



## SAFETY DATA SHEET

*This Safety Data Sheet complies with the Canadian Hazardous Products Regulations, the United States Occupational Safety and Health Administration (OSHA) Hazard Communication Standard, 29 CFR 1910 (OSHA HCS), and the European Union Directives.*

### 1 Product and Supplier Identification

- 1.1 **Product:** Sure Bond
- 1.2 **Product Use:** Bonding Agent
- 1.3 **Producer:** Haigh Industries Inc.  
#5-8118 North Fraser Way  
Burnaby BC Canada  
V5J 0E5  
Telephone: (604) 278-5851
- 1.4 **Supplier:** As above
- 1.5 **Emergencies (24-hour number):** +1(604) 278-5851

### 2 Hazards Identification

2.1 **Classification of product or mixture**

Note to reader: This product in an untested mixture and GHS classification is based on the classification of the ingredients and their concentrations. Proprietary ingredients do NOT exhibit any health effects not listed in this SDS.

**GHS Classification:** Skin Irritation: Category 2  
Eye Irritation: Category 2A  
Skin Sensitization: Category 1  
Flammable Liquids: Category 2  
Specific Target Organ Toxicity – Single Exposure: Category 3

**GHS Label Elements**

**Pictogram:**



**Signal Word:** Warning

**GHS Hazard Statements:**

H225 Highly flammable liquid and vapour.  
H315 Causes skin irritation.  
H317 May cause an allergic reaction.

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H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.
H402	Harmful to aquatic life.

### GHS Precautionary Statements:

#### Prevention:

P210	Keep away from heat, hot surface, sparks, open flames and other ignition sources. No Smoking.
P233	Keep container tightly closed.
P240	Ground/bond container and receiving equipment.
P241	Use explosion-proof equipment.
P242	Use only non-sparking tools.
P243	Take precautionary measures against static discharge.
P261	Avoid breathing dust/fume/gas/mist/vapours/spray
P264+265	Wash skin thoroughly after handling. Do not touch eyes.
P271	Use only outdoors or in a well-ventilated area.
P272	Contaminated work clothing should not be allowed out of the workplace.
P273	Avoid release into environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.

#### Response:

P302+P352	IF ON SKIN: Wash with plenty of soap and water.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower]
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P321	Specific treatment (see Section 4).
P319	Get medical help if you feel unwell.
P332+P317	IF SKIN irritation occurs: Get emergency medical help.
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
P337+P317	If eye irritation persists: Get emergency medical help.
P370+P378	In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.

#### Storage:

P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P403+P235	Store in a well-ventilated place. Keep cool.
P405	Store locked up.

#### Disposal:

P501	Dispose of contents/containers to an approved waste disposal plant.
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**2.2 Hazards not otherwise classified (HNOC) or not covered by GHS:** Polymerization with heat evolution may occur in the presence of radical forming substances (e.g. peroxides), reducing substances, and/or heavy metal ions. Repeated exposure may cause skin dryness or cracking.

### 2.3 Additional Information

#### Primary Routes of Entry:

Skin Contact:	Yes
Skin Absorption:	Yes
Eye Contact:	Yes
Ingestion:	No
Inhalation:	Yes

**Emergency Overview:** This product contains ingredients which may cause mild eye and skin irritation in some people. For eye contact, symptoms may include a moderate burning sensation, tearing, redness, or swelling. Contact with skin may cause an allergic reaction due to prior sensitization. Local redness, rash, or

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itchy skin may occur in those persons with a pre-existing sensitivity or those predisposed to skin problems. In rare cases an allergic skin reaction may occur after long term contact with this product.

### Effects of Short Term (Acute) Exposure:

**Inhalation:** This product is a mild respiratory irritant. Vapours may cause drowsiness and dizziness.

**Skin Contact:** It is expected that absorption through the skin will contribute to overall exposure. Contact with skin may cause an immediate allergic reaction in persons who may be sensitized by previous exposures. Symptoms may include an immediate rash, local redness, or itching of the skin.

**Eye Contact:** This product is an eye irritant. Exposure to the eye may cause symptoms which include a burning sensation, tearing, redness and swelling.

**Ingestion:** Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

**Effects of Long-Term (Chronic) Exposure:** This product contains ingredients which have been known to cause skin sensitization in some people. Sensitization may occur after prolonged or repeated exposures to this product. Prolonged contact with skin may defat tissue causing dermatitis or aggravate existing skin problems.

**Medical Conditions Aggravated by Exposure:** Persons susceptible to skin problems may find that the use of this product will cause increased symptoms of existing skin problems.

