

1. IDENTIFICATION

Product Identifier

Product Name TETRAGARD
Chemical Name Hydrochloric acid solution

Recommended use of the chemical and restrictions on use

Recommended use Scale removal
Restrictions on use For industrial use only

Supplier details

West Penetone Inc.
 11411-160 Street
 Edmonton, AB,
 T5M3T7
 Tel: 780-454-3919

Emergency Telephone Number

Canutec 1-(613)-996-6666 Internationally or 1-888-226-8832 – North America FOR 24 HOUR TRANSPORT EMERGENCY

2. HAZARDS IDENTIFICATION

Classification

Corrosive to metals	Category 1
Acute toxicity, inhalation - vapors	Category 4
Skin corrosion/irritation	Category 1B
Serious eye damage/eye irritation	Category 1
Specific target organ toxicity – single exposure	Category 3
Hazardous to the aquatic environment, acute hazard	Category 3

Label Elements

DANGER

Hazard Statements

May be corrosive to metals.
 Harmful if inhaled.
 Causes severe skin burns and eye damage.
 May cause respiratory irritation.
 Harmful to aquatic life



Precautionary Statements - Prevention

Keep only in original packaging.
 Do not breathe dust/fume/gas/mist/vapors/spray.
 Wash face, hands and any exposed skin thoroughly after handling.
 Do not eat, drink or smoke when using this product.
 Use only outdoors or in a well-ventilated area.
 Avoid release to the environment.
 Wear protective gloves/protective clothing/eye protection/face protection.

Precautionary Statements - Response

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER or doctor/physician.

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse.

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/physician.

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/physician.

Absorb spillage to prevent material damage.

Collect spillage.

Precautionary Statements - Storage

Store locked up. Store in corrosive resistant/container with a resistant liner. Store in a well-ventilated place. Keep container tightly closed.

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant according to local, provincial/federal regulations.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	CAS-No	Weight %
hydrogen chloride	7647-01-0	10-30
alcohols, C9-11, ethoxylated	68439-46-3	0.5-1.5

4. FIRST AID MEASURES**Ingestion**

Do not induce vomiting. Drink 1 or 2 glasses of water. Call a physician or Poison Control Centre immediately. Never give anything by mouth to an unconscious person.

Skin contact

Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse.

Inhalation

Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/physician.

Eye contact

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/physician.

Most important symptoms and effects, both acute and delayed

Causes burns to eyes, skin and mucous membranes. Symptoms include pain with local reddening, blistering, ulceration or discoloration of tissues.

Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

5. FIRE-FIGHTING MEASURES**Suitable Extinguishing Media**

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

Unsuitable Extinguishing Media

Water jet.

Specific hazards arising from the chemical

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

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

Avoid contact with skin, eyes and clothing. Use personal protective equipment. High risk of slipping due to leakage/spillage of product.

Environmental Precautions

Avoid discharge into drains/surface waters/groundwater.

Methods and material for containment and cleaning up

Contain, neutralize, and solidify with inert absorbent material. Keep in suitable, closed containers for disposal. Following product recovery, flush area with water. For large spills, stop flow of material, prevent product from entering drains, and pump off product where this is without risk and possible. Proceed as above.

7. HANDLING AND STORAGE

Precautions for Safe Handling

Handling Avoid contact with skin, eyes and clothing.

Conditions for safe storage, including any incompatibilities

Storage Keep containers tightly closed in a dry, cool and well-ventilated place.

Incompatible Materials Strong or chlorinated alkali, amphoteric or light metals

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters

Only constituents with exposure limits are listed. Any constituent not listed has no known exposure limit.

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Hydrogen chloride 7647-01-0	TWA: 2 ppm ceiling	5 ppm/7 mg/m ³ ceiling	50 ppm

Appropriate engineering controls

Engineering Controls Ensure adequate ventilation, especially in confined areas.

Individual protection measures, such as personal protective equipment

Eye/face Protection Splash proof goggles and face shield.

Skin and body protection Rubber or neoprene gloves, rubber apron and boots.

Respiratory Protection Respiratory protection if ventilation is inadequate or in case of vapor/aerosol release.

General Hygiene Considerations Handle in accordance with good industrial hygiene and safety practice. Wash soiled clothing immediately.

