS 111-40-0)	TWA	1 ppm	

**Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents)**

Components	Type	Value	Form
CARBON BLACK (CAS 1333-86-4)	TWA	3 mg/m <sup>3</sup>	Inhalable fraction.
DIETHYLENETRIAMINE (CAS 111-40-0)	TWA	1 ppm	

**Canada. Quebec OELs. (Ministry of Labor - Regulation respecting occupational health and safety)**

Components	Type	Value	Form
CARBON BLACK (CAS 1333-86-4)	TWA	3.5 mg/m <sup>3</sup>	

**Canada. Quebec OELs. (Ministry of Labor - Regulation respecting occupational health and safety)**

Components	Type	Value
DIETHYLENETRIAMINE (CAS 111-40-0)	TWA	4.2 mg/m <sup>3</sup>
		1 ppm

**Canada. Saskatchewan OELs (Occupational Health and Safety Regulations, 1996, Table 21)**

Components	Type	Value
CARBON BLACK (CAS 1333-86-4)	15 minute	7 mg/m <sup>3</sup>
	8 hour	3.5 mg/m <sup>3</sup>
DIETHYLENETRIAMINE (CAS 111-40-0)	15 minute	2 ppm
	8 hour	1 ppm

**Biological limit values** No biological exposure limits noted for the ingredient(s).

**Exposure guidelines****Canada - Alberta OELs: Skin designation**

DIETHYLENETRIAMINE (CAS 111-40-0) Can be absorbed through the skin.

**Canada - British Columbia OELs: Skin designation**

DIETHYLENETRIAMINE (CAS 111-40-0) Can be absorbed through the skin.

**Canada - Manitoba OELs: Skin designation**

DIETHYLENETRIAMINE (CAS 111-40-0) Can be absorbed through the skin.

**Canada - Ontario OELs: Skin designation**

DIETHYLENETRIAMINE (CAS 111-40-0) Can be absorbed through the skin.

**Canada - Quebec OELs: Skin designation**

DIETHYLENETRIAMINE (CAS 111-40-0) Can be absorbed through the skin.

**Canada - Saskatchewan OELs: Skin designation**

DIETHYLENETRIAMINE (CAS 111-40-0) Can be absorbed through the skin.

**US ACGIH Threshold Limit Values: Skin designation**

DIETHYLENETRIAMINE (CAS 111-40-0) Can be absorbed through the skin.

**Appropriate engineering controls**

Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. General ventilation normally adequate. Eye wash facilities and emergency shower must be available when handling this product.

**Individual protection measures, such as personal protective equipment**

**Eye/face protection** Wear safety glasses with side shields (or goggles) and a face shield. Face shield is recommended.

**Skin protection**

**Hand protection** Wear appropriate chemical resistant gloves.

**Other** Wear appropriate chemical resistant clothing. Use of an impervious apron is recommended.

**Respiratory protection** Wear positive pressure self-contained breathing apparatus (SCBA).

**Thermal hazards** Wear appropriate thermal protective clothing, when necessary.

**General hygiene considerations**

Keep away from food and drink. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Contaminated work clothing should not be allowed out of the workplace.

**9. Physical and chemical properties**

<b>Appearance</b>	Liquid.
<b>Physical state</b>	Liquid.
<b>Form</b>	Liquid.
<b>Colour</b>	Clear.
<b>Odour</b>	Ammoniacal.
<b>Odour threshold</b>	Not available.

<b>pH</b>	Not available.
<b>Melting point/freezing point</b>	-39 °C (-38.2 °F) estimated
<b>Initial boiling point and boiling range</b>	207 °C (404.6 °F) estimated
<b>Flash point</b>	> 93.3 °C (> 199.9 °F)
<b>Evaporation rate</b>	Not available.
<b>Flammability (solid, gas)</b>	Not applicable.
<b>Upper/lower flammability or explosive limits</b>	
<b>Flammability limit - lower (%)</b>	Not available.
<b>Flammability limit - upper (%)</b>	Not available.
<b>Explosive limit - lower (%)</b>	Not available.
<b>Explosive limit – upper (%)</b>	Not available.
<b>Vapour pressure</b>	0.16 hPa estimated
<b>Vapour density</b>	Not available.
<b>Relative density</b>	Not available.
<b>Solubility(ies)</b>	
<b>Solubility (water)</b>	Not available.
<b>Partition coefficient (n-octanol/water)</b>	Not available.
<b>Auto-ignition temperature</b>	398.9 °C (750.02 °F) estimated
<b>Decomposition temperature</b>	Not available.
<b>Viscosity</b>	Not available.
<b>Other information</b>	
<b>Density</b>	0.98 g/cm <sup>3</sup> estimated
<b>Explosive properties</b>	Not explosive.
<b>Flammability class</b>	Combustible IIIB estimated
<b>Oxidising properties</b>	Not oxidising.
<b>Specific gravity</b>	0.98 estimated