## 3 Composition

### 3.1 Mixture Composition

Component	CAS No.	EINECS No.	% (w/w)	GHS Classification
Isopropyl Alcohol	67-63-0	200-661-7	90-100	Acute Toxicity – Oral (Category 4): H302 Eye Irritation (Category 2A): H319 Flammable Liquids (Category 2): H225 STOT – SE (Category 3) H336
Butyl Methacrylate	97-88-1		0.5-1.5	
Ethyl Methacrylate	97-63-2	202-597-5	<1	

## 4 First Aid Measures

### 4.1 Description of First Aid Measures

**In Case of Eye Contact:** Immediately flush the contaminated eye(s) with lukewarm, gently flowing water for 20 to 30 minutes or until the chemical is removed, while holding the eyelid(s) open. Remove contact lenses if present and easy to do so. Seek medical advice.

**In Case of Skin Contact:** Remove contaminated clothing and shoes. Rinse skin with water/shower.

**If Inhalation:** Remove source of contamination or move victim to fresh air. Consult a physician.

**If Ingestion:** Do NOT induce vomiting. Rinse out mouth with water. Never give anything by mouth to an unconscious person. If spontaneous vomiting occurs, place on left side with head down to prevent aspiration of liquid into lungs. If swallowed, seek medical advice immediately.

### 4.2 Most Important Symptoms and Effects Acute and Delayed

#### Effects of Short-Term (Acute) Exposure:

**Inhalation:** Vapours may cause drowsiness and dizziness. Mild respiratory irritant.

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**Skin Contact:** It is expected that absorption through the skin will contribute to overall exposure. Contact with skin may cause an immediate allergic reaction in persons who may be sensitized by previous exposures. Symptoms may include an immediate rash, local redness, or itching of the skin.

**Eye Contact:** This product is an eye irritant. Exposure to the eye may cause symptoms which include a burning sensation, tearing, redness and swelling.

**Ingestion:** May cause gastrointestinal irritation, nausea, vomiting and diarrhea.

**Effects of Long-Term (Chronic) Exposure:** This product contains ingredients which have been known to cause skin sensitization in some people. Sensitization may occur after prolonged or repeated exposures to this product. Prolonged contact with skin may defat tissue causing dermatitis or aggravate existing skin problems.

**Medical Conditions Aggravated by Exposure:** Persons susceptible to skin problems may find that the use of this product will cause increased symptoms of existing skin problems.

### 4.3 Indication of Any Immediate Medical Attention and Special Treatment Needed

In the event of an allergic reaction, immediate medical help is required. Allergic reactions may result in various health effects including respiration.

## 5 Fire Fighting Measures

### 5.1 Extinguishing Media

Suitable extinguishing media: Carbon dioxide (CO<sub>2</sub>), dry chemical, alcohol resistant foam, water fog  
Unsuitable extinguishing media: Do not use a solid water stream as it may spread the fire.

### 5.2 Special Hazards Arising from Mixture

Highly flammable. May be ignited by open flame. Vapours are heavier than air and may spread along floors. The product is insoluble and floats on water. May polymerize when heated or on contact with incompatible materials. Fire or intense heat may cause violent rupture of packages. The pressure in sealed containers can increase under the influence of heat. Thermal decomposition may produce irritating/toxic fumes/gases.

### 5.3 Advice for Firefighters

Do not enter fire area without proper protection. Fight fire from a safe distance, upwind. Wear self-contained breathing apparatus and protective suit.

### 5.4 Further Information

Remove container from danger zone and cool with water. Prevent extinguishing water from contaminating surface water or the ground water system.

**Sensitivity to Impact:** No

**Sensitivity to Static Discharge:** Yes

## 6 Accidental Release Measures

### 6.1 Personal Precautions, Protective Equipment and Emergency Procedures

Wear suitable protective equipment. Ventilate area. Extinguish any sources of ignition. Avoid breathing mist, vapour, dust, fumes, and spray. Keep people away from and upwind of spill/leak.

### 6.2 Environmental Precautions

Ensure that any release of this material is contained to prevent leakage into waterways and sanitary sewers.

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### 6.3 Methods and Materials for Containment and Cleanup

**Remedial Measures:** Ventilate the area. Prevent further leakage or spillage if safe to do so. Use only non-sparking tools. Clean with detergents. Avoid solvents. Do not flush into surface water or sanitary sewer system. Contaminated absorbent material may pose the same hazards as the spilled product. Contact proper local authorities.

