

1. Identification

| | |
|---|--|
| Product identifier | Lime OUT |
| Other means of identification | Not available. |
| Recommended use | Calcium and Lime Scale Stain Remover |
| Recommended restrictions | None known. |
| Manufacturer/Importer/Supplier/Distributor information | |
| Manufacturer | |
| Company name | Iron Out dba Summit Brands |
| Address | 6714 Pointe Inverness Way, Suite 200 Fort Wayne, IN 46804-7935 United States |
| Telephone | 260-483-2519 |
| E-mail | Not available. |
| Emergency phone number | 1-800-424-9300 (CHEMTREC) |
| Supplier | See above. |

2. Hazard identification

| | | |
|-----------------------------------|-----------------------------------|------------|
| Physical hazards | Corrosive to metals | Category 1 |
| Health hazards | Skin corrosion/irritation | Category 1 |
| | Serious eye damage/eye irritation | Category 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 | % |
|-------------------|--------------------------|------------|---------|
| Citric Acid | | 77-92-9 | 3 - 7* |
| Hydrochloric acid | | 7647-01-0 | 5 - 10* |
| Lactic Acid | | 79-33-4 | 3 - 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

| | |
|---|---|
| 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. Wash contaminated clothing before reuse. Immediately call a POISON CENTER or doctor. 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 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. 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 | Dry chemical. Foam. Carbon dioxide. Fog. |
| 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 | 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. |
| Specific methods | Use standard firefighting procedures and consider the hazards of other involved materials. |
| Hazardous combustion products | 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.

Environmental precautions

Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS. 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. Avoid contact with eyes, skin and clothing. Avoid breathing vapors or mists of this product. Use only outdoors or in a well-ventilated area. Wear appropriate personal protective equipment. Wash thoroughly after handling. Use good industrial hygiene practices in handling this material.

Conditions for safe storage, including any incompatibilities

Store locked up. Store in a corrosion 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 | Type | Value |
|-----------------------------------|---------|---------------------|
| Hydrochloric acid (CAS 7647-01-0) | Ceiling | 3 mg/m ³ |
| | | 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 | Type | Value |
|-----------------------------------|---------|-------|
| Hydrochloric acid (CAS 7647-01-0) | Ceiling | 2 ppm |

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

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

Canada. Quebec OELs. (Ministry of Labor - Regulation respecting occupational health and safety)

| Components | Type | Value |
|-----------------------------------|---------|-----------------------|
| Hydrochloric acid (CAS 7647-01-0) | Ceiling | 7.5 mg/m ³ |
| | | 5 ppm |

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

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

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

| Components | Type | Value |
|-----------------------------------|---------|---------------------|
| Hydrochloric acid (CAS 7647-01-0) | Ceiling | 7 mg/m ³ |
| | | 5 ppm |

ACGIH

| Components | Type | Value |
|-----------------------------------|------|------------------------|
| Hydrochloric acid (CAS 7647-01-0) | TWA | 2.98 mg/m ³ |

US. ACGIH Threshold Limit Values

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

US. NIOSH: Pocket Guide to Chemical Hazards

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

| | |
|--|---|
| Biological limit values | No biological exposure limits noted for the ingredient(s). |
| Exposure guidelines | Chemicals listed in section 3 that are not listed here do not have established limit values for ACGIH or OSHA PEL. |
| 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. 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 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 or drink. |

9. Physical and chemical properties

| | |
|---|-----------------|
| Appearance | Clear |
| Physical state | Liquid. |
| Form | Liquid |
| Color | Blue |
| Odor | Lime. |
| Odor threshold | Not available. |
| pH | < 1 |
| Melting point/freezing point | Not available. |
| Initial boiling point and boiling range | Not available. |
| Pour point | Not available. |
| Specific gravity | Not available. |
| Partition coefficient (n-octanol/water) | Not available. |
| Flash point | None |
| 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 | 1.058 |
| Solubility(ies) | Not available. |
| Auto-ignition temperature | Not available. |
| Decomposition temperature | Not available. |
| Viscosity | 200 - 300 cPs |

10. Stability and reactivity

| | |
|---|--|
| Reactivity | Reacts vigorously 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 | 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. |
| Inhalation | Prolonged inhalation may be harmful. |
| Skin contact | Causes severe skin burns. |
| Eye contact | Causes serious eye 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

| Components | Species | Test Results |
|-----------------------------------|---------------|--|
| Citric Acid (CAS 77-92-9) | | |
| Acute | | |
| <i>Dermal</i> | | |
| LD50 | Rat | > 2000 mg/kg, 24 Hours, ECHA |
| <i>Inhalation</i> | | |
| LC50 | Not available | |
| <i>Oral</i> | | |
| LD50 | Mouse | 5400 mg/kg, ECHA |
| | Rat | 11700 mg/kg, ECHA |
| Hydrochloric acid (CAS 7647-01-0) | | |
| Acute | | |
| <i>Dermal</i> | | |
| LD50 | Not available | |
| <i>Inhalation</i> | | |
| LC50 | Rat | 40989 ppm, 5 Minutes, ECHA 4701 ppm, 30 Minutes, ECHA 45.6 mg/L, 5 Minutes, ECHA 8.3 mg/L, 30 Minutes, ECHA |
| <i>Oral</i> | | |
| LD50 | Not available | |
| Lactic Acid (CAS 79-33-4) | | |
| Acute | | |
| <i>Dermal</i> | | |
| LD50 | Rabbit | > 2000 mg/kg, 24 Hours, ECHA |
| <i>Inhalation</i> | | |
| LC50 | Rat | > 7.9 mg/L, 4 Hours, ECHA |

