



SAFETY DATA SHEET

1. Product and Company Identification

Product identifier	D&E 32, 46 - US only		
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	Phone:	1.800.574.5823	
E-mail	MSDS@irvingblend.com		
Emergency phone number	Emergency Phone:	1.800.424.9300 (CHEMTREC)	
	Emergency Phone:	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.
Supplemental information	Not applicable.

3. Composition/Information on Ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
2,6-Di-tert-butylphenol		128-39-2	0.1-1*
Base Oil		Trade Secret	80-100*
Distillates (petroleum), hydrotreated light paraffinic		64742-55-8	0.1-1*
N-phenyl-1-naphthalenamine		90-30-2	0.1-1*

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

Composition comments US GHS: The specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret in accordance with paragraph (i) of §1910.1200.

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	Flush with cool water. Remove contact lenses, if applicable, and continue flushing. Obtain medical attention if irritation 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 patient 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.
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.
Specific hazards arising from the chemical	During fire, gases hazardous to health may be formed.
Special protective equipment and precautions for firefighters	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Fire fighting equipment/instructions	Move containers from fire area if you can do so without risk.
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 paraffinic (CAS 64742-55-8)	PEL	5 mg/m3	Mist.

US. ACGIH Threshold Limit Values

Components	Type	Value	Form
Base Oil (CAS Trade Secret)	TWA	5 mg/m3	Inhalable fraction.
Distillates (petroleum), hydrotreated light paraffinic (CAS 64742-55-8)	TWA	5 mg/m3	Inhalable fraction.

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value	Form
Distillates (petroleum), hydrotreated light paraffinic (CAS 64742-55-8)	STEL	10 mg/m3	Mist.
	TWA	5 mg/m3	Mist.

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

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

Aniline (CAS 62-53-3)	Can be absorbed through the skin.
Naphthalene (CAS 91-20-3)	Can be absorbed through the skin.
Phenol (CAS 108-95-2)	Can be absorbed through the skin.

US. NIOSH: Pocket Guide to Chemical Hazards

Phenol (CAS 108-95-2)	Can be absorbed through the skin.
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US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Aniline (CAS 62-53-3)	Can be absorbed through the skin.
Ethyl acrylate (CAS 140-88-5)	Can be absorbed through the skin.
Phenol (CAS 108-95-2)	Can be absorbed through the skin.

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 Wear safety glasses with side shields (or goggles).

Skin protection

Hand protection Impervious gloves. Confirm with reputable supplier first.

Other Wear appropriate chemical resistant clothing.

Respiratory protection

Where exposure guideline levels may be exceeded, use an approved NIOSH respirator. Respirator should be selected by and used under the direction of a trained health and safety professional following requirements found in OSHA's respirator standard (29 CFR 1910.134), CAN/CSA-Z94.4 and ANSI's standard for respiratory protection (Z88.2).

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	Light brown
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	-36.4 - -40 °F (-38 - -40 °C)
Specific gravity	Not available.
Partition coefficient (n-octanol/water)	Not available.
Flash point	430.7 - 433.4 °F (221.5 - 223.0 °C) Pensky-Martens Closed 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	Not available.
Vapor density	Not available.
Relative density	0.8514 - 0.8548 @ 15°C
Solubility(ies)	Negligible
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	5.8 - 6.9 cSt @ 100°C 32 - 50.6 cSt @ 40°C

10. Stability and Reactivity

Reactivity	This product may react with strong 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	Contact with incompatible materials.
Incompatible materials	Strong oxidizing agents.
Hazardous decomposition products	May include and are not limited to: Oxides of nitrogen. Oxides of carbon. Oxides of sulfur. Oxides of phosphorus.

11. Toxicological Information

Information on likely routes of exposure

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.
Ingestion	May cause stomach distress, nausea or vomiting.