**Large Spills:** For large spills, dike area and prevent leakage into waterways or sanitary sewers. Recover using spark proof equipment and store in approved vented containers for re-use or disposal.

**Small Spills:** Small spills may be absorbed on an inert medium such as vermiculite or clay, then sweep into vented disposal containers.

### 6.4 Reference to Other Sections

For disposal, see section 13.

## 7 Handling and Storage

### 7.1 Precautions for Safe Handling

**Handling Procedures:** Wear proper protective equipment when handling this material. Only use non-sparking tools when handling this material. Persons with recurrent skin eczema or sensitization problems should be excluded from working with this product. Once a person is sensitized, no further exposure to the material that caused the sensitization should be permitted. Use only in a well-ventilated area. Avoid breathing vapours. Avoid contact with skin, eyes, and clothing. Keep away from incompatibles. Keep away from heat, sparks, and open flame. No smoking. Keep containers closed when not in use. Empty containers retain residue (liquid and/or vapour) and can be dangerous. Wash thoroughly after handling.

### 7.2 Conditions for Safe Storage

Store in a cool/well-ventilated place. Inspect periodically for damage or leaks. Protect from sunlight. Store away from heat. Recommended storage temperature: 1-30°C.

### 7.3 Specific End Use(s)

No other uses except those mentioned in Section 1.2.

## 8 Exposure Controls and Personal Protection

### 8.1 Control Parameters

Components with Workplace Control Parameters:

Component	Exposure Limits	Basis	Notes
Ethyl Acetate CAS No. 14178-8 EINECS No. 205-500-4	400 ppm (1440 mg/m <sup>3</sup> ) (TWA)	Canada, Alberta (OEL)	None
	150 ppm (TWA)	Canada British Columbia (OEL)	None
	400 ppm (1440 mg/m <sup>3</sup> ) (TWAEV)	Quebec (Regulation respecting health and safety) Schedule 1 Part 1: Permissible exposure values for airborne contaminants	None
	400 ppm (TWA)	USA (TLV)	None
	400 ppm (1400 mg/m <sup>3</sup> ) (TWA)	France (OEL)	None
	400 ppm (1500 mg/m <sup>3</sup> ) (TWA)	Germany (OEL)	Exposure factor 2
	400 ppm (1400 mg/m <sup>3</sup> ) (TWA)	Greece (OEL)	None
	200 mg/m <sup>3</sup> (TWA) 600 mg/m <sup>3</sup> (STEL)	Poland (OEL)	None
	400 ppm (1460 mg/m <sup>3</sup> ) (TWA)	Spain (OEL)	None

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### 8.2 Exposure Controls

**Engineering Controls:** Use only in well-ventilated areas. Apply technical measures to comply with the occupational exposure limits. Where reasonably practical this should be achieved using local exhaust ventilation and good general extraction. In case of insufficient ventilation wear suitable respiratory equipment.

**Respiratory Protection:** Vapours will be generated particularly if product is atomized, or heated. If used or sprayed in an enclosed area, at a minimum use a NIOSH approved organic vapour respirator. When cartridge type respirators are used, ensure that the cartridges are changed frequently according to the manufacturer's recommendations. Respirator selection must be done by a qualified person and be based upon a risk assessment of the work activities and exposure levels. Respirators must be fit tested and users must be clean shaven where the respirator seals to face. Exposure must be kept at or below the applicable exposure limits and the maximum use concentration of the respirator must not be exceeded.

**Skin Protection:** Depending upon the conditions of use, protective gloves and clothing to prevent skin contact. Wear sufficient clothing to prevent skin contact.

**Eye and Face Protection:** Chemical splash goggles and/or face shield must be worn when a possibility exists for eye contact due to splashing or spraying liquid. Contact lenses should not be worn.

**Footwear:** No specific recommendation.

**Other:** Emergency eyes wash fountains should be available in vicinity of use.

**Control of Environmental Exposure:** Prevent further leakage or spillage, if safe to do so. Do not let product enter drains.

