

# TOTAL HARDNESS REAGENT

Product: R-0854

## Section 1: PRODUCT INFORMATION

**Chemical family:** Mixture.

**Supplier:** Lowry & Associates  
 Agents for Taylor Technologies Inc.  
 4 – 1151 Gorham Street  
 Newmarket, Ontario  
 L3Y 7V1  
 Tel: 905-836-0505  
 Fax: 905-895-4539.

**Emergency Phone Number:** Canutec 613-996-6666.  
 410-472-4340

**Manufacturer:** Taylor Technologies Inc.  
 31 Loveton Circle  
 Sparks, MD USA 21152  
 Tel: 410-472-4340.

**TDG classification:** FLAMMABLE LIQUID, N.O.S. (isopropyl alcohol)  
 UN1993  
 Class 3  
 PG II.



**WHMIS classification:**  
 B2, D2B.



**DSL status:** Appears on DSL.

## Section 2: HAZARDOUS INGREDIENTS

| C.A.S.    | CONCENTRATION % | Ingrédient  | V.L.E.           | DL/50  | CL/50  |
|-----------|-----------------|---|------------------|--|--|
| 102-71-6  | 77              | TRIETHANOLAMINE   | 5 MG/M3          | 4920 UL/KG<br>RAT ORAL<br>5846 MG/KG<br>MOUSE ORAL<br>2200 MG/KG<br>RABBIT<br>ORAL<br>> 20 ML/KG<br>RABBIT<br>DERMAL<br>> 16 ML/KG<br>RAT DERMAL | NOT<br>AVAILABLE   |
| 1787-61-7 | <1              | 1-NAPHTHALENESULFONIC ACID,<br>3-HYDROXY-4(1-HYDROXY-2-NAPHTHALENYL)AZO)-7-NITRO-, MONOSODIUM SALT ^F<br>ACIDE<br>1-NAPHTHALENE SULFONIQUE, 3-HYDROXY-1-[(1-HYDROXY-2-NAPHTHALENE)AZO]-7-NITR | NOT<br>AVAILABLE | 17,590 MG/KG<br>RAT ORAL   | NOT<br>AVAILABLE   |
| 67-63-0   | 23              | 2-PROPANOL  | 200 PPM          | 5000 MG/KG<br>RAT ORAL<br>3600 MG/KG<br>MOUSE ORAL<br>6410 MG/KG<br>RABBIT<br>ORAL<br>12,800 MG/KG<br>RABBIT<br>DERMAL                           | 53,000 MG/M3<br>MOUSE<br>INHALATION<br>72,600 MG/M3<br>RAT<br>INHALATION<br>16,000 PPM/8H<br>RAT<br>INHALATION |

## Section 2A: ADDITIONAL INGREDIENT INFORMATION

**Note:** (supplier).  
Cas# 102-71-6 LD50 8680 mg/kg Rat Oral.  
CAS# 67-63-0: TLV 980 mg/m3.

## Section 3: PHYSICAL DATA

**Physical state:** Liquid.  
**Appearance & odor:** Ammonia odour.  
Dark blue.  
**Odor threshold (ppm):** Not available.  
**Vapour pressure (mmHg):** Not available.  
**Vapour density (air=1):** 2  
**Volatiles (%)**  
**By volume:** 99  
**Evaporation rate (butyl acetate = 1):** Not available.  
**Boiling point (°C):** 260-315.6  
**Freezing point (°C):** Not available.  
**pH:** 10.3  
**Specific gravity @ 20 °C:** 1.02  
**Solubility in water (%):** Soluble.  
**Coefficient of water\oil dist.:** Not available.

## Section 4: FIRE & EXPLOSION DATA

**Flammability:** Flammable.  
**Conditions of flammability:** Vapours may travel to a source of ignition and flash back.  
Heat, sparks and open flames.  
**Extinguishing media:** Water spray.  
Alcohol foam, dry chemical or carbon dioxide (CO2).  
**Special procedures:** Self-contained breathing apparatus required.  
Firefighters should wear the usual protective gear.  
Cool fire exposed containers with water spray.  
Use water fog to knock down vapours.  
**Auto-ignition temperature:** Not available.  
**Flash point (°C), method:** 18.8  
**Lower flammability limit (% vol):** 2  
**Upper flammability limit (% vol):** 12  
**Explosion Data**  
**Sensitivity to static discharge:** Take precautionary measures against static discharge.

