SAFETY DATA SHEET



1. Product and Company Identification

Product identifier Iron OUT (liquid)
Other means of identification Not available

Recommended use Rust Stain Remover
Recommended restrictions None known.

Manufacturer information Iron Out dba Summit Brands 6714 Pointe Inverness Way

Suite 200

Fort Wayne, IN 46804-7935 US

Phone: 260-483-2519

Emergency Phone: 1-800-424-9300 (CHEMTREC)

Supplier See above.

2. Hazards Identification

Physical hazardsCorrosive to metalsCategory 1Health hazardsSkin corrosion/irritationCategory 1Serious eye damage/eye irritationCategory 1

Environmental hazards Not classified.

WHMIS 2015 defined hazards Not classified

Label elements



Signal word Danger

Hazard statement May be corrosive to metals. Causes severe skin burns and eye damage.

Precautionary statement

Prevention Keep only in original packaging. Do not breathe mist or vapor. Wash thoroughly after handling.

Wear protective gloves, protective clothing, eye protection and face protection.

Response Absorb spillage to prevent material-damage.

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. Wash contaminated clothing before reuse. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or doctor. Specific treatment (see information on this label). IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses,

if present and easy to do. Continue rinsing.

Storage Store in a corrosion resistant container with a resistant inner liner. Store locked up.

Disposal Dispose of container in accordance with local, regional, national and international regulations.

WHMIS 2015: Health Hazard(s)

not otherwise classified

(HHNOC)

None known

WHMIS 2015: Physical Hazard(s) not otherwise classified (PHNOC)

None known

Hazard(s) not otherwise

classified (HNOC)

None known.

Supplemental information None.

3. Composition/Information on Ingredients

Mixture

Chemical name	Common name and synonyms	CAS number	%
1,2-Propanediol		57-55-6	1 - 5*
Oxalic acid		144-62-7	5 - 10*

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

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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.

*CANADA GHS: The exact percentage (concentration) of composition has been withheld as a trade secret.

4. First Aid Measures

Inhalation

IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a

POISON CENTER or doctor.

Skin contact

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. Immediately call a POISON CENTER or doctor. Wash contaminated clothing before reuse.

Specific treatment (see information on this label).

Eye contact

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 CENTER or doctor.

Ingestion IF S

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER or doctor.

Most important symptoms/effects, acute and delayed

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.

Indication of immediate medical attention and special treatment needed

Provide general supportive measures and treat symptomatically. Symptoms may be delayed.

General information

Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves. If you feel unwell, seek medical advice (show the label where possible). Show this safety data sheet to the doctor in attendance. Wash contaminated clothing before reuse. Avoid contact with eyes and skin. Wear rubber gloves and chemical splash goggles. Keep out of reach of children.

5. Fire Fighting Measures

Suitable extinguishing media

Unsuitable extinguishing

media

Dry chemical. Water spray. Foam. Carbon dioxide.

Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from the chemical

Firefighters should wear a self-contained breathing apparatus.

Special protective equipment and precautions for firefighters

Firefighters should wear full protective clothing including self-contained breathing apparatus.

Fire-fighting equipment/instructions

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

equipment/instructions
Specific methods

Use standard firefighting procedures and consider the hazards of other involved materials. May include and are not limited to: Oxides of carbon. Oxides of nitrogen. Hydrogen fluoride.

Hazardous combustion products

6. Accidental Release Measures

Personal precautions, protective equipment and emergency procedures Keep unnecessary personnel away. Keep out of low areas. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Do not breathe mist or vapor. 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.

Methods and materials for containment and cleaning up

Should not be released into the environment.

Large Spills: Stop leak if you can do so without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Absorb spillage to prevent material damage. 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. Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.

Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not contaminate water. Avoid discharge into drains, water courses or onto the ground. Prevent entry into waterways, sewers, basements or confined areas.

