

SAFETY DATA SHEET

1. Product and Company Identification

Product identifier Lime OUT

Other means of identification Not available

Recommended use Calcium and Lime Scale 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

None known

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

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	%
Citric Acid		77-92-9	3 - 7*
Hydrochloric acid		7647-01-0	5 - 10*

#7846 Page: 1 of 10 Issue date 30-November-2018

Chemical name	Common name and synonyms	CAS number	<u></u> %
Lactic Acid		70_33_/	2 7*

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

Composition comments

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

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

4. First Aid Measures

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

POISON CENTER or doctor.

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. Wash Skin contact

contaminated clothing before reuse. 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 Eye contact

and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor.

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

doctor/physician.

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. In the case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). Show this safety data sheet to the doctor in attendance. 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. Foam. Carbon dioxide. Fog. Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from

the chemical

Special protective equipment

and precautions for firefighters Fire-fighting

equipment/instructions Specific methods

Hazardous combustion products

During fire, gases hazardous to health may be formed.

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

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

Use standard firefighting procedures and consider the hazards of other involved materials.

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

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. Fully encapsulating, vapor protective clothing should be worn for spills and leaks with no fire. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Avoid inhalation of vapors. Ventilate closed spaces before entering them. 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.

#7846 Page: 2 of 10 Issue date 30-November-2018 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

Avoid prolonged exposure. Use only outdoors or in a well-ventilated area. Wear appropriate personal protective equipment. Observe good industrial hygiene practices. Wash thoroughly after handling. Use good industrial hygiene practices in handling this material. Avoid breathing vapors or mists of this product. Avoid contact with eyes, skin and clothing.

Conditions for safe storage, including any incompatibilities

Store locked up. Store in corrosive resistant container with a resistant inner liner. 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 well-ventilated place.

8. Exposure Controls/Personal Protection

Occupational exposure limits

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

Components	Туре	Value
Hydrochloric acid (CAS 7647-01-0)	Ceiling	3 mg/m3
7017 01 0)		2 ppm

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

Components	Type	Value
Hydrochloric acid (CAS 7647-01-0)	Ceiling	2 ppm

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

Components	Туре	Value
Hydrochloric acid (CAS 7647-01-0)	Ceiling	2 ppm

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

Components	Туре	Value	
Hydrochloric acid (CAS 7647-01-0)	Ceiling	2 ppm	

Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment)

Components	Туре	Value	
Hydrochloric acid (CAS 7647-01-0)	Ceiling	7.5 mg/m3	
,		5 ppm	

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

Components	туре	value	
Hydrochloric acid (CAS 7647-01-0)	Ceiling	2 ppm	

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

Components	Туре	Value
Hydrochloric acid (CAS 7647-01-0)	Ceiling	7 mg/m3

US. ACGIH Threshold Limit Values

Components	Туре	Value
Hydrochloric acid (CAS 7647-01-0)	Ceiling	2 ppm

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Туре	Value	
Hydrochloric acid (CAS 7647-01-0)	Ceiling	7 mg/m3	
, , , , , , , , , , , , , , , , , , , ,		5 ppm	

5 ppm

Biological limit values

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

Exposure guidelinesChemicals listed in section 3 that are not listed here do not have established limit values for ACGIH or OSHA PEL.

#7846 Page: 3 of 10 Issue date 30-November-2018

Canada - Manitoba OELs: Skin designation

2,6-Octadienal, 3,7-dimethyl- (CAS 5392-40-5) Can be absorbed through the skin.

Canada - Ontario OELs: Skin designation

2.6-Octadienal, 3.7-dimethyl- (CAS 5392-40-5) Can be absorbed through the skin.

US ACGIH Threshold Limit Values: Skin designation

2,6-Octadienal, 3,7-dimethyl- (CAS 5392-40-5) Can be absorbed through the skin.

Appropriate engineering

controls

Use only under good ventilation conditions or with respiratory protection.

Individual protection measures, such as personal protective equipment

Eye/face protection

Wear chemical goggles.

Skin protection

Rubber gloves. Confirm with a reputable supplier first. **Hand protection**

Wear appropriate chemical resistant clothing. Rubber apron recommended. Other

Where exposure guideline levels may be exceeded, use an approved NIOSH respirator. Respiratory protection

Thermal hazards Not available.

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. Use good industrial hygiene practices in handling this material. When using do not eat

9. Physical and Chemical Properties

Clear **Appearance** Liquid. Physical state Liquid **Form** Blue Color Odor I ime

Odor threshold Not available.

< 1 pН

Melting point/freezing point Not available. Initial boiling point and boiling

range

Not available.

Not available. Pour point Specific gravity Not available. Not available. Partition coefficient (n-octanol/water)

None Flash point

Evaporation rate Not available. Not applicable. Flammability (solid, gas)

Upper/lower flammability or explosive limits

Flammability limit - lower

(%)

Not available.

Flammability limit - upper

Not available.

