

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product Name REFLECT L-70

Other means of identification

Product Code 423
Synonyms None

Recommended use of the chemical and restrictions on use

Recommended Use Metal Cleaner / Brightener.
Uses advised against No information available

Manufacturer Address

Anderson Chemical Company, 325 South Davis Avenue, Litchfield, MN 55355 (320-693-2477)

Emergency telephone number

Chemtrec 1-800-424-9300

2. HAZARDS IDENTIFICATION

Classification

Acute toxicity - Oral	Category 4
Serious eye damage/eye irritation	Category 2A
Reproductive toxicity	Category 1B
Corrosive to metals	Category 1

Label elements

Emergency Overview

Danger

Hazard statements

Harmful if swallowed
 Causes serious eye irritation
 May damage fertility or the unborn child
 May be corrosive to metals



Appearance aqueous solution

Physical state liquid

Odor Acrid odor

Precautionary Statements - Prevention

Obtain special instructions before use
 Do not handle until all safety precautions have been read and understood
 Use personal protective equipment as required
 Do not eat, drink or smoke when using this product
 Wear eye/face protection
 Keep only in original container
 Wash hands and face thoroughly after handling

Precautionary Statements - Response

IF exposed or concerned: Get medical advice/attention

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

If eye irritation persists: Get medical advice/attention

IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell

Rinse mouth

Absorb spillage to prevent material damage

Precautionary Statements - Storage

Store locked up

Store in a corrosive resistant container.

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)**Other Information**

Unknown Acute Toxicity

0% of the mixture consists of ingredient(s) of unknown toxicity

3. COMPOSITION/INFORMATION ON INGREDIENTS

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

4. FIRST AID MEASURES

First aid measures**Eye contact**

Flush immediately with water for 15 minutes. Lift upper and lower eyelids for complete rinsing. Get immediate medical attention.

Skin Contact

Flush with water for 15 minutes. Get medical attention. Remove contaminated clothing and wash before reuse.

Inhalation

Remove victim from immediate source of exposure to fresh air. If breathing is difficult, administer oxygen if available. If victim is not breathing, administer CPR. If individual experiences nausea, headache, or dizziness, get immediate medical attention.

Ingestion

Rinse mouth with water. Give water to dilute. Do not induce vomiting. Get immediate medical attention. Never give anything by mouth to a semi-comatose, comatose, convulsing or unconscious person.

Self-protection of the first aider

Use personal protective equipment as required.

Most important symptoms and effects, both acute and delayed**Symptoms**

Causes serious eye irritation. Inhalation can cause serious effects that may be delayed following exposure. May cause mild skin irritation. May damage fertility or the unborn child. Harmful if swallowed.

Indication of any immediate medical attention and special treatment needed**Note to physicians**

Symptoms may be delayed.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media None known.

Specific hazards arising from the chemical

Heating above 110 deg C results in an exothermic decomposition with release of CO₂ gas and potentially hydrofluoric acid.

Hazardous combustion products Carbon dioxide (CO₂). Carbon monoxide. Nitrogen oxides (NO_x). Hydrogen cyanide. Hydrofluoric acid. Hydrogen gas. Metalloid fluorides.

Explosion data

Sensitivity to Mechanical Impact None.

Sensitivity to Static Discharge None.

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions	Evacuate nonessential personnel. Ventilate area. Wear appropriate personal protection equipment. Do not touch or walk through spilled material. Avoid breathing vapors or mists. Ensure adequate ventilation, especially in confined areas. Approach spill from upwind.
Environmental precautions	See Section 12 for additional ecological information. Prevent entry into sewers, water.
Methods for containment	Stop leak if you can do it without risk. Completely contain spilled material with dikes or sand bags, etc.
Methods for cleaning up	Take up with sand or other non-combustible absorbent material and place into containers for later disposal.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling Do not get in eyes, on skin, or clothing. Do not breathe vapors or mists. Do not ingest. Wash thoroughly after handling. Wear protective clothing/equipment. Use with adequate ventilation.