7. Handling and Storage

Precautions for safe handling

DANGER -- CORROSIVE

Use only with adequate ventilation. Do not taste or swallow. Avoid prolonged exposure. Wear appropriate personal protective equipment. Wash thoroughly after handling. Wash contaminated clothing before reuse. Use good industrial hygiene practices in handling this material. Do not get in eyes, on skin or on clothing. Avoid breathing vapors or mists of this product.

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Store locked up. Store in a closed container away from incompatible materials. Keep only in the original container. Store in a cool, dry place out of direct sunlight. Store in a corrosion resistant container with a resistant inner liner.

8. Exposure Controls/Personal Protection

upational exposure limits Canada. Alberta OELs (Occupatior	nal Health & Safety	Code, Schedule 1 Table 2)	
Components	Type	Value	
Oxalic acid (CAS 144-62-7)	STEL	2 mg/n	m3
	TWA	1 mg/n	m3
Canada. British Columbia OELs. (0 Safety Regulation 296/97, as amen	ded)		ances, Occupational Health a
Components	Туре	Value	
Oxalic acid (CAS 144-62-7)	STEL	2 mg/n	
	TWA	1 mg/n	m3
Canada. Manitoba OELs (Reg. 217 Components	/2006, The Workpla Type	ce Safety And Health Act) Value	
Oxalic acid (CAS 144-62-7)	STEL	2 mg/n	m3
	TWA	1 mg/n	m3
Canada. Ontario OELs. (Control of	Exposure to Biolog	nical or Chemical Agents)	
Components	Type	Value	Form
1,2-Propanediol (CAS 57-55-6)	TWA	155 mg	g/m3 Vapor and aeroso
0. 00 0,		10 mg/	/m3 Aerosol.
		50 ppn	m Vapor and aeroso
Oxalic acid (CAS 144-62-7)	STEL	2 mg/n	m3
	TWA	1 mg/n	m3
Canada. Quebec OELs. (Ministry o Components	f Labor - Regulation Type	n Respecting the Quality of the Value	•
Oxalic acid (CAS 144-62-7)	STEL	2 mg/n	m3
	TWA	1 mg/n	m3
US. OSHA Table Z-1 Limits for Air			
Components Ovalia axid (CAS 444 63 7)	Type	Value	··· 0
Oxalic acid (CAS 144-62-7)	PEL	1 mg/n	113
US. ACGIH Threshold Limit Values Components	S Type	Value	
Oxalic acid (CAS 144-62-7)	STEL	2 mg/n	 n?
Oxalic acid (OAO 144-02-1)	TWA	2 mg/n 1 mg/n	
		i ing/ii	no .
US. NIOSH: Pocket Guide to Chem Components	iicai Hazards Type	Value	
Oxalic acid (CAS 144-62-7)	STEL	2 mg/n	 m3
(0.00 0)	TWA	1 mg/n	
IIC AILIA Wastenlaga Environment		•	
US. AIHA Workplace Environments Components	ai Exposure Levei (Type	WEEL) Guides Value	Form
1,2-Propanediol (CAS 57-55-6)	TWA	10 mg/	/m3 Aerosol.
•	iological exposure lin	nits noted for the ingredient(s).	
osure guidelines	- January Composition		
Canada - Manitoba OELs: Skin des	signation		
Hydrogen fluoride (CAS 7664-39 Canada - Ontario OELs: Skin desig	9-3)	Can be absorbed through the	he skin.
Hydrogen fluoride (CAS 7664-39 US ACGIH Threshold Limit Values	9-3)	Can be absorbed through the	he skin.
Hydrogen fluoride (CAS 7664-39		Can be absorbed through the	he skin.

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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) and a face shield.

Skin protection

Hand protectionOtherRubber gloves. Confirm with a reputable supplier first.As required by employer code. Rubber apron recommended.

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. Wash hands before breaks and immediately after handling the product. When using do not eat or drink.

9. Physical and Chemical Properties

AppearanceClearPhysical stateLiquid.FormLiquid.ColorColorlessOdorLime.