Explosive limit - lower (%) Not available. Not available. Explosive limit - upper (%) Not available. Vapor pressure Not available. Vapor density

1 058 Relative density

Solubility(ies) Not available. **Auto-ignition temperature** Not available. Not available. **Decomposition temperature** 200 - 300 cPs **Viscosity**

10. Stability and Reactivity

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

#7846 Page: 4 of 10 Issue date 30-November-2018 Possibility of hazardous

reactions

Hazardous polymerization does not occur.

Chemical stability

Stable under recommended storage conditions.

Conditions to avoid

Do not mix with other chemicals. Do not mix with bleach or any other chemical.

Incompatible materials

Caustics. Oxidizers. Bases. Reducing agents.

Hazardous decomposition

products

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

11. Toxicological Information

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

Information on likely routes of exposure

Ingestion Causes digestive tract burns.

Prolonged inhalation may be harmful. Inhalation

Skin contact Causes severe skin burns. **Eve contact** Causes serious eve damage.

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

Species	Test Results
Pat	> 2000 mg/kg, 24 Hours, ECHA
Nat	> 2000 Hig/kg, 24 Hours, EOTA
Not available	
Mouse	5400 mg/kg, ECHA
	5040 mg/kg, HSDB
Rat	11700 mg/kg, ECHA
	6730 mg/kg, HSDB
7-01-0)	
Mouse	1449 mg/kg, HSDB
Mouse	13745 ppm, 5 Minutes, ECHA
Mouse	2644 ppm, 5 Minutes, ECHA
	1108 ppm, 1 Hours, RTECS
	16.5 mg/L, 5 Minutes, ECHA
D .	3.2 mg/L, 5 Minutes, ECHA
Rat	40989 ppm, 5 Minutes, ECHA
	4701 ppm, 5 Minutes, ECHA
	3124 ppm, 1 Hours, HSDB
	2810 ppm, 1 Hours
	1405 ppm, 4 Hours
	45.6 mg/L, 5 Minutes, ECHA
	8.3 mg/L, 5 Minutes, ECHA
	900 mg/kg, HSDB
Rat	238 - 277 mg/kg, HSDB
	Rat Not available Mouse

#7846 Page: 5 of 10 Issue date 30-November-2018

Test Results Components **Species**

Lactic Acid (CAS 79-33-4)

Acute

Dermal

LD50 Rabbit > 2000 mg/kg, 24 Hours, ECHA

Inhalation

LC50 Rat > 7.9 mg/L, 4 Hours, ECHA

Oral

LD100 Rat < 5000 mg/kg, ECHA

LD50 Guinea pig 1810 mg/kg Mouse 4875 mg/kg

Rat > 5000 mg/kg, ECHA 4936 mg/kg, ECHA

3543 mg/kg, Sigma Aldrich

Skin corrosion/irritation Causes severe skin burns and eye damage.

Exposure minutes Not available. Not available. Erythema value Oedema value Not available.

Serious eye damage/eye

irritation

Causes serious eye damage.

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

value

Not available. Conjunctival oedema value Recover days Not available.

Respiratory or skin sensitization

ACGIH sensitization

2,6-Octadienal, 3,7-dimethyl- (CAS 5392-40-5) Dermal sensitization

Canada - Alberta OELs: Irritant

Acetic acid, phenylmethyl ester (CAS 140-11-4) Irritant Hydrochloric acid (CAS 7647-01-0) Irritant

Canada - Manitoba OELs Hazard: Dermal sensitization

2.6-Octadienal, 3.7-dimethyl- (CAS 5392-40-5) Dermal sensitization

Respiratory sensitization Not available.

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

No data available to indicate product or any components present at greater than 0.1% are Mutagenicity

mutagenic or genotoxic.

Carcinogenicity See below.

IARC Monographs. Overall Evaluation of Carcinogenicity

Acetic acid, phenylmethyl ester (CAS 140-11-4) Volume 40, Supplement 7, Volume 71 - 3 Not classifiable as to

carcinogenicity to humans.

Hydrochloric acid (CAS 7647-01-0) Volume 54 - 3 Not classifiable as to carcinogenicity to humans.

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.

Teratogenicity Not classified. Specific target organ toxicity -Not classified.

single exposure

Specific target organ toxicity -Not classified.

repeated exposure

Not available. **Aspiration hazard**

Chronic effects Prolonged inhalation may be harmful. 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. See below

Ecotoxicological data

Components **Species Test Results**

Citric Acid (CAS 77-92-9)

Acute

Crustacea EC50 Daphnia magna 120 mg/L, 72 hr

Aquatic

Acute

Fish LC50 Bluegill (Lepomis macrochirus) 1516 mg/L, 96 hr

Hydrochloric acid (CAS 7647-01-0)

Aquatic

LC50 Western mosquitofish (Gambusia affinis) 282 mg/L, 96 hours Fish

Lactic Acid (CAS 79-33-4)

Aquatic

Crustacea EC50 Water flea (Daphnia magna) 180 - 320 mg/L, 48 hours

Persistence and degradability

No data is available on the degradability of this product.

No data available. Bioaccumulative potential 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

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

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.

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).