## 9 Physical and Chemical Properties

### 9.1 Information on Basic Physical and Chemical Properties

<b>Appearance:</b>	Clear liquid
<b>Odour:</b>	Ester-like odour
<b>Odour Threshold:</b>	Not available
<b>pH:</b>	Not applicable
<b>Melting Point/Freezing Point:</b>	-83°C (based on ingredients)
<b>Initial Boiling Point:</b>	77°C (based on ingredients)
<b>Flash Point:</b>	3.3°C
<b>Evaporation Rate:</b>	6.2
<b>Upper Flammable Limit:</b>	11.5% (based on ingredients)
<b>Lower Flammable Limit:</b>	2.0% (based on ingredients)
<b>Vapour Pressure:</b>	9.73 kPa @ 20°C (based on ingredients)
<b>Vapour Density:</b>	>1.0
<b>Relative Density:</b>	0.94 @ 25°C (water=1)
<b>Solubility:</b>	Negligible in water
<b>Partition Coefficient:</b>	Log P(oct) = 0.66
<b>Autoignition Temperature:</b>	427°C (based on ingredients)
<b>Decomposition Temperature:</b>	No data
<b>Viscosity:</b>	No data
<b>Explosive Properties:</b>	Not explosive. May be sensitive to static discharge.
<b>Oxidizing Properties:</b>	No data

### 9.2 Other Safety Information

None

## 10 Stability and Reactivity

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### 10.1 Reactivity

Product may become reactive if inhibitor is depleted.

### 10.2 Chemical Stability

Stable as supplied.

### 10.3 Possibility of Hazardous Reactions

High temperatures, inhibitor depletion, accidental impurities, or exposure to radiation or oxidizers may initiate spontaneous polymerization, generating heat and pressure. Closed containers may rupture during hazardous polymerization.

Exothermic reaction with:

Fluorine

Chlorosulfonic Acid

Strong Oxidizing Agents

Fuming Sulfuric Acid

Risk of explosion with:

Lithium Aluminium Hydride

Alkali Metals

Hydrides

Alkaline Earth Metals

Violent reactions possible with:

Strong Acids and Strong Bases

### 10.4 Conditions to Avoid

Exposure to heat, light and moisture. Do not use in areas without adequate ventilation.

### 10.5 Incompatible Materials

Strong oxidizing agents, strong reducing agents, free radical initiators, inert gases, oxygen scavengers, peroxides, amines, sulfur compounds, heavy metal ions, alkalis and various plastics.

### 10.6 Hazardous Decomposition Products

Carbon monoxide, carbon dioxide and various oxides of nitrogen.

## 11 Toxicological Information

### 11.1 Information on Toxicological Effects

Note to reader: We do not test our products on animals. In compliance with current SDS preparation requirements, the values listed are published values for generic ingredients with known animal toxicity.

#### Acute Toxicity

Component	LD <sub>50</sub>	LC <sub>50</sub>
Ethyl Acetate CAS No. 14178-8 EINECS No. 205-500-4	5620 mg/kg (oral/rat) >20000 mg/kg (dermal/rabbit)	N/av
Isopropylidenediphenyl Bisoxhydroxypropyl Methacrylate CAS No. 1565-94-2 EINECS No. 216-367-7	N/av	N/av
HEMA (2-Hydroxyethyl Methacrylate) CAS No. 868-77-9 EINECS No. 212-782-2	>5000 mg/kg (oral/rat) >5000 mg/kg (dermal/rabbit)	N/av

**Abbreviation Key:** N/p: not published, N/d: not determined, N/ap: not applicable, N/av: not available.

### 11.2 Skin Corrosion/Irritation

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Components of this mixture may cause skin irritation, H315, Category 2, Warning

### 11.3 Serious Eye Damage/Eye Irritation

Components of this mixture may cause eye irritation, H319, Category 2A, Warning

### 11.4 Respiratory or Skin Sensitization

Components of this mixture may cause skin sensitization, H317, Category 1, Warning

### 11.5 Germ Cell Mutagenicity

No information available.

### 11.6 Carcinogenicity

Not classifiable as a human carcinogen.

### 11.7 Reproductive Toxicology

No information available.

### 11.8 Specific Target Organ Toxicity – Single Exposure

Components of this mixture may cause drowsiness or dizziness, H336, Category 3, Warning

### 11.9 Specific Target Organ Toxicity – Repeated Exposure

No information available.

### 11.10 Aspiration Hazard

No information available.