Odor threshold Not available.

pH < 1

Melting point/freezing point Not available.

Initial boiling point and boiling Not available.

range

Pour point Not available.

Specific gravity Not available.

Partition coefficient Not available.

(n-octanol/water)

Flash point Not available.

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 1.025

Solubility(ies)

Auto-ignition temperature

Decomposition temperature

Viscosity

Not available.

Not available.

Not available.

10. Stability and Reactivity

Reactivity Reacts violently with alkaline material. This product may react with reducing agents.

Possibility of hazardous

reactions

Hazardous polymerization does not occur.

Chemical stability Stable under recommended storage conditions.

Conditions to avoid Reacts violently with strong alkaline substances. This product may react with reducing agents.

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Incompatible materials Hazardous decomposition products

Acids. Caustics. Oxidizers. Reducing agents. Metals.

May include and are not limited to: Oxides of carbon. Oxides of nitrogen. Hydrogen fluoride.

11. Toxicological Information

Routes of exposure Eye, Skin contact, Skin absorption, Inhalation, Ingestion.

Information on likely routes of exposure

Ingestion Causes digestive tract burns.

Inhalation Prolonged inhalation may be harmful. May cause irritation to the respiratory system.

Skin contact Causes severe skin burns. Causes serious eye damage. Eye contact

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.

Information on toxicological effects

Acute toxicity	cute toxicity Causes severe skin burns and eye damage.	
Components	Species	Test Results
1,2-Propanediol (CAS 57-55-	-6)	
Acute		
Dermal	D-III:	> 0000
LD50	Rabbit	> 2000 mg/kg, 24 Hours, ECHA
		20800 mg/kg, Millipore
Inhalation	D. I.I.Y	047040/ 00 011 FOLIA
LC50	Rabbit	> 317042 mg/m3, 2 Hours, ECHA
<i>Oral</i> LD50	Dog	19 g/kg, HSDB
LD30		
	Guinea pig	19700 mg/kg, ECHA
		18.4 g/kg, HSDB
	Mouse	24900 mg/kg, ECHA
		23900 mg/kg, HSDB
		23.9 g/kg, HSDB
	Rabbit	22.8 g/kg, CCOHS
		18 g/kg, HSDB
	Rat	19.4 - 36 g/kg, Millipore
		22000 mg/kg, ECHA
		21 g/kg, CCOHS
Oxalic acid (CAS 144-62-7)		
Acute		
Dermal		
LD50	Rabbit	20000 mg/kg, European Agency for the Evaluation of Medicinal Products
Oral		
LD50	Rat	375 mg/kg, Toxicology and Applied Pharmacology
		9.5 ml/kg, ECHA
		7.5 ml/kg, ECHA

Skin corrosion/irritation Causes severe skin burns and eye damage. Not available. **Exposure minutes** Not available. Erythema value Oedema value Not available.

Serious eye damage/eye

irritation

Causes serious eye damage.

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1.1 ml/100g, ECHA

Corneal opacity value Not available. Not available. Iris lesion value Conjunctival reddening Not available.

value

Conjunctival oedema value Not available. Recover days Not available.

Respiratory or skin sensitization Canada - Alberta OELs: Irritant

> Oxalic acid (CAS 144-62-7) Irritant

Respiratory sensitization Not available.

This product is not expected to cause skin sensitization. Skin sensitization

Mutagenicity Non-hazardous by WHMIS/OSHA criteria.

Carcinogenicity Not classified or listed by IARC, NTP, OSHA and ACGIH.

IARC Monographs. Overall Evaluation of Carcinogenicity

Hydrogen fluoride (CAS 7664-39-3) Volume 27, Supplement 7 - 3 Not classifiable as to carcinogenicity

to humans.

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

Not listed.

Reproductive toxicity Non-hazardous by WHMIS/OSHA criteria. **Teratogenicity** Non-hazardous by WHMIS/OSHA criteria.

Specific target organ toxicity -

single exposure

Not classified.