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
2,6-Di-tert-butylphenol (CAS 128-39-2)		
Acute		
<i>Dermal</i>		
LD50	Rabbit	> 10000 mg/kg
<i>Inhalation</i>		
LC50	Not available	
<i>Oral</i>		
LD50	Mouse	2995 mg/kg
	Rat	> 5000 mg/kg
Base Oil (CAS Trade Secret)		
Acute		
<i>Dermal</i>		
LD50	Rabbit	> 4480 mg/kg
	Rat	> 2000 mg/kg
<i>Oral</i>		
LD50	Rat	> 2000 mg/kg
Distillates (petroleum), hydrotreated light paraffinic (CAS 64742-55-8)		
Acute		
<i>Dermal</i>		
LD50	Rabbit	> 5000 mg/kg, 24 Hours, ECHA
		> 2000 mg/kg, ECHA
		> 2000 mg/kg, 24 Hours

Components	Species	Test Results
<i>Inhalation</i> LC50	Rat	< 5.7 mg/L, 4 Hours, ECHA
		> 5.5 mg/L, 4 Hours, ECHA
		> 5.3 mg/L, 4 Hours, ECHA
		> 5.2 mg/L, 4 Hours, ECHA
		> 4 mg/L, 4 Hours, ECHA
		> 3.9 mg/L, 4 Hours, ECHA
		2.2 mg/L, 4 Hours, ECHA
<i>Oral</i> LD50	Rat	> 5000 mg/kg, ECHA
		> 2000 mg/kg, ECHA
		5000 mg/kg, ECHA

N-phenyl-1-naphthalenamine (CAS 90-30-2)

Acute <i>Dermal</i> LD50	Rabbit	> 5000 mg/kg, 24 Hours
<i>Inhalation</i> LC50	Not available	
<i>Oral</i> LD50	Mouse	1231 mg/kg, ECHA
	Rat	2380 mg/kg, ECHA
		1625 mg/kg, ECHA

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 Contains < 3% (w/w) DMSO-extract

ACGIH Carcinogens

Aniline (CAS 62-53-3) A3 Confirmed animal carcinogen with unknown relevance to humans.

Base Oil (CAS Trade Secret) A2 Suspected human carcinogen.

Distillates (petroleum), hydrotreated light paraffinic (CAS 64742-55-8) A4 Not classifiable as a human carcinogen.

Ethyl acrylate (CAS 140-88-5) A2 Suspected human carcinogen.

Naphthalene (CAS 91-20-3) A4 Not classifiable as a human carcinogen.

Phenol (CAS 108-95-2) A4 Not classifiable as a human carcinogen.

Toluene (CAS 108-88-3) A3 Confirmed animal carcinogen with unknown relevance to humans.

IARC Monographs. Overall Evaluation of Carcinogenicity

Aniline (CAS 62-53-3)	Volume 27, Supplement 7 - 3 Not classifiable as to carcinogenicity to humans.
Ethyl acrylate (CAS 140-88-5)	Volume 39, Supplement 7, Volume 71 - 2B Possibly carcinogenic to humans.
Naphthalene (CAS 91-20-3)	Volume 82 - 2B Possibly carcinogenic to humans.
Phenol (CAS 108-95-2)	Volume 47, Volume 71 - 3 Not classifiable as to carcinogenicity to humans.
Toluene (CAS 108-88-3)	Volume 47, Volume 71 - 3 Not classifiable as to carcinogenicity to humans.

US - California Proposition 65 - CRT: Listed date/Carcinogenic substance

1-naphthylamine (CAS 134-32-7)
2-naphthylamine (CAS 91-59-8)
Aniline (CAS 62-53-3)
Ethyl acrylate (CAS 140-88-5)
Naphthalene (CAS 91-20-3)

US. National Toxicology Program (NTP) Report on Carcinogens

Base Oil (CAS Trade Secret) Known To Be Human Carcinogen.
Distillates (petroleum), hydrotreated light paraffinic (CAS 64742-55-8) Known To Be Human Carcinogen.
Naphthalene (CAS 91-20-3) Reasonably Anticipated to be a Human Carcinogen.