## 10. Stability and reactivity

<b>Reactivity</b>	The product is stable and non-reactive under normal conditions of use, storage and transport.
<b>Chemical stability</b>	Material is stable under normal conditions.
<b>Possibility of hazardous reactions</b>	Hazardous polymerisation does not occur.
<b>Conditions to avoid</b>	Avoid temperatures exceeding the flash point. Contact with incompatible materials.
<b>Incompatible materials</b>	Strong acids. Peroxides. Phenols.
<b>Hazardous decomposition products</b>	No hazardous decomposition products are known.

## 11. Toxicological information

### Information on likely routes of exposure

<b>Inhalation</b>	May cause irritation to the respiratory system. May cause allergy or asthma symptoms or breathing difficulties if inhaled. Prolonged inhalation may be harmful.
<b>Skin contact</b>	Toxic in contact with skin. Causes severe skin burns. May cause an allergic skin reaction.
<b>Eye contact</b>	Causes serious eye damage.
<b>Ingestion</b>	Causes digestive tract burns. Harmful if swallowed.

**Symptoms related to the physical, chemical and toxicological characteristics** Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. Coughing. Difficulty in breathing.

### Information on toxicological effects

Acute toxicity	Toxic in contact with skin. Harmful if swallowed.	
Components	Species	Test Results
Carbon Black (CAS 1333-86-4)		
<b>Acute</b>		
<b>Oral</b>		
LD50	Rat	> 8000 mg/kg
<b>Skin corrosion/irritation</b>	Causes severe skin burns and eye damage.	
<b>Serious eye damage/eye irritation</b>	Causes serious eye damage.	
<b>Respiratory or skin sensitisation</b>		
<b>Canada - Alberta OELs: Irritant</b>		
DIETHYLENETRIAMINE (CAS 111-40-0)	Irritant	
<b>Canada - British Columbia OELs: Respiratory or skin sensitiser</b>		
DIETHYLENETRIAMINE (CAS 111-40-0)	Capable of causing respiratory, dermal or conjunctival sensitization.	
<b>Respiratory sensitisation</b>	May cause allergy or asthma symptoms or breathing difficulties if inhaled.	
<b>Skin sensitisation</b>	May cause an allergic skin reaction.	
<b>Germ cell mutagenicity</b>	Due to partial or complete lack of data the classification is not possible.	
<b>Carcinogenicity</b>	Due to partial or complete lack of data the classification is not possible.	
<b>ACGIH Carcinogens</b>		
Carbon Black (CAS 1333-86-4)	A3 Confirmed animal carcinogen with unknown relevance to humans.	
<b>Canada - Manitoba OELs: carcinogenicity</b>		
Carbon Black (CAS 1333-86-4)	Confirmed animal carcinogen with unknown relevance to humans.	
<b>IARC Monographs. Overall Evaluation of Carcinogenicity</b>		
Carbon Black (CAS 1333-86-4)	2B Possibly carcinogenic to humans.	
<b>US. National Toxicology Program (NTP) Report on Carcinogens</b>		
Carbon Black (CAS 1333-86-4)	Known To Be Human Carcinogen.	
<b>Reproductive toxicity</b>	Due to partial or complete lack of data the classification is not possible.	
<b>Specific target organ toxicity - single exposure</b>	Due to partial or complete lack of data the classification is not possible.	
<b>Specific target organ toxicity - repeated exposure</b>	Due to partial or complete lack of data the classification is not possible.	
<b>Aspiration hazard</b>	Due to partial or complete lack of data the classification is not possible.	
<b>Chronic effects</b>	Prolonged inhalation may be harmful.	

