



GH Berlin Windward
866-946-3927
www.ghberlinwindward.com

SAFETY DATA SHEET

1. Product and Company Identification

Product identifier	Bar & Chain Win
Other means of identification	Not available
Recommended use	Lubricant
Recommended restrictions	None known.
Manufacturer/Importer/Supplier/Distributor information	
Manufacturer	
Company name	Irving Blending & Packaging
Address	PO Box 1169 Saint John, NB E2L 4E6 Canada
Telephone	1.800.574.5823
E-mail	MSDS@irvingblend.com
Emergency phone number	1.506.648.3060

2. Hazards Identification

Physical hazards	Not classified.
Health hazards	Not classified.
Environmental hazards	Not classified.
OSHA defined hazards	Not classified.
Label elements	
Hazard symbol	None.
Signal word	None.
Hazard statement	The mixture does not meet the criteria for classification.
Precautionary statement	
Prevention	Observe good industrial hygiene practices.
Response	Wash hands after handling.
Storage	Store away from incompatible materials.
Disposal	Dispose of waste and residues in accordance with local authority requirements.
Hazard(s) not otherwise classified (HNOC)	None known.

3. Composition/Information on Ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
Distillates (petroleum), hydrotreated heavy paraffinic		64742-54-7	60 - 100
Distillates (petroleum), hydrotreated light naphthenic		64742-53-6	60 - 100
Distillates (petroleum), hydrotreated light paraffinic		64742-55-8	60 - 100
Distillates (petroleum), hydrotreated middle		64742-46-7	60 - 100
Distillates (petroleum), light hydrotreated		64742-47-8	60 - 100
Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based		72623-86-0	60 - 100
Lubricating oils, petroleum, C20-50, hydrotreated neutral oil-based		72623-87-1	60 - 100
Chemical name	Common name and synonyms	CAS number	%
Lubricating oils, petroleum, C20-50, hydrotreated neutral oil-based, high-viscosity		72623-85-9	60 - 100
Residual Oils (petroleum), Solvent Deasphalted		64741-95-3	60 - 100
Residual oils (Petroleum), solvent-dewaxed		64742-62-7	60 - 100
Residual oils (petroleum), solvent-refined		64742-01-4	60 - 100
White mineral oil (petroleum)		8042-47-5	60 - 100
Paraffin Oils (petroleum), Catalytic Dewaxed Heavy		64742-70-7	15 - 40
Lubricating oils, petroleum, hydrotreated spent		64742-58-1	1 - 5

Composition comments

US GHS: The exact percentage (concentration) of composition has been withheld as a trade secret in accordance with paragraph (i) of §1910.1200.

** The base oil may be a mixture of the above-mentioned CAS numbers

4. First Aid Measures

Inhalation	If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing. Call a physician if symptoms develop or persist.
Skin contact	Rinse skin with water/shower. Get medical attention if irritation develops and persists.
Eye contact	Rinse with water. Get medical attention if irritation develops and persists.
Ingestion	Rinse mouth. If ingestion of a large amount does occur, call a poison control center immediately.
Most important symptoms/effects, acute and delayed	Direct contact with eyes may cause temporary irritation.
Indication of immediate medical attention and special treatment needed	Treat symptomatically.
General information	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

5. Fire Fighting Measures

Suitable extinguishing media	Dry chemical powder. Water fog. Foam. Carbon dioxide (CO ₂).
Unsuitable extinguishing media	
Specific hazards arising from the chemical	and precautions for firefighters
Special protective equipment	Fire-fighting equipment/instructions

D water jet as an extinguisher, as this will spread the fire. During fire,
o gases hazardous to health may be formed.

Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

n Move containers from fire area if you can do so without risk.

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Specific methods	Use standard firefighting procedures and consider the hazards of other involved materials.
General fire hazards	No unusual fire or explosion hazards noted.

6. Accidental Release Measures

Personal precautions, protective equipment and emergency procedures	Keep out of low areas. Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. For personal protection, see section 8 of the SDS.
Methods and materials for containment and cleaning up	Stop the flow of material, if this is without risk. Large Spills: Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Absorb in vermiculite, dry sand or earth and place into containers. Prevent entry into waterways, sewer, basements or confined areas. 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.
Environmental precautions	Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS. Avoid discharge into drains, water courses or onto the ground.