**Sensitivity to mechanical impact:** Not applicable.  
**Hazardous combustion products:** Carbon monoxide (CO).  
Oxides of nitrogen (NO<sub>x</sub>).  
**Explosive power:** Not available.

**Section 5: REACTIVITY DATA**


**Chemical stability:** Stable under normal conditions.  
**Conditions of instability:** Heat, sparks & open flame.  
Contact with incompatible substances.  
**Hazardous polymerization:** Not available.  
**Incompatible substances:** Strong acids.  
Strong oxidizers.  
**Hazardous decomposition products:** See hazardous combustion products.

**Section 6: TOXICOLOGICAL PROPERTIES**

**Route of entry:** Skin contact, eye contact, inhalation and ingestion.  
Effects of acute exposure  
**Eye contact:** Irritant.  
**Skin contact:** Irritant.  
May stain skin.  
May cause dermatitis.  
**Inhalation:** Irritant.  
May cause narcosis.  
**Ingestion:** Irritant.  
May cause severe irritation of the gastrointestinal tract.  
**Effects of chronic exposure:** Pre-existing eye, skin and respiratory disorders may be aggravated.  
**LD50 of product, species & route:** Not available for mixture, see the ingredients section.  
**LC50 of product, species & route:** Not available for mixture, see the ingredients section.  
**Exposure limit of material:** Not available for mixture, see the ingredients section.  
**Sensitization to product:** Not available.  
**Carcinogenic effects:** Not listed as a carcinogen.  
**Reproductive effects:** Not available.  
**Teratogenicity:** Not available.  
**Mutagenicity:** Not available.  
**Synergistic materials:** Not available.

**Section 7: PREVENTATIVE MEASURES**

**Precautionary Measures**

**Gloves/Type:** 

Wear protective gloves.

**Respiratory/Type:** None required under normal use.




NIOSH approved respirator, if necessary.

**Eye/Type:** 

Safety glasses.

**Footwear/Type:** Safety shoes per local regulations.

**Clothing/Type:** 

Lab coat.

**Other/Type:** Eye wash facility should be in close proximity.  
Emergency shower should be in close proximity.

**Ventilation requirements:** Provide sufficient mechanical ventilation to maintain exposure below TLV.

**Leak/Spill:** Absorb with inert material.  
Wear appropriate protective equipment.  
Ground handling equipment.  
Place in a closed container for disposal.

**Waste disposal:** In accordance with municipal, provincial and federal regulations.

**Handling procedures and equipment:** Keep away from heat, sparks, and open flame.  
Avoid breathing vapors/mists.  
Use adequate ventilation.  
Wear personal protective equipment appropriate to task.  
Wash thoroughly after handling.  
Use proper grounding procedures.  
Avoid contact with skin, eyes and clothing.  
Launder contaminated clothing prior to reuse.  
Do not ingest.

**Storage requirements:** Keep out of direct sunlight.  
Store in a cool and dry place.  
Keep away from ignition sources.

**Special shipping information:** See transportation information.

## Section 8: FIRST AID MEASURES

**Skin contact:** Remove contaminated clothing.  
Wash with water for at least 15 minutes.  
Get medical attention.  
Wash thoroughly with soap and water.

**Eye contact:** Immediately flush eyes with large amounts of water for at least 15 minutes, lifting upper and lower lids. Get prompt medical attention.

**Inhalation:** Remove victim to fresh air.  
Obtain medical attention.

**Ingestion:** Obtain medical attention.  
Do not induce vomiting.  
Never give anything by mouth to an unconscious person.  
Drink a large amount of water.

**Additional information:** The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. This company shall not be held liable for any inaccuracies.

### Section 9: ADDITIONAL INFORMATION

**General note:** This material safety data sheet was prepared from information obtained from various sources, including product suppliers and the Canadian Center for Occupational Health and Safety.

**Data prepared by:** Lowry & Associates  
Agents for Taylor Technologies Inc.  
4 – 1151 Gorham Street  
Newmarket, Ontario  
L3Y 7V1  
Tel: 905-836-0505  
Fax: 905-895-4539.

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