## 12. Ecological information

<b>Ecotoxicity</b>	The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.
<b>Persistence and degradability</b>	No data is available on the degradability of any ingredients in the mixture.
<b>Bioaccumulative potential</b>	No data available.
<b>Mobility in soil</b>	No data available.
<b>Other adverse effects</b>	No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

## 13. Disposal considerations

<b>Disposal instructions</b>	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of contents/container in accordance with local/regional/national/international regulations.
<b>Local disposal regulations</b>	Dispose in accordance with all applicable regulations.
<b>Hazardous waste code</b>	The waste code should be assigned in discussion between the user, the producer and the waste disposal company.
<b>Waste from residues / unused products</b>	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

**Contaminated packaging**

Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

**14. Transport information****TDG**

**UN number** UN2735  
**UN proper shipping name** AMINES, LIQUID, CORROSIVE, N.O.S. (Diethylenetriamine, Aminoethylethanolamine), Limited Quantity  
**Transport hazard class(es)**  
**Class** 8  
**Subsidiary risk** -  
**Packing group** II  
**Environmental hazards** Not available.  
**Special precautions for user** Read safety instructions, SDS and emergency procedures before handling.

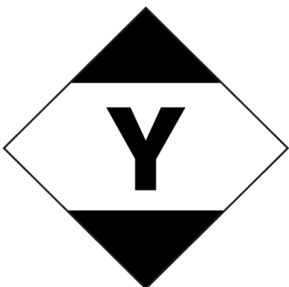
**IATA**

**UN number** UN2735  
**UN proper shipping name** Amines, liquid, corrosive, n.o.s. (Diethylenetriamine, Aminoethylethanolamine), Limited Quantity  
**Transport hazard class(es)**  
**Class** 8  
**Subsidiary risk** -  
**Packing group** II  
**Environmental hazards** No.  
**ERG Code** 8L  
**Special precautions for user** Read safety instructions, SDS and emergency procedures before handling.  
**Other information**  
**Passenger and cargo aircraft** Allowed with restrictions.  
**Cargo aircraft only** Allowed with restrictions.

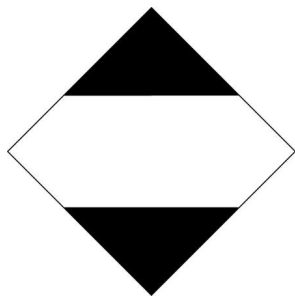
**IMDG**

**UN number** UN2735  
**UN proper shipping name** AMINES, LIQUID, CORROSIVE, N.O.S. or POLYAMINES, LIQUID, CORROSIVE, N.O.S. (Diethylenetriamine, Aminoethylethanolamine), Limited Quantity  
**Transport hazard class(es)**  
**Class** 8  
**Subsidiary risk** -  
**Packing group** II  
**Environmental hazards**  
**Marine pollutant** No.  
**EmS** F-A, S-B  
**Special precautions for user** Read safety instructions, SDS and emergency procedures before handling.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** Not established.

**IATA**





## 15. Regulatory information

### Canadian regulations

This product has been classified in accordance with the hazard criteria of the HPR and the SDS contains all the information required by the HPR.

#### Controlled Drugs and Substances Act

Not regulated.

#### Export Control List (CEPA 1999, Schedule 3)

Not listed.

#### Greenhouse Gases

Not listed.

#### Precursor Control Regulations

Not regulated.

### International regulations

#### Stockholm Convention

Not applicable.

#### Rotterdam Convention

Not applicable.

#### Kyoto Protocol

Not applicable.

#### Montreal Protocol

Not applicable.

#### Basel Convention

Not applicable.

### International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCs)	Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
Taiwan	Taiwan Chemical Substance Inventory (TCSI)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

\*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

## 16. Other information

Issue date 31-May-2019

Revision date 04-May-2020

**Version No.**

02

**Disclaimer**

ITW Performance Polymers cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release.

**Revision information**

Composition / Information on Ingredients: Component Summary  
Composition/information on ingredients: Component information  
Stability and reactivity: Conditions to avoid  
Toxicological information: Aspiration hazard  
Toxicological information: Carcinogenicity  
Toxicological information: Mutagenicity  
Toxicological information: Reproductivity  
Toxicological information: Respiratory sensitisation  
Toxicological information: Inhalation  
Toxicological information: Skin contact  
Toxicological information: Specific target organ toxicity - repeated exposure  
Toxicological information: Specific target organ toxicity - single exposure