7. Handling and Storage

Precautions for safe handling	Avoid prolonged exposure. Use care in handling/storage. Avoid contact with eyes, skin and clothing.
Conditions for safe storage, including any incompatibilities	Store in original tightly closed container. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure Controls/Personal Protection

Occupational exposure limits

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value	Form
Distillates (petroleum), hydrotreated light naphthenic (CAS 64742-53-6)	PEL	5 mg/m3	Mist.
		2000 mg/m3 500 ppm	
Distillates (petroleum), hydrotreated light paraffinic (CAS 64742-55-8)	PEL	5 mg/m3	Mist.
Distillates (petroleum), hydrotreated middle (CAS 64742-46-7)	PEL	5 mg/m3	Mist.
Paraffin Oils (petroleum), Catalytic Dewaxed Heavy (CAS 64742-70-7)	PEL	5 mg/m3	Mist.
White mineral oil (petroleum) (CAS 8042-47-5)	PEL	5 mg/m3	Mist.

US. ACGIH Threshold Limit Values

Components	Type	Value	Form
White mineral oil (petroleum) (CAS 8042-47-5)	TWA	5 mg/m3	Inhalable fraction.

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value	Form
Distillates (petroleum), hydrotreated light naphthenic (CAS 64742-53-6)	STEL	10 mg/m3	Mist.
	TWA	5 mg/m3	Mist.
Distillates (petroleum), hydrotreated light paraffinic (CAS 64742-55-8)	STEL	10 mg/m3	Mist.
	TWA	5 mg/m3	Mist.
Distillates (petroleum), hydrotreated middle (CAS 64742-46-7)	STEL	10 mg/m3	Mist.
	TWA	5 mg/m3	Mist.
Distillates (petroleum), light hydrotreated (CAS 64742-47-8)	TWA	100 mg/m3	
Paraffin Oils (petroleum), Catalytic Dewaxed Heavy (CAS 64742-70-7)	STEL	10 mg/m3	Mist.
	TWA	5 mg/m3	Mist.
White mineral oil (petroleum) (CAS 8042-47-5)	STEL	10 mg/m3	Mist.
	TWA	5 mg/m3	Mist.

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

Appropriate engineering controls	Good general ventilation (typically 10 air changes per hour) 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.
Individual protection measures, such as personal protective equipment	
Eye/face protection	Chemical goggles are recommended.
Skin protection	
Hand protection	Wear protective gloves.
Other	Wear appropriate chemical resistant clothing.
Respiratory protection	When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.
Thermal hazards	Not applicable.
General hygiene considerations	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.

9. Physical and Chemical Properties

Appearance	Liquid
Physical state	Liquid.
Form	Liquid.
Color	Red
Odor	Petroleum
Odor threshold	Not available.
pH	Not available.
Melting point/freezing point	Not available.
Initial boiling point and boiling range	Not available.
Pour point	Not available.
Specific gravity	0.86 - 0.87
Partition coefficient (n-octanol/water)	Not available.
Flash point	222.0 - 242.0 Cleveland Open Cup
Evaporation rate	Not available.
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or explosive limits	
Flammability limit - lower (%)	Not available.
Flammability limit - upper (%)	Not available.
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	< 0 mm Hg @ 20°C
Vapor density	Not available.
Relative density	Not available.
Solubility(ies)	Negligible
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	46.6 - 108.1 cSt @ 40°C
Other information	
Percent volatile	0 %

10. Stability and Reactivity

Reactivity	This product may react with oxidizing agents.
Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
Chemical stability	Material is stable under normal conditions.
Conditions to avoid	Avoid temperatures exceeding the flash point. Contact with incompatible materials.

Incompatible materials
Hazardous decomposition products

Strong oxidizing agents.
May include and are not limited to: Oxides of carbon. Oxides of nitrogen. Oxides of sulfur. Oxides of phosphorus. Hydrogen sulphide.

11. Toxicological Information

Information on likely routes of exposure

Ingestion Expected to be a low ingestion hazard.
Inhalation Prolonged inhalation may be harmful.
Skin contact No adverse effects due to skin contact are expected.
Eye contact Direct contact with eyes may cause temporary irritation.

Symptoms related to the physical, chemical and toxicological characteristics

Direct contact with eyes may cause temporary irritation.

