GUR THERMAL SYSTEMS CLEANING TECHNOLOGIES LTD.

7 H A G A N I M S T R ; R A M A T H A S H A R O N 4 7 2 3 1 , I S R A E L

 $T\;E\;L: +\;9\;7\;2\; -\;3\; -\;6\;4\;9\;2\;0\;5\;3\quad ;\quad F\;A\;X: +\;9\;7\;2\; -\;3\; -\;6\;4\;8\;2\;8\;9\;2\quad ;$

E - M A I L : S A L E S & @ G U R - T E C H N O L O G I E S . C O M S I T E : W W W . G U R - T E C H N O L O G I E S . C O M

MSDS - Material Safety Data Sheet

Labels: Corrosive compound

1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Name: Ice-Clean

Nickel-Safe Ice Machine Cleaner.

Company Identification: Gur Thermal Systems Cleaning Technologies Ltd., Israel.

For information call: +972 3 6492053 \ Fax: +972 3 6482892 Emergency Number: +972-544653064 / Local Health Authority.

2 - HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW:

Labeling according to EC Directives (1999/45/EC):

Corrosive compound. Harmful if swallowed. Moderate Toxic.

Causes eye and skin irritation & burns.

Sub risk: Corrosive.

Potential Short Term Health Effects -

Eye: Causes eye burns & eye damage. Skin: Causes skin burns or irritation.

Ingestion: large amounts may cause symptoms of abdominal pain, vomiting, and diarrhea.

Moderate toxic.

Inhalation: May cause respiratory tract irritation.

3 - COMPOSITION, INFORMATION ON INGREDIENTS

Components	Chemical formula	CAS Mo.	EC No.	Percent
Phosphoric Acid	H3P04	7664-38-2	2316332	Less than 50%
Non-hazardous detergent	N/A (Propriety products)	N/A	N/A	30% - 40%

4 - FIRST AID MEASURES

Eyes:

Flush eyes with plenty of water for at least 15 minutes, Remove contact lenses occasionally lifting the upper and lower lids. Get medical aid.

Skin:

Flush skin with plenty of soap and water for at least 15 minutes while removing contaminated clothing and shoes.

Get medical aid if irritation develops or persists.

Ingestion:

Drink plenty of water. Get medical aid. Do not induce vomiting. Inhalation:

Remove to fresh air. If not breathing, give artificial respiration.

If breathing is difficult, give oxygen.

Get medical attention immediately.

5 - FIRE FIGHTING MEASURES

Non combustible compound.

Use suitable extinguishing media - Water spray, CO2, Foam.

Wear appropriate protective clothing.

Mount respiratory protective device, if necessary.

When heated to decomposition, may emit toxic fumes of POx & Cl.

6 - ACCIDENTAL RELEASE MEASURES

Use proper personal protective clothing & equipment.

Ventilate area of spill.

Spills: Dilute with a large amount of water & alkaline neutralizers.

Spills/Leaks: Absorb & collect spill in suitable disposal container.

Cleanup affected area.

7 - HANDLING and STORAGE

Handling:

Handle with care. Wash equipment thoroughly after handling.

Avoid contact with skin and eyes. Avoid breathing.

Avoid contact with clothing.

Storage:

Keep out of the reach of children. Store in a closed container away from strong alkaline.

Store in a tightly closed container.

Store in a cool, dry, well-ventilated area,

away from incompatible substances as explosives

8 - EXPOSURE CONTROLS, PERSONAL PROTECTION

Engineering Controls:

Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.

Exposure Limits-

OSHA PEL: TWA: 2 mg/m3 ACGIH TLV: Ceiling: 2 mg/m3

DPG MAK: 2 mg\m3

Personal Protective Equipment -

Eves: Wear safety goggles or face shield.

Maintain eye wash fountain and quick-drench facilities

in work area.

Skin: Wear appropriate rubber gloves to prevent skin exposure.

Clothing: Wear appropriate protective clothing to avoid contact with skin and rubber \ PVC Apron & boots.