Empty containers should be taken to an approved waste handling site for recycling or disposal. Contaminated packaging

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

Proper shipping name Corrosive liquids, n.o.s. **Technical name** HYDROGEN CHLORIDE Limited Quantity - US **Hazard class**

Subsidiary hazard class 8 **Packing group** Ш

Special provisions B2, IB2, T11, TP2, TP27 **Packaging exceptions** < 1.3 Gallons - Limited Quantity

202 Packaging non bulk 242 Packaging bulk

Transportation of Dangerous Goods (TDG - Canada)

Basic shipping requirements:

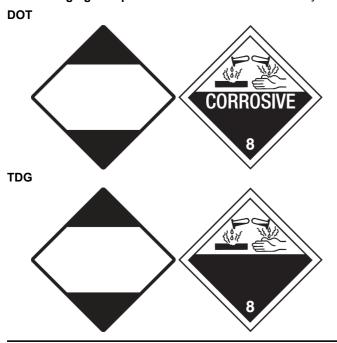
UN number UN1760

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

#7846 Page: 7 of 10 Issue date 30-November-2018 **Technical name** HYDROGEN CHLORIDE **Hazard class** Limited Quantity - Canada

Subsidiary hazard class 8 Ш **Packing group Special provisions** 16

<1L - Limited Quantity Packaging exceptions



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 NPRI VOCs with Additional Reporting Requirements: Mass reporting threshold/Identification Number

Isopropanol (CAS 67-63-0)

1 TONNES

Export Control List (CEPA 1999, Schedule 3)

Not listed.

Greenhouse Gases

Not listed.

Precursor Control Regulations

Hydrochloric acid (CAS 7647-01-0) Class B Not applicable

WHMIS 2015 Exemptions

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)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Hydrochloric acid (CAS 7647-01-0) Listed. Isopropanol (CAS 67-63-0) Listed.

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

Hydrochloric acid (CAS 7647-01-0) 5000 LBS

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

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

No

Immediate Hazard - Yes **Hazard categories**

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

SARA 302 Extremely

hazardous substance

SARA 311/312 Hazardous Nο

chemical

#7846 Page: 8 of 10 Issue date 30-November-2018

Chemical name	CAS number	% by wt.
Hydrochloric acid	7647-01-0	5 - 10*

Other federal regulations

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

Hydrochloric acid (CAS 7647-01-0)

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

Hydrochloric acid (CAS 7647-01-0)

Clean Water Act (CWA) Section 112(r) (40 CFR Hazardous substance

68.130)

US state regulations

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

Acetic acid, phenylmethyl ester (CAS 140-11-4)

Hydrochloric acid (CAS 7647-01-0)

Listed.

Listed.

Listed.

US - Illinois Chemical Safety Act: Listed substance

Hydrochloric acid (CAS 7647-01-0) Isopropanol (CAS 67-63-0)

US - Louisiana Spill Reporting: Listed substance

Hydrochloric acid (CAS 7647-01-0) Listed. Isopropanol (CAS 67-63-0) Listed.

US - Minnesota Haz Subs: Listed substance

Acetic acid, phenylmethyl ester (CAS 140-11-4)

Hydrochloric acid (CAS 7647-01-0)

Listed.

Listed.

Listed.

Listed.

US - New Jersey RTK - Substances: Listed substance

Acetic acid, phenylmethyl ester (CAS 140-11-4)

Hydrochloric acid (CAS 7647-01-0) Isopropanol (CAS 67-63-0)

US - North Carolina Toxic Air Pollutants: Listed substance

Hydrochloric acid (CAS 7647-01-0)

US - Texas Effects Screening Levels: Listed substance

2,6-Octadienal, 3,7-dimethyl- (CAS 5392-40-5)

Acetic acid, phenylmethyl ester (CAS 140-11-4)

Citric Acid (CAS 77-92-9)

Hydrochloric acid (CAS 7647-01-0)

Listed.

Isopropanol (CAS 67-63-0)

Lactic Acid (CAS 79-33-4)

Listed.

US. Massachusetts RTK - Substance List

Hydrochloric acid (CAS 7647-01-0)

Isopropanol (CAS 67-63-0)

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

Hydrochloric acid (CAS 7647-01-0) Isopropanol (CAS 67-63-0)

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

Hydrochloric acid (CAS 7647-01-0)

Isopropanol (CAS 67-63-0)

US. Rhode Island RTK

Hydrochloric acid (CAS 7647-01-0)

Isopropanol (CAS 67-63-0)

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.

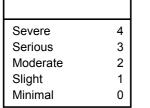
Inventory status

Country(s) or regionInventory nameOn inventory (yes/no)*CanadaDomestic Substances List (DSL)NoCanadaNon-Domestic Substances List (NDSL)YesUnited States & Puerto RicoToxic Substances Control Act (TSCA) InventoryYes

^{*}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

Issue date

Other information

3 **HEALTH** 0 **FLAMMABILITY** 1 PHYSICAL HAZARD PERSONAL PROTECTION



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.

30-November-2018

Version #

Effective date 20-March-2018

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

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

document.

Redbook revision #11, 12/5/16