### 11.11 Additional Information

None

## 12 Ecological Information

### 12.1 Toxicity

#### To Fish:

Ethyl Acetate	LC <sub>50</sub>	96H	230mg/L (Fathead Minnow)
Isopropylidenediphenyl Bisoxhydroxypropyl Methacrylate	No data available		
2-Hydroxyethyl Methacrylate	LC <sub>50</sub>	96H	>100 mg/L
4-Methoxyphenol	LC <sub>50</sub>	96H	28.5 mg/L (Rainbow trout)

#### To Algae:

Ethyl Acetate	NOEC	72H	>100 mg/L (Green Algae)
Isopropylidenediphenyl Bisoxhydroxypropyl Methacrylate	No data available		
2-Hydroxyethyl Methacrylate	EC <sub>50</sub>	72H	836 mg/L
4-Methoxyphenol	No data available		

#### To Daphnia:

Ethyl Acetate	No data available		
Isopropylidenediphenyl Bisoxhydroxypropyl Methacrylate	No data available		
2-Hydroxyethyl Methacrylate	EC <sub>50</sub>	18H	380 mg/L
4-Methoxyphenol	No data available		

### 12.2 Persistence and Degradability

2-Hydroxyethyl Methacrylate photodegrades rapidly when exposed to air.

No data on other components.

### 12.3 Bio accumulative Potential

2-Hydroxyethyl Methacrylate and ethyl acetate are considered readily biodegradable.

Not data on other components.



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### 12.4 Mobility in Soil

No data available

### 12.5 Results of PBT and vPvB Assessment

Not conducted

### 12.6 Other Adverse Effects

No data available

## 13 Disposal Considerations

### 13.1 Waste Treatment Methods

**Product:** Review federal, provincial or state, and local government requirements prior to disposal. Store material for disposal as indicated in Storage Conditions. Disposal by controlled incineration or by secure land fill may be acceptable.

**Contaminated Packaging:** Dispose as above.

## 14 Transport Information

### Transport of Dangerous Goods (TDG and CLR):

UN Number	UN1993
UN Proper Shipping Name	FLAMMABLE LIQUID, N.O.S. (Ethyl Acetate)
UN Transport Hazard Class(es)	3
Packing Group	II
Labels	3

### International Air Transport Association (IATA):

UN Number	UN1993
UN Proper Shipping Name	FLAMMABLE LIQUID, N.O.S. (Ethyl Acetate)
UN Transport Hazard Class(es)	3
Packing Group	II
Labels	3
Additional Information	Refer to the appropriate Packing Instruction, prior to shipping this material. Review all State and Operator Variations, prior to shipping this material.

### International Maritime Organization (IMO):

UN Number	UN1993
UN Proper Shipping Name	FLAMMABLE LIQUID, N.O.S. (Ethyl Acetate)
UN Transport Hazard Class(es)	3
Packing Group	II
Labels	3
Additional Information	May be shipped as LIMITED QUANTITY when transported in containers no larger than 1.0 Litre, in packages not exceeding 30 kg gross mass.

## 15 Regulatory Information

### 15.1 CANADIAN FEDERAL REGULATIONS

CEPA, DOMESTIC SUBSTANCES LIST: Listed

### 15.2 UNITED STATES FEDERAL REGULATIONS

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**TOXIC SUBSTANCES CONTROL ACT (TSCA):** All components are listed in the inventory.

**California Proposition 65:** No ingredients listed.

**OSHA (29 CFR 1910 Subpart Z):** Meets criteria for a hazardous substance.

**CERCLA (40 CFR 302):** No ingredients listed.

**SARA 302 (40 CFR 355):** No ingredients listed.

**SARA 313 (40 CFR 372):** No ingredients listed.

**SARA 311/312 (40 CFR 370):** Immediate (Acute) Health, Delayed (Chronic) Health

**Massachusetts Right to Know:** 4- Methoxyphenol (p- Hydroxyanisole)

**New Jersey Right to Know:** 4- Methoxyphenol (p- Hydroxyanisole)

**Pennsylvania Right to Know:** 4- Methoxyphenol (p- Hydroxyanisole)

## 16 Other Information

**Original Preparation Date:** April 8, 2022

**Prepared By:** Haigh Industries Inc.  
#5-8118 North Fraser Way  
Burnaby BC  
Canada V5J 0E5

**Disclaimer:** This Safety Data Sheet (SDS) was prepared using information provided by ingredient supplier SDS and other relevant sources. This product has been classified using weight of evidence, expert judgment and previous testing as per Part 1.3 of the Fifth Edition of The Globally Harmonized System of Classification and Labelling of Chemicals (GHS). The information in this SDS is offered for your consideration and guidance when exposed to this product. Haigh Industries Inc. expressly disclaims all expressed or implied warranties and assumes no responsibilities for the accuracy or completeness of the data contained herein. The data in this SDS does not apply to use with any other product or in any other process.

**This Safety Data Sheet may not be changed, or altered in any way without the expressed knowledge and permission of Haigh Industries Inc.**

**Revisions:** None