



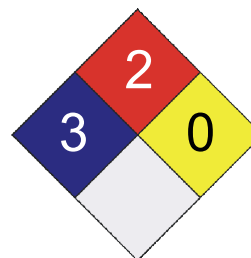
1. Product and Company Identification

Product Name CITRA SOL
CAS # Mixture
Product Use Cleaner
Manufacturer Frank's Maintenance Products Inc.
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N2R 1H2 Canada
Phone (519) 748-4433
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CANUTEC

LEGEND HMIS/NFPA	
Severe	4
Serious	3
Moderate	2
Slight	1
Minimal	0

Health	/ 3
Flammability	2
Physical Hazard	0
Personal Protection	C



2. Hazards Identification

Emergency Overview

DANGER -- CORROSIVE
Combustible liquid. May cause sensitisation by skin contact. Keep away from heat and flame.

Potential short term health effects

Routes of exposure

Eye, Skin contact, Inhalation, Ingestion.

Eyes

Causes chemical burns. May cause blindness.

Skin

May cause chemical burns. Contains a potential skin sensitizer.

Inhalation

Excessive intentional inhalation may cause respiratory tract irritation and central nervous system effects (headache, dizziness).

Ingestion

Harmful if swallowed. May cause chemical burns to mouth, throat and stomach.

Target organs

Eyes. Respiratory system. Skin.

Chronic effects

Prolonged or repeated exposure can cause drying, defatting and dermatitis. Prolonged or repeated exposure to dilutions can cause drying, defatting and dermatitis.

Signs and symptoms

The product causes burns of eyes, skin and mucous membranes.

3. Composition/Information on Ingredients

Ingredient(s)	CAS #	Percent
Tetrasodium ethylenediamine tetraacetate	64-02-8	1 - 5
Sodium metasilicate	6834-92-0	1 - 5
d-Limonene	5989-27-5	5 - 10
Alcohols, C12-16, ethoxylated	68551-12-2	10 - 30

4. First Aid Measures

First aid procedures

Eye contact

Immediately flush with cool water. Remove contact lenses, if applicable, and continue flushing for 15 minutes. Obtain medical attention immediately.

Skin contact

Immediately flush with water. Wash with soap and water. Obtain medical attention if irritation persists.

Inhalation

If symptoms develop move victim to fresh air. If symptoms persist, obtain medical attention.

Ingestion

Do not induce vomiting. Rinse mouth with water, then drink one or two glasses of water. Obtain medical attention. Never give anything by mouth if victim is unconscious, or is convulsing.

Notes to physician

Symptoms may be delayed.

General advice

If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance.

5. Fire-fighting Measures

Flammable properties

Combustible by WHMIS criteria.

Extinguishing media**Suitable extinguishing media**

Dry chemical. Alcohol foam. Carbon dioxide. Fog.

Unsuitable extinguishing media

Not available

Protection of firefighters**Specific hazards arising from the chemical**

Not available

Protective equipment for firefighters

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

Hazardous combustion products

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

Explosion data**Sensitivity to mechanical impact**

Not available

Sensitivity to static discharge

Not available

6. Accidental Release Measures

Personal precautions

Keep unnecessary personnel away. Do not touch or walk through spilled material. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Keep people away from and upwind of spill/leak.

Methods for containment

Stop leak if you can do so without risk. Prevent entry into waterways, sewers, basements or confined areas.

Methods for cleaning up

Remove sources of ignition. Before attempting clean up, refer to hazard data given above. Small spills may be absorbed with non-reactive absorbent and placed in suitable, covered, labelled containers. Prevent large spills from entering sewers or waterways. Contact emergency services and supplier for advice. Never return spills in original containers for re-use.

7. Handling and Storage

Handling

Use good industrial hygiene practices in handling this material. Do not get this material in your eyes, on your skin, or on your clothing.

Storage

Keep out of reach of children. Do not store at temperatures above 120°F (49°C). Store in a closed container away from incompatible materials. Keep out of the reach of children.

8. Exposure Controls / Personal Protection

Exposure limits**Ingredient(s)****Exposure limits**

Alcohols, C12-16, ethoxylated

ACGIH-TLV

Not established

d-Limonene

ACGIH-TLV

Not established

Sodium metasilicate

ACGIH-TLV

TWA: 10 mg/m3

Tetrasodium ethylenediamine tetraacetate

ACGIH-TLV

Not established

Engineering controls	General ventilation normally adequate.
Personal protective equipment	
Eye/Face protection	Wear chemical goggles.
Hand protection	Rubber gloves. Confirm with a reputable supplier first.
Skin and body protection	As required by employer code. Use of an impervious apron is recommended.
Respiratory protection	Where exposure guideline levels may be exceeded, use an approved NIOSH respirator. Avoid breathing mists or vapours.
General hygiene considerations	Use good industrial hygiene practices in handling this material. When using do not eat or drink. Wash hands before breaks and immediately after handling the product.

9. Physical & Chemical Properties

Appearance	Liquid.
Colour	Orange
Form	Liquid
Odour	Citrus
Odour threshold	Not available
Physical state	Liquid
pH	12 - 12.5
Freezing point	Not available
Boiling point	Not available
Flash point	51°C
Evaporation Rate	Not available
Flammability limits in air, lower, % by volume	Not available
Flammability Limits in Air, Upper, % by Volume	Not available
Vapour pressure	Not available
Vapour density	Not available
Specific gravity	Not available
Octanol/water coefficient	Not available
Solubility (H2O)	Not available
Auto-ignition temperature	Not available
VOC (Weight %)	Not available
Viscosity	Not available
Percent volatile	Not available

10. Chemical Stability & Reactivity Information

Chemical stability	Stable under recommended storage conditions.
Conditions to avoid	Do not mix with other chemicals. Reacts violently with acids. This product may react with oxidizing agents.
Incompatible materials	Acids. Oxidizing agents.
Hazardous decomposition products	May include and are not limited to: Oxides of carbon.
Possibility of hazardous reactions	Hazardous polymerisation does not occur.

11. Toxicological Information

Component analysis - LC50

Ingredient(s)	LC50
Alcohols, C12-16, ethoxylated	Not available
d-Limonene	Not available
Sodium metasilicate	Not available
Tetrasodium ethylenediamine tetraacetate	Not available

Component analysis - Oral LD50

Ingredient(s)	LD50
Alcohols, C12-16, ethoxylated	1380 mg/kg rat
d-Limonene	4400 mg/kg rat; 5600 mg/kg mouse
Sodium metasilicate	1153 mg/kg rat
Tetrasodium ethylenediamine tetraacetate	1658 mg/kg rat

Effects of acute exposure

Eye	Causes chemical burns. May cause blindness.
Skin	May cause chemical burns. Contains a potential skin sensitizer.
Inhalation	Excessive intentional inhalation may cause respiratory tract irritation and central nervous system effects (headache, dizziness).
Ingestion	Harmful if swallowed. May cause chemical burns to mouth, throat and stomach.
Sensitisation	Contains a potential skin sensitizer.
Chronic effects	Non-hazardous by WHMIS criteria.
Carcinogenicity	Non-hazardous by WHMIS criteria.

IARC - Group 3 (Not Classifiable)

d-Limonene	5989-27-5	Monograph 73 [1999] (overall evaluation downgraded from 2B to 3 with supporting evidence from other data relevant to carcinogenicity and its mechanisms)
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Mutagenicity Non-hazardous by WHMIS criteria.

Reproductive effects Non-hazardous by WHMIS criteria.

Teratogenicity Non-hazardous by WHMIS criteria.

12. Ecological Information

Ecotoxicity effects Components of this product have been identified as having potential environmental concerns.

Ecotoxicity - Freshwater Algae Data

Tetrasodium ethylenediamine tetraacetate	64-02-8	72 Hr EC50 Scenedesmus subspicatus: 1.01 mg/L
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Ecotoxicity - Freshwater Fish Species Data

d-Limonene	5989-27-5	96 Hr LC50 Pimephales promelas: 702 mg/L [flow-through]
Sodium metasilicate	6834-92-0	96 Hr LC50 Brachydanio rerio: 210 mg/L [semi-static]
Tetrasodium ethylenediamine tetraacetate	64-02-8	96 Hr LC50 Lepomis macrochirus: 41 mg/L [static]; 96 Hr LC50 Pimephales promelas: 59.8 mg/L [static]

Ecotoxicity - Water Flea Data

Sodium metasilicate	6834-92-0	96 Hr EC50 Daphnia magna: 216 mg/L
Tetrasodium ethylenediamine tetraacetate	64-02-8	24 Hr EC50 Daphnia magna: 610 mg/L

Environmental effects Not available

Aquatic toxicity Not available

Persistence and degradability Not available

Bioaccumulation/accumulation Not available

Partition coefficient Not available

Mobility in environmental media Not available

Chemical fate information Not available

13. Disposal Considerations

Waste codes Not available

Disposal instructions Dispose in accordance with all applicable regulations.

Waste from residues / unused products Not available

Contaminated packaging Not available

14. Transport Information

Transportation of Dangerous Goods (TDG)

Basic shipping requirements:

Proper shipping name	FLAMMABLE LIQUID, CORROSIVE, N.O.S. (d-Limonene)
Hazard class	3 (8)
UN number	UN2924
Packing group	III
Additional information:	
Special provisions	16



15. Regulatory Information

Canadian federal regulations

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

Canada - WHMIS - Ingredient Disclosure List

d-Limonene	5989-27-5	1 %
Sodium metasilicate	6834-92-0	1 %

WHMIS classification

Class B - Division 3 - Combustible Liquid, Class D - Division 2B, Class E - Corrosive Material

WHMIS status

Controlled

WHMIS labeling



Inventory Status

Country(s) or region	Inventory Name	On Inventory (Yes/No)*
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No

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

16. Other Information

Disclaimer

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.

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Prepared by

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