

1) Product Identification: HeatLink[®] #01331 (Enercon EC-910)Product Use: *Descaler***Manufacturer:**Enercon Water Treatment Ltd.
3606 - 6 Avenue North
Lethbridge, AB T1H 5C4**Emergency Phone:**

Canutec: 613-996-6666

Transportation of Dangerous Goods Classification:

Hydrochloric Acid Solution, 8 (9.2) UN 1789 II

WHMIS classification:*Class D Division 2 Subdivision B; Class E***2) Ingredients:****Chemical Name:***Hydrochloric Acid***Cas#**7647-01-0
%Range - (20-60)**TLV(mg/m³)**

5 ppm

LD50(mg/kg)

900C

3) Physical Data:Physical state*liquid*Odour threshold*5 ppm*Specific gravity*1.21*Density*N/D*pH*(1%) 2.2*Solubility in water*N/D*Appearance and odour*odorless, dark brown*Freezing point*(°C) N/D*Boiling point*(°C) 99°C*Vapour pressure (at 20°C)*30 mmHg*Vapour density*(air=1) N/D*Evaporation rate*(butyl acetate=1) N/D*Coeff. of water/oil*N/D*

4) Fire and Explosion Hazard Data:**Conditions of flammability:***Nonflammable***Extinguishing media:** *N/A* Water Foam CO₂
Other:**Special procedures:****Flash point:** (°C TCC) *None***Flammable limits in air % by volume:** lower *N/A* upper *N/A***Auto ignition temp:** (°C) *none known***Explosion data:****Sensitivity to impact:** *None***Sensitivity to static discharges:** *None***5) Reactivity Data:****Stability (normal conditions)** stable ✓ unstable**Conditions to avoid:** *N/D***Conditions of reactivity:***Reacts with certain metals liberating explosive hydrogen gas.***Incompatibility: (materials to avoid)***Avoid contact with alkalis, oxidizing or reducing agents, cyanides, sulfides, combustibles, formaldehyde, amines, vinyl acetate, propylene oxide, beta-propiolactone, and metal oxides.***Hazardous decomposition products:***May liberate hydrogen chloride especially when heated.***6) Toxicological Properties:****Route of entry:** skin contact ✓ absorbed by skin eye contact ✓
inhalation ✓ ingestion ✓**Effects of acute exposure***Vapors, mists, and liquids are extremely corrosive to the skin and may cause severe burns.**Vapors, mists, and liquids are extremely corrosive to the eyes. Prolonged contact may cause permanent eye injury and blindness.**Vapors and mists are extremely corrosive to the nose, throat, and mucous membranes. Prolonged breathing of high concentrations may result in death.**Vapors, mists, and liquids are extremely corrosive to the mouth and throat, swallowing the liquid burns the tissues, causes severe abdominal pain, nausea, vomiting and collapse. Large quantities can cause death.*

Effects of chronic exposure:

May result in areas of destruction of skin tissue or primary irritant dermatitis. Inhalation may cause severe tissue damage and increases susceptibility to respiratory illness.

Exposure limits: N/D

Irritancy: See “Effects of acute exposure” above.

Sensitization: N/D **Synergistic mat:** N/D

Reproductive eff: N/D **Teratogenicity:** N/D

Carcinogenicity: *The ingredients of this product are not considered to be carcinogens by the National Toxicity Program, the International Agency for Research on Cancer or the Occupational Safety and Health Administration.*

Mutagenicity: N/D

7) Preventative Measures

Personal protective equipment:

eye protection: ✓ gloves: ✓ clothing: ✓

Respiratory protection:

Use NIOSH approved respirator with acid vapor cartridge.

Ventilation requirements:

Mechanical (general).

Spill and leak procedures:

Wear personal protective quipemt described above. Stop leak. Ventilate area. Small spills: mop up or absorb using inert materials, such as Diatomatious earth or “floor dry.” Large spills: Contain by diking and neutralize with lime or soda ash. With soda ash, provide adequate ventilation to dissipate CO₂ and acid fumes.

Waste disposal:

Dispose of contaminated or neutralized material in accordance with local Municipal regulations.

Handling procedures:

*Use adequate ventilation. Dilute by adding product to water. **Not** water to product. Use acid resistant transfer equipment.*

Storage requirements:

Keep containers closed when not in use; store in a cool (0-40°C), dry and well-ventilated place away from incompatible materials.

Special handling information:

None.

8) First Aid Measures:

Skin Contact:

Immediately flush skin thoroughly with cold water for at least 15 minutes while removing contaminated clothing. Obtain prompt medical attention.

Eye Contact:

Immediately flush eyes thoroughly with water for at least 30 minutes, lifting upper and lower eyelids occasionally. Obtain prompt medical attention.

Inhalation:

Remove victim from contaminated area to fresh air. Give artificial respiration if not breathing. Obtain prompt medical attention.

Ingestion:

If awake, give plenty of water or milk to drink. Do not give anything by mouth to an unconscious or convulsing person. Do not induce vomiting. Obtain medical attention immediately.

9) Other Information:

none

10) Preparation Information

Prepared by:

HeatLink Group Inc.

4603E - 13th Street N.E.

Calgary, Alberta T2E 6M3

Fax: 403-250-1155

Date prep./rev.: 2005.11.01

print date: 2005.11.01

phone: 403-250-3432

toll free: 1-800-661-5332

N/D - no data N/A - not applicable N/E - not established < - less > - greater
A = oral rat LD50 B = oral rat LD low C = oral LD50/LD low other animal
D = estimated 1000 E = arbitrary 2000 F = other route prefix C = ceiling limit

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