Specific target organ toxicity -

repeated exposure

Not classified.

Aspiration hazard Not available.

Prolonged inhalation may be harmful. **Chronic effects**

12. Ecological Information

Because of the low pH of this product, it would be expected to produce significant ecotoxicity upon **Ecotoxicity**

exposure to aquatic organisms and aquatic systems.

Ecotoxicological data

Components		Species	Test Results
1,2-Propanediol (CAS 57-55-6)			
Crustacea	EC50	Daphnia	10000 mg/L, 48 Hours
Aquatic			
Crustacea	EC50	Water flea (Daphnia magna)	> 10000 mg/L, 48 hours
Fish	LC50	Fathead minnow (Pimephales promelas)	710 mg/L, 96 hours
Oxalic acid (CAS 144-62-7)			
Crustacea	EC50	Daphnia	137.5 mg/L, 48 Hours
Aquatic			
Crustacea	EC50	Water flea (Daphnia magna)	125 - 150 mg/L, 48 hours
Persistence and degradability	No data is ava	ailable on the degradability of this product.	

ata is available on the degradability of this product

Bioaccumulative potential No data available. No data available. Mobility in soil Not available. Mobility in general

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

Review federal, state/provincial, and local government requirements prior to disposal. Collect and **Disposal instructions**

> reclaim or dispose in sealed containers at licensed waste disposal site. This material and its container must be disposed of as hazardous waste. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used

container.

Local disposal regulations

Dispose in accordance with all applicable regulations.

The waste code should be assigned in discussion between the user, the producer and the waste Hazardous waste code

disposal company.

#21770 Page: 6 of 9 Issue date 30-November-2018 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

Transport of Dangerous Goods (TDG) Proof of Classification

Classification Method: Classified as per Part 2, Sections 2.1 – 2.8 of the Transportation of Dangerous Goods Regulations. If applicable, the technical name and the classification of the product will appear below.

U.S. Department of Transportation (DOT)

Basic shipping requirements:

UN number UN1760

Proper shipping name Corrosive liquids, n.o.s.

Technical name Oxalic acid

Hazard class

Subsidiary hazard class Limited Quantity - US

Packing group III

Special provisions IB3, T7, TP1, TP28

Packaging exceptions <1.3 Gallons - Limited Quantity

Packaging non bulk 203 Packaging bulk 241

Transportation of Dangerous Goods (TDG - Canada)

Basic shipping requirements:

UN number UN1760

Proper shipping name CORROSIVE LIQUID, N.O.S.

Technical name OXALIC ACID

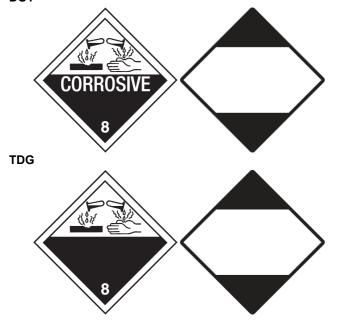
Hazard class 8

Subsidiary hazard class Limited Quantity - Canada

Packing group III Special provisions 16

Packaging exceptions <5L - Limited Quantity

DOT



15. Regulatory Information

Canadian federal 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.

Canada CEPA Schedule I: Listed substance

Hydrofluorosilicic acid (CAS 16961-83-4) Hydrogen fluoride (CAS 7664-39-3)

Listed. Listed.

Export Control List (CEPA 1999, Schedule 3)

Not listed.

Greenhouse Gases

Not listed.

Precursor Control Regulations

Not regulated.

WHMIS 2015 Exemptions Not applicable

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication **US federal regulations**

Standard, 29 CFR 1910.1200.

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

Oxalic acid (CAS 144-62-7) 1.0 % One-Time Export Notification only.

CERCLA Hazardous Substance List (40 CFR 302.4)

Hydrogen fluoride (CAS 7664-39-3) Listed.