Information on toxicological effects

Acute toxicity

Components	Species	Test Results
Distillates (petroleum), hydrotreated heavy paraffinic (CAS 64742-54-7)		
Acute		
<i>Dermal</i>		
LD50	Rabbit	> 2000 mg/kg
<i>Inhalation</i>		
LC50	Rat	>= 2.2 mg/l/4h
<i>Oral</i>		
LD50	Rat	5000 mg/kg
Distillates (petroleum), hydrotreated light naphthenic (CAS 64742-53-6)		
Acute		
<i>Dermal</i>		
LD50	Rabbit	> 2000 mg/kg
<i>Inhalation</i>		
LC50	Rat	2.2 mg/l/4h
<i>Oral</i>		
LD50	Rat	> 5000 mg/kg
Distillates (petroleum), hydrotreated light paraffinic (CAS 64742-55-8)		
Acute		
<i>Dermal</i>		
LD50	Rabbit	2000 mg/kg
<i>Inhalation</i>		
LC50	Rat	2.2 mg/l/4h
<i>Oral</i>		
LD50	Rat	5000 mg/kg
Distillates (petroleum), hydrotreated middle (CAS 64742-46-7)		
Acute		
<i>Dermal</i>		
LD50	Rabbit	2000 mg/kg
<i>Inhalation</i>		
LC50	Rat	4.6 mg/l/4h
<i>Oral</i>		
LD50	Rat	7400 mg/kg
Distillates (petroleum), light hydrotreated (CAS 64742-47-8)		
Acute		
<i>Dermal</i>		
LD50	Rabbit	> 2000 mg/kg
<i>Inhalation</i>		
LC50	Rat	> 2.8 mg/l/4h

Components	Species	Test Results
<i>Oral</i> LD50	Rat	> 5000 mg/kg
Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based (CAS 72623-86-0)		
Acute		
<i>Dermal</i> LD50	Rabbit	2000 mg/kg
<i>Inhalation</i> LC50	Rat	2.2 mg/l/4h
<i>Oral</i> LD50	Rat	5000 mg/kg
Lubricating oils, petroleum, hydrotreated spent (CAS 64742-58-1)		
Acute		
<i>Dermal</i> LD50	Rabbit	> 4480 mg/kg
	Rat	> 2000 mg/kg
<i>Oral</i> LD50	Rat	> 2000 mg/kg
Paraffin Oils (petroleum), Catalytic Dewaxed Heavy (CAS 64742-70-7)		
Acute		
<i>Inhalation</i> LC50	Not available	
<i>Oral</i> LD50	Not available	
Residual Oils (petroleum), Solvent Deasphalted (CAS 64741-95-3)		
Acute		
<i>Inhalation</i> LC50	Not available	
<i>Oral</i> LD50	Not available	
Residual oils (Petroleum), solvent-dewaxed (CAS 64742-62-7)		
Acute		
<i>Dermal</i> LD50	Rat	> 2000 mg/kg
<i>Inhalation</i> LC50	Rat	> 2180 mg/m ³ , 4 hours 2 mg/l/4h
<i>Oral</i> LD50	Rat	> 5000 mg/kg
Residual oils (petroleum), solvent-refined (CAS 64742-01-4)		
Acute		
<i>Dermal</i> LD50	Rabbit	> 2000 mg/kg
<i>Inhalation</i> LC50	Not available	
<i>Oral</i> LD50	Rat	15000 mg/kg
White mineral oil (petroleum) (CAS 8042-47-5)		
Acute		
<i>Dermal</i> LD50	Rat	> 2000 mg/kg
<i>Oral</i> LD50	Rat	5000 mg/kg

