



MSDS Protocol K-651

1. Identification and Company Information

Product name Protocol K-651	Use of the substance Calcium, rust, lime remover
Company identification Supplier	Sci-Tech Engineered Chemicals
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Province	Alberta
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2. Hazard Identification

HAZARD OVERVIEW: Pale amber, clear liquid with mild characteristic odour. May darken with exposure to sunlight.

EYES: Contact with eyes may cause mild to moderate irritation.

SKIN: Prolonged contact can cause irritation and drying of the skin.

INHALATION: Mists can irritate the respiratory tract.

INGESTION: Ingestion may cause diarrhea, vomiting, cramps and gastrointestinal irritation.

CARCINOGENICITY: Non-hazardous by WHMIS/OSHA criteria. Not listed by IARC, NTP or ACGIH

TERATOGENICITY, MUTAGENICITY: The product was found not to be mutagenic when tested by the Ames Assay.

3. Composition, Information of Ingredients

Hazardous Components

Chemical name	CAS #	Concentration	LD(50) of Ingredient
Organic Salts	506-89-8	10 - 30%	n.av
Alcohol ethoxylate	68991-48-0	1 - 5%	Rat (Oral) 2000 mg/kg

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4. First Aid Measures

Inhalation: Remove victim to fresh air. If irritation persists, seek medical attention.

Skin Contact: Remove contaminated clothing. Wash affected area with soap and water. Seek medical attention if irritation occurs or persists.

Eye Contact: Remove contact lenses. Flush immediately with large volumes of water. If irritation persists, seek medical attention.

Ingestion: Do not induce vomiting. If vomiting occurs, lean victim forward to prevent breathing in vomitus. Give large amounts of water. Do not give anything by mouth to an unconscious or convulsing person. Seek immediate medical attention.

5. Fire Fighting Measures

Flammability: Not flammable

Flash Point: Not applicable

Sensitivity to static discharge: No

Sensitivity to mechanical impact: No

Extinguishing Media: Use media appropriate for surrounding fire

Special fire fighting procedures: Not applicable

Unusual fire and explosion hazards: None

Hazardous decomposition products: None associated with this product.

6. Accidental Release Measures

Leak and spill procedure: Wear proper PPE. Stop or reduce leak if safe to do so. Restrict access to spill area until clean up is complete. Prevent material from entering sewers, waterways or confined spaces. Soak up smaller spills with non-reactive absorbent material. Flush with water to remove any residue. Use caution when walking in spill areas because spills can cause extremely slippery conditions.

7. Handling and Storage

Use proper equipment for lifting and transporting all containers. Use sensible industrial hygiene and housekeeping practices. Wash thoroughly after handling. Store in a cool, dry, and well-ventillated place. Keep containers tightly closed and away from incompatibles. Venting of containers is advisable.

8. Exposure Controls, Personal Protection

Engineering controls: Use in areas with good general ventilation. Use automatic dispensing directly from container when possible.

Respiratory protection: Not required for normal use.

Eye protection: Use chemical goggles when handling large volumes.

Skin protection: Use impervious (rubber, nitrile) gloves to minimize skin contact.

Other protective clothing or equipment: Eye wash

Work hygienic practices: The usual precaution for the handling of chemicals must be observed.

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9. Physical and Chemical Properties

Appearance:	Clear colourless to pale amber liquid
Specific gravity (Water = 1)	1.00 +/- 0.02
Solubility in water:	100% soluble
Odour:	Mild characteristic
pH (1% in water):	1.0 +/- 0.5
Boiling point	100°C
Freezing point	0°C

10. Stability and Reactivity

Stability: Stable under normal conditions.

Conditions to avoid: Prolonged contact with aluminum can generate hydrogen gas. Avoid leaving on exposed aluminum surfaces for long periods of time without rinsing. Exposure to sunlight can cause a darkening of this material but efficacy will not be affected.

Incompatible materials: Incompatible with strong bases, and oxidizers

Hazardous decomposition products: May thermally decompose to produce carbon monoxide and carbon dioxide.

Hazardous polymerization: Will not occur.

11. Toxicological Information

Carcinogenicity: Non-hazardous by WHMIS/OSHA criteria. Not listed by IARC, NTP or ACGIH

Teratogenicity, mutagenicity, reproductive effects: This product was found not to be mutagenic when tested by the Ames Assay (OECD Guidelines for Testing of Chemicals, Sec. 471)

12. Ecological Information

Environmental fate: Readily biodegradable.

13. Disposal Considerations

Product should be disposed of in accordance to provincial or state and local government requirements prior to disposal. If the product was supplied in a single use container, care should be taken to dispose of the container in a responsible manner in accordance to local regulations.

14. Transportation Information

Canadian TDG: Not Regulated

15. Regulatory Information

Canadian WHMIS: D2.B

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16. Other Information

PREPARED BY:

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