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE:

Clear, colorless liquid

ODOR

Acidic

ODOR THRESHOLD:

Not applicable

VAPOR PRESSURE, mm Hg AT 20°C (68°F):

Not applicable

VAPOR DENSITY (Air = 1):

Not applicable

RELATIVE DENSITY AT 20°C (68°F):

1.128-1.132

pH:

<1.0

MELTING POINT / FREEZING POINT:

Approx. -15 °C (5°F)

BOILING POINT/BOILING RANGE:

Approx. 100 °C (212°F)

FLASH POINT:

None

EVAPORATION RATE, water = 1:

1

FLAMMABILITY (SOLID, GAS):

Not applicable

SOLUBILITY IN WATER:

Complete

PARTITION COEFFICIENT, N-OCTANOL/WATER:

Not available

AUTO-IGNITION TEMPERATURE:

Not available

DECOMPOSITION TEMPERATURE:

Not available

VISCOSITY:

Not available

FLAMMABLE LIMITS:**UPPER:** Not applicable **LOWER:** Not applicable**10. STABILITY AND REACTIVITY****Reactivity**

Not reactive under normal conditions.

Conditions to Avoid

Store away from incompatible materials.

Chemical Stability

Stable under normal conditions.

Possibility of hazardous reactions

None

Incompatible Materials

Strong or chlorinated alkali, amphoteric or light metals.

Hazardous decomposition products

Hydrogen chloride.

11. TOXICOLOGICAL INFORMATION**Acute toxicity**

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
hydrogen chloride 7647-01-0	700-900 mg/kg (rat)	>5000 mg/kg (rabbit)	4.66 mg/L – 4 h rat
alcohols, C9-11, ethoxylate 68439-46-3	>2000 mg/kg (rat)	>2000 mg/kg (rabbit)	Not applicable

Information on likely sources of exposure**Ingestion**

Ingestion may cause burns to the digestive and respiratory tract.

Skin corrosion/irritation

Corrosive to skin.

Inhalation

Spray mist may cause irritation or burns to respiratory tract.

Serious eye damage/irritation

Corrosive to eyes and may cause grave lesions, including blindness.

Delayed and immediate effects and also chronic effects from short and long-term exposure**Respiratory or skin sensitization**

Not a sensitizer.

Germ cell mutagenicity

None known.

Carcinogenicity

No listed human carcinogens.

Reproductive toxicity

No information available.

STOT - single exposure

No information available.

STOT-repeated exposure

No information available.

Aspiration Hazard

None known.

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms include tingling sensation and / or reddening of tissues, eventually leading to burn lesions.

12. ECOLOGICAL INFORMATION**Ecotoxicity**

Chemical Name	Fish	Waterflea	Algae
hydrogen chloride 7647-01-0	282 mg/L: 96 h gambusia affinis LC50	Not listed	Not listed
alcohols, C9-11, ethoxylate 68439-46-3	5-10 mg/L: 96 h LC50	5-10 mg/L: 48 h EC50	10-100mg/L: 72 h

Persistence and degradability

Not applicable to inorganic materials.

Bioaccumulative potential

Significant accumulation in organisms is not to be expected.

Mobility in soil

No information available

Other adverse effects

Do not release untreated in natural waters.

13. DISPOSAL CONSIDERATIONS**Waste Disposal Method**

Dispose of in accordance with local regulations.

Contaminated Packaging

Empty containers should be taken for local recycling, recovery, or waste disposal.

14. TRANSPORT INFORMATION

UN Number: 3264
UN Proper Shipping Name: Corrosive Liquid, Acidic, Inorganic, N.O.S. (contains hydrochloric acid)
Transport Hazard Class(es):
Class: TDG: 8
US DOT: 8
IMDG: 8
Label(s): 8
Packing Group: II
Marine Pollutant: No
Special precautions for user: None established
Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code: Not determined

15. REGULATORY INFORMATION

Canada (DSL/NDSL)

All ingredients contained in this product are in compliance with the Canadian Environmental Protection Act and are listed on the DSL or are exempt.

United States (TSCA)

All ingredients contained in this product are listed on the TSCA inventory or are exempt.

HMIS Information:

Health: 3
Flammability: 0
Reactivity: 0

16. OTHER INFORMATION**Preparation Date**

13 May 2016

Revision Date

14 October 2020

Revision Note

Revision 1 – Updates to Section 1, 4, 9, 11, 14, 15

Disclaimer

The information provided on this SDS is correct to the best of our knowledge, information, and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal, and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

End of SDS