

TOTAL HARDNESS REAGENT

Product: R-0854

Section 1: PRODUCT INFORMATION

Chemical family: Mixture.

Supplier: Lowry & Associates, div. of Chem-Aquascience, Inc
Canadian Master Distributors for Taylor Technologies, Inc.
4-1151 Gorham Street
Newmarket, ON.
L3Y 8Y1
Tel: 905-836-0505
Fax: 905-895-4539.

Emergency Phone Number: Canutec 613-996-6666.
905-625-9117 (Monday - Friday 9 a.m. - 4 p.m.).

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 %	Ingredient Name	T.L.V.	LD/50	LC/50
102-71-6	77	TRIETHANOLAMINE	5 MG/M3	4920 UL/KG RAT ORAL 5846 MG/KG MOUSE ORAL 2200 MG/KG RABBIT ORAL > 20 ML/KG RABBIT DERMAL > 16 ML/KG RAT DERMAL	NOT AVAILABLE
1787-61-7	<1	1-NAPHTHALENESULFONIC ACID, 3-HYDROXY-4((1-HYDROXY-2-NAPHTHALENYL)AZO)-7-NITRO-, MONOSODIUM SALT ^F ACIDE 1-NAPHTHALENE SULFONIQUE,	NOT AVAILABLE	17,590 MG/KG RAT ORAL	NOT AVAILABLE

		3-HYDROXY-1-[(1-HYDROXY-2-NAPHTHALENE)AZO]-7-NITR			
67-63-0	23	2-PROPANOL	200 PPM	5000 MG/KG RAT ORAL	53,000 MG/M3 MOUSE INHALATION
				3600 MG/KG MOUSE ORAL	72,600 MG/M3 RAT INHALATION
				6410 MG/KG RABBIT ORAL	16,000 PPM/8H RAT INHALATION
				12,800 MG/KG RABBIT DERMAL	

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 (°C): 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_x).

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.

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