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

Hydrogen fluoride (CAS 7664-39-3) 100 LBS

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

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Nο

Hazard categories Immediate Hazard - Yes

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

SARA 302 Extremely hazardous substance

SARA 311/312 Hazardous

chemical

SARA 313 (TRI reporting)

Not regulated.

Other federal regulations

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

Hydrogen fluoride (CAS 7664-39-3)

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

Hydrogen fluoride (CAS 7664-39-3)

Clean Water Act (CWA)

Hazardous substance

Section 112(r) (40 CFR

68.130)

US state regulations

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

Hydrofluorosilicic acid (CAS 16961-83-4) Listed. Hydrogen fluoride (CAS 7664-39-3) Listed. Oxalic acid (CAS 144-62-7) Listed.

US - Illinois Chemical Safety Act: Listed substance

Hydrogen fluoride (CAS 7664-39-3)

US - Louisiana Spill Reporting: Listed substance

Hydrogen fluoride (CAS 7664-39-3) Listed.

US - Minnesota Haz Subs: Listed substance

1,2-Propanediol (CAS 57-55-6) Listed. Hydrofluorosilicic acid (CAS 16961-83-4) Listed. Hydrogen fluoride (CAS 7664-39-3) Listed. Oxalic acid (CAS 144-62-7) Listed.

US - New Jersey RTK - Substances: Listed substance

1,2-Propanediol (CAS 57-55-6)

Hydrofluorosilicic acid (CAS 16961-83-4) Hydrogen fluoride (CAS 7664-39-3)

Oxalic acid (CAS 144-62-7)

US - New York Release Reporting: Acutely Hazardous Substances: Listed substance

Hydrogen fluoride (CAS 7664-39-3) Listed.

US - North Carolina Toxic Air Pollutants: Listed substance

Hydrofluorosilicic acid (CAS 16961-83-4) Hydrogen fluoride (CAS 7664-39-3)

US - Texas Effects Screening Levels: Listed substance

1,2-Propanediol (CAS 57-55-6) Listed. Alcohols, C9-11, ethoxylated (CAS 68439-46-3) Listed. Hydrofluorosilicic acid (CAS 16961-83-4) Listed. Hydrogen fluoride (CAS 7664-39-3) Listed. Oxalic acid (CAS 144-62-7) Listed.

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US. Massachusetts RTK - Substance List

Hydrofluorosilicic acid (CAS 16961-83-4) Hydrogen fluoride (CAS 7664-39-3)

Oxalic acid (CAS 144-62-7)

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

Hydrogen fluoride (CAS 7664-39-3)

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

1,2-Propanediol (CAS 57-55-6)

Hydrofluorosilicic acid (CAS 16961-83-4)

Hydrogen fluoride (CAS 7664-39-3)

Oxalic acid (CAS 144-62-7)

US. Rhode Island RTK

1,2-Propanediol (CAS 57-55-6) Hydrogen fluoride (CAS 7664-39-3) Oxalic acid (CAS 144-62-7)

US. California Proposition 65

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.

Inventory status

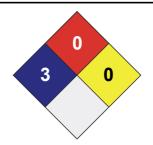
Country(s) or region	Inventory name	On inventory (yes/no)*
Canada	Domestic Substances List (DSL)	No
Canada	Non-Domestic Substances List (NDSL)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

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

16. Other Information

LEGEND	
Severe	4
Serious	3
Moderate	2
Slight	1
Minimal	0





Disclaimer

The data contained in this material safety data sheet was obtained from sources that were technically accurate, reliable, and state of the art when this document was prepared. If data was unavailable to complete certain sections, the absence of that data is identified in this document. Because the supplier cannot know the exact circumstances during actual use of this product, other hazards, exposure scenarios, disposal considerations, and regulations may apply and it is the responsibility of the user to read and understand the product label and this document before use. Do not use the product for purposes other than those stated in Section 1.

Issue date 30-November-2018

Version # 02

Effective date 29-January-2018

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

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

document.

Redbook revision # 11, 12/14/17

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