Respirators: A NIOSH/MSHA approved air purifying dust or mist

respirator. Where exposure guideline levels may be exceeded, use an approved NIOSH respirator

9 - PHYSICAL AND CHEMICAL PROPERTIES

Physical State: liquid

Appearance: Clear to light Red

Odor: acidic pH: 0 - 1

Vapor Pressure: ab. 5 mm at 20 cen grade

Freezing point $< 32.00 \,^{\circ}\text{F} \, (0 \,^{\circ}\text{C})$ Boiling Point: $> 212.00 \,^{\circ}\text{F} \, (100 \,^{\circ}\text{C})$ Evaporation rate $< 1 \, (\text{BuAc} = 1)$ Flash Point: Not Applicable Solubility: Soluble in water Specific Gravity/Density: ab. 1.40 kg/dm³

10 - STABILITY AND REACTIVITY

Normally stable.

Conditions to Avoid: Incompatible materials, sunlight & heat. Incompatibilities with Other Materials: Strong Alkaline products.

Hazardous Polymerization: Will not occur.

If heated to decomposition, will emit toxic fumes of POx & Cl.

11 - TOXICOLOGICAL INFORMATION

Human poison by an unspecified route. Moderate toxic.

LD50 (oral , rat) = 1.5 gr \ body weight IARC carcinogenic category - none Epidemiology: No data available.

12 - ECOLOGICAL INFORMATION

Ecological studies have not been conducted for this product. The following information is available for components of this

product.

Ecotoxicity: phosphoric acid – 96 Hr LC50 mosquito fish: 138 mg/L

hydrochloric acid - 48 Hr LC50 bluegill: 3.6 mg/L

Do not allow compound to reach ground water sources.

Hazardous to drinking water.

Must not reach sewage water or drainage ditch undiluted or un-neutralized.

13 - DISPOSAL CONSIDERATIONS

Dilute with water.

Dispose of in a manner consistent with local regulations.

Transfer to a licensed disposal contractor.

14 - TRANSPORT INFORMATION

US DOT - Ground / Domestic

Proper Shipping Name: CORROSIVE LIQUID, N.O.S (Phosphoric Acids),

UN Number: 1760, Hazard Class: 8, Packing Group: III

IATA - Air

Proper Shipping Name: CORROSIVE LIQUID, N.O.S (Phosphoric Acids).

UN Number: 1760, Hazard Class: 8, Packing Group: III

IMO/IMDG - Water:

Proper Shipping Name: CORROSIVE LIQUID, N.O.S (Phosphoric Acids), UN Number: 1760, Hazard Class: 8, Packing Group: III, Stowage Category: A

Labels: Class 8, EmS Number: F-A, S-B,

HTS Code: 3402.90.5030 - Cleaning Preparations, Packaging Exceptions: <5L - Limited Quantity

RID/ADR - Rail. Road

Proper Shipping Name: CORROSIVE LIQUID, N.O.S (Phosphoric Acids),

UN Number: 1760, Hazard Class: 8, Packing Group: III

15 - REGULATORY INFORMATION

Reported \ included on the EPA TSCA inventory list. Community Right To Know list.

Risk Phrase & H-Statements - Full text:

R20/21/22: Harmful by inhalation, in contact with skin and if swallowed.

R34: Causes burns R36 /38: Irritating to eyes.

R41: Risk of serious damage to eyes.

H302: Harmful if swallowed

H312: Harmful in contact with skin

H314: Causes severe skin burns and eye damage

H373: May cause damage to organs through prolonged or repeated exposure

Safety Phrase: 20, 24 - 46, 60

Hazchem code: 2R.

16 - ADDITIONAL INFORMATION

According to EC Directive 91/155/EEC.

MSDS Creation Date: 2001. Amendment, by d.k. Revision: 2, 07\2013.

The information above is believed to be accurate & represents the best information currently available to us.

However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes.

In no way shall supplier be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if has been advised of the possibility of such damages.

Page 4 of 4, Ice-Clean, Rev. 07\2013

Label: Class 8

