SAFETY DATA SHEET

1. Identification

Product identifier **HYDRAZINE MONOHYDRATE, REAGENT**

Other means of identification

Product code 1160

Recommended use professional, scientific and technical activities: other professional, scientific and technical activities

Recommended restrictions None known.

Manufacturer/Importer/Supplier/Distributor information

Manufacturer

Company name	GFS Chemicals, Inc.	
Address	P.O. Box 245 Powell, OH 43065 United States	
Telephone	Phone	740-881-5501
	Toll Free	800-858-9682
	Fax	740-881-5989
Website	www.gfschemicals.com	
E-mail	service@gfschemicals.com	
Emergency phone number	Emergency Assistance	Chemtrec 800-424-9300

2. Hazard(s) identification

Physical hazards	Flammable liquids	Category 3
Health hazards	Acute toxicity, oral	Category 3
	Acute toxicity, dermal	Category 2
	Acute toxicity, inhalation	Category 3
	Skin corrosion/irritation	Category 1
	Serious eye damage/eye irritation	Category 1
	Sensitization, skin	Category 1
	Carcinogenicity	Category 1
Environmental hazards	Hazardous to the aquatic environment, acute hazard	Category 1
	Hazardous to the aquatic environment, long-term hazard	Category 1

OSHA defined hazards Not classified.

Label elements

Signal word Danger

Hazard statement Flammable liquid and vapor. Toxic if swallowed. Fatal in contact with skin. Causes severe skin burns and eye damage. May cause an allergic skin reaction. Causes serious eye damage. Toxic if inhaled. May cause cancer. Very toxic to aquatic life. Very toxic to aquatic life with long lasting effects.

Precautionary statement

Prevention Do not handle until all safety precautions have been read and understood. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Keep container tightly closed. Ground/bond container and receiving equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Do not breathe mist or vapor. 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.

Response	If swallowed: Rinse mouth. Do NOT induce vomiting. If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. If inhaled: Remove person to fresh air and keep comfortable for breathing. If 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. Collect spillage. Wash contaminated clothing before reuse.
Storage	Store in a well-ventilated place. Keep container tightly closed. Store in a well-ventilated place. Keep cool. Store locked up.
Disposal	Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.
Hazard(s) not otherwise classified (HNOC)	None known.
Supplemental information	None.

3. Composition/information on ingredients

Substances

Chemical name	Common name and synonyms	CAS number	%
HYDRAZINE MONOHYDRATE		7803-57-8	100

*Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. First-aid measures

Inhalation	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Oxygen or artificial respiration if needed. Do not use mouth-to-mouth method if victim inhaled the substance. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Call a POISON CENTER or doctor/physician.
Skin contact	Remove contaminated clothing immediately and wash skin with soap and water. Call a physician or poison control center immediately. Chemical burns must be treated by a physician. Wash contaminated clothing before reuse.
Eye contact	Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician or poison control center immediately.
Ingestion	Call a physician or poison control center immediately. Rinse mouth. Do not induce vomiting. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. Do not use mouth-to-mouth method if victim ingested the substance. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.
Most important symptoms/effects, acute and delayed	Burning pain and severe corrosive skin damage. Convulsions. Dizziness. Nausea. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. Irritation of nose and throat.
Indication of immediate medical attention and special treatment needed	Provide general supportive measures and treat symptomatically. Thermal burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital. Chemical burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital. Keep victim warm. Keep victim under observation. Symptoms may be delayed.
General information	Take off immediately all contaminated clothing. IF exposed or concerned: Get medical advice/attention. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance. Wash contaminated clothing before reuse. Discard any shoes or clothing items that cannot be decontaminated.

5. Fire-fighting measures

Suitable extinguishing media	Alcohol resistant foam. Water fog. Dry chemical powder. Carbon dioxide (CO2).
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.
Specific hazards arising from the chemical	Vapors may form explosive mixtures with air. