



SAFETY DATA SHEET

Issuing Date No data available

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Revision Number 0

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

GHS product identifier

Product Name DESCALER

Other means of identification

Product Code(s) 112725

Synonyms N/A

Recommended use of the chemical and restrictions on use

Recommended Use Descalant

Uses advised against No Information Available

Supplier's details

Supplier Address

Birsch Industries
476 Viking Drive
Virginia Beach, VA. 23452
TEL: 757-622-0355

Emergency telephone number

Emergency Telephone Number CHEM-TEL, INC.
24 Hour Emergency Contact 1-800-255-3924

2. HAZARDS IDENTIFICATION

Classification

METAL CORROSION – Category 1
SKIN IRRITANT – Category 2
EYE IRRITANT – Category 2A

GHS Label elements, including precautionary statements

Emergency Overview

Signal Word WARNING

Hazard Statements

- May be corrosive to metals.
- Causes skin irritation.
- Causes serious eye irritation.

Appearance Red**Physical State** Liquid**Odor** Acrid**Symbol:****Precautionary Statements****Prevention**

Wear protective gloves and eye protection. Wash thoroughly after handling. Take off contaminated clothing and wash before reuse.

Eyes

IF IN EYES, rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do so. Continue rinsing. If eye irritation persists, get medical advice/attention.

Ingestion

IF SWALLOWED, rinse mouth. Do NOT induce vomiting.

Skin

IF ON SKIN, wash with plenty of water. If skin irritation occurs, get medical advice/attention.

Inhalation

IF INHALED, remove victim to fresh air and keep at rest in a position comfortable for breathing.

Storage and Disposal

Keep only in original container. Absorb spillage to prevent material damage. Store in corrosive resistant container with a resistant inner liner.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms

Chemical Name	CAS-No	Weight %	Notes
Phosphoric acid	7664-38-2	< 15	*
Hydrochloric Acid	7647-01-0	< 6	*

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

4. FIRST AID MEASURES

Description of necessary first-aid measures**General Information**

Immediately remove any clothing soiled by the product.

Eye Contact

Remove contact lenses if worn. Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

Skin Contact

Immediately wash with water and soap and rinse thoroughly.

Inhalation

Supply fresh air; consult doctor in case of complaints.

Ingestion Rinse out mouth and then drink plenty of water. Do NOT induce vomiting; immediately call for medical help.

Indication of immediate medical attention and special treatment needed, if necessary

Notes to Physician Coughing. Breathing difficulty. Nausea. Gastric or intestinal disorders when ingested. Irritating to eyes and skin. Danger of gastric perforation. May cause respiratory irritation.

Indication of Any Immediate Medical Attention and Special Treatment Medical supervision for at least 48 hours. Oxygen respiration treatment, if necessary.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

CO₂, extinguishing power or water spray. Fight larger fires with water spray or alcohol resistant foam. Do NOT use limestone powder.

Specific Hazards Arising from the Chemical

During heating or in case of fire, poisonous gases are produced.

Hazardous Thermal Decomposition Products

No information available

Specific Fire-Fighting Methods

No information available

Protective Equipment and Precautions for Firefighters

Wear self-contained respiratory protective device. Wear fully protective suit.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions Wear protective equipment. Keep unprotected persons away. For large spills, use respiratory protective device against the effects of fumes/dust/aerosol. Ensure adequate ventilation.

Environmental Precautions

Environmental Precautions Do not allow to enter sewers/surface or ground water.

Methods and materials for containment and cleaning up

Methods for Cleaning Up Use limestone to neutralize and absorb spill. Dispose contaminated material as waste according to item 13. Send for recovery or disposal in suitable receptacles. Clean the affected area carefully with warm water.

7. HANDLING AND STORAGE

Precautions for safe handling

Handling Prevent formation of aerosols. Use only in well ventilated areas. Avoid splashes or spray in enclosed areas.

Conditions for safe storage, including any incompatibilities

Storage Store only in original receptacle. Provide ventilation for receptacles. Do NOT use aluminum or steel receptacles. Store away from foodstuffs.

Incompatible Products Store away from acids. Do not store together with alkalis (caustic solutions).

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters**Components with limit values that require monitoring at the workplace:**

7664-38-2 Phosphoric acid	
PEL (USA)	Long-term value: 1 mg/m ³
REL (USA)	Short-term value: 3 mg/m ³ Long-term value: 1 mg/m ³
TLV (USA)	Short-term value: 3 mg/m ³ Long-term value: 1 mg/m ³
EL (Canada)	Short-term value: 3 mg/m ³ Long-term value: 1 mg/m ³
EV (Canada)	Short-term value: 3 mg/m ³ Long-term value: 1 mg/m ³
LMPE (Mexico)	Short-term value: 3 mg/m ³ Long-term value: 1 mg/m ³
7647-01-0 Hydrochloric acid	
PEL (USA)	Ceiling limit value: 7 mg/m ³ , 5 ppm
REL (USA)	Ceiling limit value: 7 mg/m ³ , 5 ppm
TLV (USA)	Ceiling limit value: 2.98 mg/m ³ , 2 ppm
EL (Canada)	Ceiling limit value: 2 ppm
EV (Canada)	Ceiling limit value: 2 ppm
LMPE (Mexico)	Ceiling limit value: 2 ppm A4

General protective and hygienic measures

Keep away from foodstuffs, beverages and feed. Immediately remove all soiled and contaminated clothing. Wash hands before breaks and at the end of work. Avoid contact with the eyes and skin.

Appropriate engineering controls

No information available.

Individual protection measures, such as personal protective equipment

Eye & Face Protection	Safety glasses.
Hand & Skin Protection	Protective gloves: The glove material has to be impermeable and resistant to the product. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation.
Respiratory Protection	Use suitable respiratory protective device when aerosol or mist is formed. Use suitable respiratory protective device when high concentrations are present. For spills, respiratory protection may be advisable.
Hygiene Measures	Handle in accordance with good industrial hygiene and safety practices.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical State	Liquid	Appearance	Yellow
Odor	Characteristic	Odor Threshold	No information available

Property	Values
pH	< 1
Melting Point/Range	No data available
Boiling Point/Boiling Range	> 100° C
Flash Point	No data available
Evaporation rate	No data available
Flammability (solid, gas)	No data available
Flammability Limits in Air	
upper flammability limit	No data available
lower flammability limit	No data available

Vapor Pressure	23 hPa (17 mm Hg)
Vapor Density	1.07 g/cm ³ (8.929 lbs/gal)
Relative Density	No data available
Specific Gravity	No data available
Water Solubility	No data available
Solubility in other solvents	No data available
Partition coefficient: n-octanol/water	No data available
Autoignition Temperature	No data available
Decomposition Temperature	No data available
Viscosity	No data available
Flammable Properties	No data available
Explosive Properties	No data available
Oxidizing Properties	No data available

10. STABILITY AND REACTIVITY

Stability

The product is stable

Possibility of hazardous reactions

Reacts with alkali. Corrosive action on metals. Toxic fumes may be released if heated above the decomposition point. Reacts with light alloys to form hydrogen.

Conditions to avoid

No information available

Incompatible materials

No information available

Hazardous decomposition products

Under fire conditions only: Phosphorus oxides, Chlorine

11. TOXICOLOGICAL INFORMATION

Route of Exposure

Skin contact, Eye contact, Inhalation, Ingestion

Symptoms

Eye Contact	Irritating effect
Skin Contact	Irritant to skin and mucous membranes

Chronic Toxicity

Carcinogenicity	No known significant effects or critical hazards.
Mutagenicity	No known significant effects or critical hazards.
Teratogenicity	No known significant effects or critical hazards.
Developmental Effects	No known significant effects or critical hazards.
Fertility Effects	No known significant effects or critical hazards.

12. ECOLOGICAL INFORMATION

Toxicity

The product contains materials that are harmful to the environment. Inorganic product, is not eliminable from water by means of biological cleaning processes.

Behavior in Environmental Systems

No further relevant information available

Additional Ecological Information

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system. Must not reach bodies of water or drainage ditch undiluted or unneutralized. Rinse off of bigger amounts into drains or the aquatic environment may lead to increased pH-values. A high pH-value harms aquatic organisms. In the dilution of the use-level the pH-value is considerably reduced, so that after the use of the product the aqueous waste, emptied into drains, is only low water-dangerous.

13. DISPOSAL CONSIDERATIONS

Waste Disposal Methods

Small amounts may be diluted with plenty of water and washed away. Dispose of bigger amounts in accordance with Local Authority requirements. The user of this material has the responsibility to dispose of unused material, residues and containers in compliance with all relevant local, state and federal laws and regulations regarding treatment, storage and disposal for hazardous and non hazardous wastes. Residual materials should be treated as hazardous.

Uncleaned Packaging

Disposal must be made according to official regulations.

14. TRANSPORT INFORMATION

DOT/IMDG/IATA

UN Number	UN3264
Proper Shipping Name	Corrosive liquid, acidic, inorganic, n.o.s. (Hydrochloric acid, Phosphoric acid)
Hazard Class	8
Packing Group	III

15. REGULATORY INFORMATION

International Inventories

TSCA	Complies
DSL	Complies

U.S. Federal Regulations

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains the following chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372:

111-76-2 2-butoxyethanol

SARA Hazard Categories

Section 355 (Extremely Hazardous Substances): 7647-01-0 Hydrochloric acid
Section 313 (Specific Toxic Chemical Listings): 7664-38-2 Phosphoric acid
 7647-01-0 Hydrochloric acid

Clean Water Act

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

California Proposition 65

This product does not contain any Proposition 65 chemicals.

US State Right-To-Know Regulations

This product does not contain any substances regulated by state right-to-know regulations.

Carcinogenic Categories

EPA (Environmental Protection Agency): Not Listed

IARC (International Agency for Research on Cancer) – 7647-01-0 Hydrochloric acid

TLV (Threshold Limit Value established by ACGIH) - 7647-01-0 Hydrochloric acid

16. OTHER INFORMATION			
<u>NFPA</u>	Health 1	Flammability 0	Instability 0
<u>HMIS</u>	Health 1	Flammability 0	Physical Hazards 0
Prepared By	Birsch Industries 476 Viking Drive Virginia Beach, VA. 23452 TEL: 757-622-0355		
Issuing Date	No information available		
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Revision Note	N/A		
<u>General Disclaimer</u>			
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End of Safety Data Sheet			