Conditions for safe storage, including any incompatibilities

Storage Conditions	Keep containers tightly closed and properly labeled. Containers that have been emptied will retain product residue and should be handled as if they were full. Store in a cool, dry, well-ventilated place away from incompatible materials. Wash hands before eating, drinking, using tobacco, applying make-up or using the toilet. Do not store, use, and/or consume foods, beverages, tobacco in areas where this product is stored.
Incompatible materials	Avoid contact with oxidizers, aluminum and zinc. This material may be extremely hazardous in contact with chlorates or nitrates. This material is acidic. Contact with hypochlorites (e.g. chlorine bleach, sulfides, or cyanides) will liberate toxic gases. Contact with alkaline materials (e.g. aqua ammonia) will generate heat and produce noxious gas. Do not mix directly with dehydrating agents such as acetic anhydride or concentrated sulfuric. High concentrations will react vigorously with carbonate scales which may carry vapors which should not be inhaled.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters**Exposure Guidelines**

Appropriate engineering controls

Showers
 Eyewash stations
 Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/face protection	Goggles.
Skin and body protection	If contact is anticipated, wear protective clothing appropriate to use conditions.
Respiratory protection	If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

General Hygiene Considerations Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES**Information on basic physical and chemical properties**

Physical state	liquid	Odor	Mild acrid odor
Appearance	aqueous solution	Odor threshold	No information available
Color	colorless or amber		

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	<1	
Melting point/freezing point	No information available	
Boiling point / boiling range	No information available	
Flash point	No information available	
Evaporation rate	No information available	
Flammability (solid, gas)	No information available	
Flammability Limit in Air		
Upper flammability limit:	No information available	
Lower flammability limit:	No information available	
Vapor pressure	No information available	
Vapor density	>No information available	
Specific Gravity	1.136	
Water solubility	Soluble in water	
Solubility in other solvents	No information available	
Partition coefficient	No information available	
Autoignition temperature	No information available	
Decomposition temperature	No information available	
Kinematic viscosity	No information available	
Dynamic viscosity	No information available	
Explosive properties	No information available	
Oxidizing properties	No information available	

Other Information

Softening point	No information available
Molecular weight	No information available
VOC Content (%)	No information available
Density	No information available
Bulk density	No information available

10. STABILITY AND REACTIVITY

Reactivity

No data available

Chemical stability

Stable up to 230 deg F.

Possibility of Hazardous Reactions

None under normal processing.

Conditions to avoidHeating above 110°C (230°F) results in an exothermic decomposition with rapid release of CO₂ gas and potentially hydrofluoric acid.**Incompatible materials**

Avoid contact with oxidizers, aluminum and zinc. This material may be extremely hazardous in contact with chlorates or nitrates. This material is acidic. Contact with hypochlorites (e.g. chlorine bleach, sulfides, or cyanides) will liberate toxic gases. Contact with alkaline materials (e.g. aqua ammonia) will generate heat and produce noxious gas. Do not mix directly with dehydrating agents such as acetic anhydride or concentrated sulfuric. High concentrations will react vigorously with carbonate scales which may carry vapors which should not be inhaled.

Hazardous Decomposition Products

None under normal use conditions.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information	No data available
Inhalation	Exposure to decomposition products may cause a health hazard.
Eye contact	Causes serious eye irritation.
Skin Contact	May cause mild skin irritation.
Ingestion	Harmful if swallowed. May damage fertility or the unborn child.

Information on toxicological effects

Symptoms No information available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Sensitization	No information available.
Germ cell mutagenicity	No information available.
Carcinogenicity	No information available.
Reproductive toxicity	No information available.
STOT - single exposure	No information available.
STOT - repeated exposure	No information available.
Aspiration hazard	No information available.

Numerical measures of toxicity - Product Information

Unknown Acute Toxicity 0% of the mixture consists of ingredient(s) of unknown toxicity

12. ECOLOGICAL INFORMATION

Ecotoxicity

0% of the mixture consists of components(s) of unknown hazards to the aquatic environment

Persistence and degradability

No information available.

Bioaccumulation

No information available.

Other adverse effects

No information available

13. DISPOSAL CONSIDERATIONS**Waste treatment methods****Disposal of wastes**

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated packaging

Do not reuse container.

14. TRANSPORT INFORMATION**DOT**

Not regulated

15. REGULATORY INFORMATION**International Inventories**

TSCA	Complies
DSL/NDSL	Complies
EINECS/ELINCS	Complies
ENCS	Complies
IECSC	Complies
KECL	Complies
PICCS	Complies
AICS	Complies

Legend:**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List**EINECS/ELINCS** - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances**ENCS** - Japan Existing and New Chemical Substances**IECSC** - China Inventory of Existing Chemical Substances**KECL** - Korean Existing and Evaluated Chemical Substances**PICCS** - Philippines Inventory of Chemicals and Chemical Substances**AICS** - Australian Inventory of Chemical Substances**US Federal Regulations****SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