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

Not regulated.

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.
Further information	This product has no known adverse effect on human health.

12. Ecological Information

Ecotoxicity See below

Ecotoxicological data

Components

2,6-Di-tert-butylphenol (CAS 128-39-2)

	Species	Test Results	
Crustacea	EC50	Daphnia	0.45 mg/L, 48 Hours

Distillates (petroleum), hydrotreated light paraffinic (CAS 64742-55-8)

Crustacea	EC50	Daphnia	1000 mg/L, 48 Hours
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Persistence and degradability No data is available on the degradability of this product.

Bioaccumulative potential No data available.

Partition coefficient n-octanol / water (log Kow)

2,6-Di-tert-butylphenol	4.92
N-phenyl-1-naphthalenamine	4.2

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.

Transportation of Dangerous Goods (TDG - Canada)

Not regulated as dangerous goods.

15. Regulatory Information

US federal regulations

This product is NOT known to be a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

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

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Aniline (CAS 62-53-3)	Listed.
Ethyl acrylate (CAS 140-88-5)	Listed.
Naphthalene (CAS 91-20-3)	Listed.
Phenol (CAS 108-95-2)	Listed.
Toluene (CAS 108-88-3)	Listed.

US EPCRA Section 304 Extremely Haz. Subs. & CERCLA Haz. Subs.: Section 304 EHS reportable quantity

Aniline (CAS 62-53-3)	5000 LBS
Phenol (CAS 108-95-2)	1000 LBS

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

Not regulated.

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
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SARA 302 Extremely hazardous substance	No
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SARA 311/312 Hazardous chemical	No
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SARA 313 (TRI reporting)	Not regulated.
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Other federal regulations

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

Aniline (CAS 62-53-3)
Ethyl acrylate (CAS 140-88-5)
Naphthalene (CAS 91-20-3)
Phenol (CAS 108-95-2)
Toluene (CAS 108-88-3)

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

Not regulated.

Safe Drinking Water Act (SDWA)	Not regulated.
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Drug Enforcement Administration (DEA). List 2, Essential Chemicals (21 CFR 1310.02(b) and 1310.04(f)(2) and Chemical Code Number

Toluene (CAS 108-88-3)	6594
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Drug Enforcement Administration (DEA). List 1 & 2 Exempt Chemical Mixtures (21 CFR 1310.12(c))

Toluene (CAS 108-88-3)	35 %WV
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DEA Exempt Chemical Mixtures Code Number

Toluene (CAS 108-88-3)	594
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FEMA Priority Substances Respiratory Health and Safety in the Flavor Manufacturing Workplace

Ethyl acrylate (CAS 140-88-5)	High priority
Phenol (CAS 108-95-2)	Low priority

Food and Drug Administration (FDA)	Not regulated.
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US state regulations

US - Illinois Chemical Safety Act: Listed substance

Aniline (CAS 62-53-3)
Ethyl acrylate (CAS 140-88-5)

Naphthalene (CAS 91-20-3)
Phenol (CAS 108-95-2)
Toluene (CAS 108-88-3)

US - Louisiana Spill Reporting: Listed substance

Aniline (CAS 62-53-3)	Listed.
Ethyl acrylate (CAS 140-88-5)	Listed.
Naphthalene (CAS 91-20-3)	Listed.
Phenol (CAS 108-95-2)	Listed.
Toluene (CAS 108-88-3)	Listed.