| Components | Species | Test Results |
|---|--|---|
| <i>Oral</i> LD50 | Rat | > 2000 mg/kg, ECHA |
| Skin corrosion/irritation | Causes severe skin burns and eye damage. | |
| Exposure minutes | Not available. | |
| Erythema value | Not available. | |
| 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 value | Not available. | |
| Conjunctival oedema value | Not available. | |
| Recover days | Not available. | |
| Respiratory or skin sensitization | | |
| Canada - Alberta OELs: Irritant | | |
| Hydrochloric acid (CAS 7647-01-0) | Irritant | |
| Respiratory sensitization | Not available. | |
| Skin sensitization | This product is not expected to cause skin sensitization. | |
| Mutagenicity | No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic. | |
| Carcinogenicity | See below. | |
| IARC Monographs. Overall Evaluation of Carcinogenicity | | |
| Hydrochloric acid (CAS 7647-01-0) | Volume 54 - 3 | Not classifiable as to carcinogenicity to humans. |
| OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052) | Not listed. | |
| Reproductive toxicity | This product is not expected to cause reproductive or developmental effects. | |
| Teratogenicity | Not classified. | |
| 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. | |

12. Ecological information

Ecotoxicity Because of the low pH of this product, it would be expected to produce significant ecotoxicity upon exposure to aquatic organisms and aquatic systems. See below

Ecotoxicological data

| Components | Species | Test Results |
|--------------------------------------|--|--|
| Citric Acid (CAS 77-92-9) | | |
| <i>Acute</i> | | |
| Crustacea | EC50 | Daphnia magna |
| | | 120 mg/L, 72 hr |
| Aquatic | | |
| <i>Acute</i> | | |
| Fish | LC50 | Bluegill (<i>Lepomis macrochirus</i>) |
| | | 1516 mg/L, 96 hr |
| Hydrochloric acid (CAS 7647-01-0) | | |
| Aquatic | | |
| Fish | LC50 | Western mosquitofish (<i>Gambusia affinis</i>) |
| | | 282 mg/L, 96 hours |
| Lactic Acid (CAS 79-33-4) | | |
| Aquatic | | |
| Crustacea | EC50 | Water flea (<i>Daphnia magna</i>) |
| | | 180 - 320 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 | 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. |
| 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

| | |
|---|--|
| 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 | Hydrochloric acid |
| Hazard class | 8 |
| Subsidiary hazard class | Limited Quantity - US |
| Packing group | II |
| Packaging exceptions | < 1L - Limited Quantity |

Transportation of Dangerous Goods (TDG - Canada)

Basic shipping requirements:

| | |
|--------------------------------|---------------------------|
| UN number | UN1760 |
| Proper shipping name | CORROSIVE LIQUID, N.O.S. |
| Technical name | Hydrochloric acid |
| Hazard class | 8 |
| Subsidiary hazard class | Limited Quantity - Canada |
| Packing group | II |
| Special provisions | 16 |
| Packaging exceptions | <1L - Limited Quantity |

DOT



TDG



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.

Export Control List (CEPA 1999, Schedule 3)

Not listed.

Greenhouse Gases

Not listed.

Precursor Control Regulations

Hydrochloric acid (CAS 7647-01-0) Class B

WHMIS 2015 Exemptions Not applicable

US federal regulations This product is 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)

Hydrochloric acid (CAS 7647-01-0) Listed.

SARA 304 Emergency release notification

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

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance No

SARA 311/312 Hazardous chemical Yes

Classified hazard categories Corrosive to metal
Skin corrosion or irritation
Serious eye damage or eye irritation

SARA 313 (TRI reporting)

| 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 68.130) Hazardous substance

Clean Water Act (CWA) Section 112(r) (40 CFR 68.130)

US state regulations

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

Hydrochloric acid (CAS 7647-01-0) Listed.

US - Illinois Chemical Safety Act: Listed substance

Hydrochloric acid (CAS 7647-01-0)

US - Louisiana Spill Reporting: Listed substance

Hydrochloric acid (CAS 7647-01-0) Listed.

US - Minnesota Haz Subs: Listed substance

Hydrochloric acid (CAS 7647-01-0) Listed.

US - North Carolina Toxic Air Pollutants: Listed substance

Hydrochloric acid (CAS 7647-01-0)

US - Texas Effects Screening Levels: Listed substance

Citric Acid (CAS 77-92-9) Listed.

Hydrochloric acid (CAS 7647-01-0) Listed.

Lactic Acid (CAS 79-33-4) Listed.

US. Massachusetts RTK - Substance List

Hydrochloric acid (CAS 7647-01-0)

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

Hydrochloric acid (CAS 7647-01-0)

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

Hydrochloric acid (CAS 7647-01-0)

US. Rhode Island RTK

Hydrochloric acid (CAS 7647-01-0)

US. California Proposition 65

This product is not subject to warning labeling under the California Proposition 65 regulation.

Inventory status

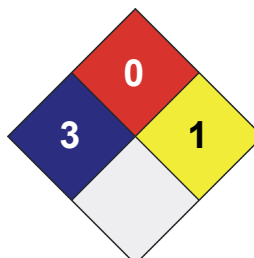
| Country(s) or region | Inventory name | On inventory (yes/no)* |
|-----------------------------|---|------------------------|
| Canada | Domestic Substances List (DSL) | No |
| Canada | Non-Domestic Substances List (NDSL) | Yes |
| United States & Puerto Rico | Toxic Substances Control Act (TSCA) Inventory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

| | |
|----------------------------|-----|
| HEALTH | / 3 |
| FLAMMABILITY | 0 |
| PHYSICAL HAZARD | 1 |
| PERSONAL PROTECTION | X |



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

08-February-2021

Version #

05

Effective date

08-February-2021

Prepared by

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

Further information

Not available.

Other information

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

Redbook revision # 11, 12/5/16