Components	Species	Test Results
LC50 Inhalation LC50	Rat	> 2.2 mg/l, 4 Hours
Skin corrosion/irritation	Prolonged skin contact may cause temporary irritation.	
Exposure minutes	Not available.	
Erythema value	Not available.	
Oedema value	Not available.	
Serious eye damage/eye irritation	Direct contact with eyes may cause temporary irritation.	
Corneal opacity value	Not available.	
Iris lesion value	Not available.	
Conjunctival reddening value	Not available.	
Conjunctival oedema value	Not available.	
Recover days	Not available.	
Respiratory or skin sensitization		
Respiratory sensitization	Not available.	
Skin sensitization	This product is not expected to cause skin sensitization.	
Germ cell mutagenicity	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.	
Carcinogenicity	Risk of cancer cannot be excluded with prolonged exposure. Contains < 3% (w/w) DMSO-extract	
IARC Monographs. Overall Evaluation of Carcinogenicity		
Distillates (petroleum), hydrotreated light naphthenic (CAS 64742-53-6)	1	Carcinogenic to humans.
Distillates (petroleum), hydrotreated light paraffinic (CAS 64742-55-8)	1	Carcinogenic to humans.
Distillates (petroleum), hydrotreated middle (CAS 64742-46-7)	1	Carcinogenic to humans.
White mineral oil (petroleum) (CAS 8042-47-5)	3	Not classifiable as to carcinogenicity to humans.
US. National Toxicology Program (NTP) Report on Carcinogens		
Distillates (petroleum), hydrotreated light naphthenic (CAS 64742-53-6)	Known To Be Human Carcinogen.	
Distillates (petroleum), hydrotreated light paraffinic (CAS 64742-55-8)	Known To Be Human Carcinogen.	
Distillates (petroleum), hydrotreated middle (CAS 64742-46-7)	Known To Be Human Carcinogen.	
US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)		
Not listed.		
Reproductive toxicity	This product is not expected to cause reproductive or developmental effects.	
Specific target organ toxicity - single exposure	Not classified.	
Specific target organ toxicity - repeated exposure	Not classified.	
Aspiration hazard	Not available.	
Chronic effects	Prolonged inhalation may be harmful. Prolonged exposure may cause chronic effects.	
Further information	This product has no known adverse effect on human health.	

12. Ecological Information

Ecotoxicity	See below		Test Results
Components	Species	Species	Test Results
Distillates (petroleum), hydrotreated heavy paraffinic (CAS 64742-54-7)			
Crustacea	EC50	Daphnia	1000 mg/L, 48 Hours
Distillates (petroleum), hydrotreated light naphthenic (CAS 64742-53-6)			
Crustacea	EC50	Daphnia	1000 mg/L, 48 Hours
Distillates (petroleum), hydrotreated light paraffinic (CAS 64742-55-8)			
Crustacea	EC50	Daphnia	1000 mg/L, 48 Hours

Components	Species		Test Results
Distillates (petroleum), light hydrotreated (CAS 64742-47-8)			
Aquatic			
Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss)	2.9 mg/l, 96 hours
Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based (CAS 72623-86-0)			
Crustacea	EC50	Daphnia	1000 mg/L, 48 Hours
Lubricating oils, petroleum, C20-50, hydrotreated neutral oil-based (CAS 72623-87-1)			
Crustacea	EC50	Daphnia	1000 mg/L, 48 Hours
Lubricating oils, petroleum, C20-50, hydrotreated neutral oil-based, high-viscosity (CAS 72623-85-9)			
Crustacea	EC50	Daphnia	1000 mg/L, 48 Hours
Residual oils (Petroleum), solvent-dewaxed (CAS 64742-62-7)			
Crustacea	EC50	Daphnia	1000 mg/L, 48 Hours
Residual oils (petroleum), solvent-refined (CAS 64742-01-4)			
Crustacea	EC50	Daphnia	1000 mg/L, 48 Hours

Persistence and degradability	No data is available on the degradability of this product.
Bioaccumulative potential	No data available.
Mobility in soil	No data available.
Mobility in general	Not 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.
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	Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied.

14. Transport Information

U.S. Department of Transportation (DOT)

Not regulated as dangerous goods.

15. Regulatory Information

US federal regulations

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories

Immediate Hazard - No
Delayed Hazard - No
Fire Hazard - No
Pressure Hazard - No
Reactivity Hazard - No

SARA 302 Extremely hazardous substance

No

SARA 311/312 Hazardous chemical

No

SARA 313 (TRI reporting)

Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act (SDWA) Not regulated.

Food and Drug Administration (FDA) Not regulated.

US state regulations

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

US - California Hazardous Substances (Director's): Listed substance

- Distillates (petroleum), hydrotreated light naphthenic (CAS 64742-53-6) Listed.
- Distillates (petroleum), hydrotreated light paraffinic (CAS 64742-55-8) Listed.
- Distillates (petroleum), hydrotreated middle (CAS 64742-46-7) Listed.
- Paraffin Oils (petroleum), Catalytic Dewaxed Heavy (CAS 64742-70-7) Listed.
- White mineral oil (petroleum) (CAS 8042-47-5) Listed.

US - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance

- Benzene, ethyl- (CAS 100-41-4) Listed.
- Naphthalene (CAS 91-20-3) Listed.

US - Minnesota Haz Subs: Listed substance

- Distillates (petroleum), hydrotreated light naphthenic (CAS 64742-53-6) Listed.
- Distillates (petroleum), hydrotreated light paraffinic (CAS 64742-55-8) Listed.
- Distillates (petroleum), hydrotreated middle (CAS 64742-46-7) Listed.
- Paraffin Oils (petroleum), Catalytic Dewaxed Heavy (CAS 64742-70-7) Listed.
- White mineral oil (petroleum) (CAS 8042-47-5) Listed.

US - Texas Effects Screening Levels: Listed substance

- Distillates (petroleum), hydrotreated heavy paraffinic (CAS 64742-54-7) Listed.
- Distillates (petroleum), hydrotreated light naphthenic (CAS 64742-53-6) Listed.
- Distillates (petroleum), hydrotreated light paraffinic (CAS 64742-55-8) Listed.
- Distillates (petroleum), hydrotreated middle (CAS 64742-46-7) Listed.
- Distillates (petroleum), light hydrotreated (CAS 64742-47-8) Listed.
- Lubricating oils, petroleum, hydrotreated spent (CAS 64742-58-1) Listed.
- Paraffin Oils (petroleum), Catalytic Dewaxed Heavy (CAS 64742-70-7) Listed.
- Residual oils (Petroleum), solvent-dewaxed (CAS 64742-62-7) Listed.
- Residual oils (petroleum), solvent-refined (CAS 64742-01-4) Listed.
- White mineral oil (petroleum) (CAS 8042-47-5) Listed.

US. Massachusetts RTK - Substance List

- Distillates (petroleum), hydrotreated light naphthenic (CAS 64742-53-6) Listed.
- Distillates (petroleum), hydrotreated light paraffinic (CAS 64742-55-8) Listed.
- Distillates (petroleum), hydrotreated middle (CAS 64742-46-7) Listed.
- Distillates (petroleum), light hydrotreated (CAS 64742-47-8) Listed.
- Paraffin Oils (petroleum), Catalytic Dewaxed Heavy (CAS 64742-70-7) Listed.
- White mineral oil (petroleum) (CAS 8042-47-5) Listed.

US. Pennsylvania RTK - Hazardous Substances

- Distillates (petroleum), hydrotreated light paraffinic (CAS 64742-55-8) Listed.
- Distillates (petroleum), hydrotreated middle (CAS 64742-46-7) Listed.
- Distillates (petroleum), light hydrotreated (CAS 64742-47-8) Listed.
- Paraffin Oils (petroleum), Catalytic Dewaxed Heavy (CAS 64742-70-7) Listed.
- White mineral oil (petroleum) (CAS 8042-47-5) Listed.

US. Rhode Island RTK

Not regulated.

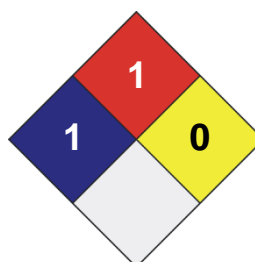
Country(s) or region	Inventory name	On inventory (yes/no)*
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s)

16. Other Information

LEGEND	
Severe	4
Serious	3
Moderate	2
Slight	1
Minimal	0

HEALTH	/ 1
FLAMMABILITY	1
PHYSICAL HAZARD	0
PERSONAL PROTECTION	X



Disclaimer

The information in the sheet was written based on the best knowledge and experience currently available. Information contained herein was obtained from sources considered technically accurate and reliable. While every effort has been made to ensure full disclosure of product hazards, in some cases data is not available and is so stated. Since conditions of actual product use are beyond control of the supplier, it is assumed that users of this material have been fully trained according to the requirements of all applicable legislation and regulatory instruments. No warranty, expressed or implied, is made and supplier will not be liable for any losses, injuries or consequential damages which may result from the use of or reliance on any information contained in this document.

Issue date

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Further information

For an updated SDS, please contact the supplier/manufacturer listed on the first page of the document.

Other information

This Safety Data Sheet was prepared to comply with the current OSHA Hazard Communication Standard (HCS) adoption of the Globally Harmonized System of Classification and Labeling of Chemicals (GHS).

Prepared by

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