US - Michigan Critical Materials Register: Parameter number

Toluene (CAS 108-88-3)	TOLUENE
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US - Minnesota Haz Subs: Listed substance

Aniline (CAS 62-53-3)	ANILINE AND HOMOLOGUES
Distillates (petroleum), hydrotreated light paraffinic (CAS 64742-55-8)	OIL MIST, MINERAL
Ethyl acrylate (CAS 140-88-5)	ETHYL ACRYLATE
Naphthalene (CAS 91-20-3)	NAPHTHALENE
Phenol (CAS 108-95-2)	PHENOL
Toluene (CAS 108-88-3)	TOLUENE

US - New Jersey RTK - Substances: Listed substance

Aniline (CAS 62-53-3)
Ethyl acrylate (CAS 140-88-5)
Naphthalene (CAS 91-20-3)
Phenol (CAS 108-95-2)
Toluene (CAS 108-88-3)

US - North Carolina Toxic Air Pollutants: Listed substance

Aniline (CAS 62-53-3)
Phenol (CAS 108-95-2)
Toluene (CAS 108-88-3)

US - Pennsylvania RTK - Hazardous Substances: Special hazard

Ethyl acrylate (CAS 140-88-5)

US - Washington Chemical of High Concern to Children: Listed substance

Aniline (CAS 62-53-3)
Phenol (CAS 108-95-2)
Toluene (CAS 108-88-3)

US. California Controlled Substances. CA Department of Justice (California Health and Safety Code Section 11100)

Not listed.

US. Massachusetts RTK - Substance List

Aniline (CAS 62-53-3)
Distillates (petroleum), hydrotreated light paraffinic (CAS 64742-55-8)
Ethyl acrylate (CAS 140-88-5)
Naphthalene (CAS 91-20-3)
Phenol (CAS 108-95-2)
Toluene (CAS 108-88-3)

US. New Jersey Worker and Community Right-to-Know Act

Aniline (CAS 62-53-3)
Ethyl acrylate (CAS 140-88-5)
Naphthalene (CAS 91-20-3)
Phenol (CAS 108-95-2)
Toluene (CAS 108-88-3)

US. Pennsylvania RTK - Hazardous Substances

Aniline (CAS 62-53-3)
Distillates (petroleum), hydrotreated light paraffinic (CAS 64742-55-8)
Ethyl acrylate (CAS 140-88-5)
Naphthalene (CAS 91-20-3)
Phenol (CAS 108-95-2)
Toluene (CAS 108-88-3)

US. Pennsylvania Worker and Community Right-to-Know Law

Aniline (CAS 62-53-3)
Distillates (petroleum), hydrotreated light paraffinic (CAS 64742-55-8)
Ethyl acrylate (CAS 140-88-5)
Naphthalene (CAS 91-20-3)
Phenol (CAS 108-95-2)
Toluene (CAS 108-88-3)

US. Rhode Island RTK

Aniline (CAS 62-53-3)
Distillates (petroleum), hydrotreated light paraffinic (CAS 64742-55-8)

Ethyl acrylate (CAS 140-88-5)
 Naphthalene (CAS 91-20-3)
 Phenol (CAS 108-95-2)
 Toluene (CAS 108-88-3)

US. California Proposition 65



WARNING: This product can expose you to chemicals including Naphthalene, which is known to the State of California to cause cancer, and Toluene, which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

US - California Proposition 65 - CRT: Listed date/Carcinogenic substance

1-naphthylamine (CAS 134-32-7)	Listed: October 1, 1989
2-naphthylamine (CAS 91-59-8)	Listed: February 27, 1987
Aniline (CAS 62-53-3)	Listed: January 1, 1990
Ethyl acrylate (CAS 140-88-5)	Listed: July 1, 1989
Naphthalene (CAS 91-20-3)	Listed: April 19, 2002

US - California Proposition 65 - CRT: Listed date/Developmental toxin

Toluene (CAS 108-88-3)	Listed: January 1, 1991
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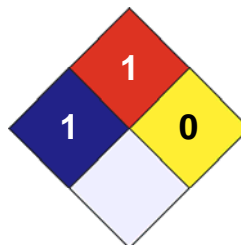
Country(s) or region	Inventory name	On inventory (yes/no)*
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*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 05-June-2019

Version # 01

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 Dell Tech Laboratories Ltd. Phone: (519) 858-5021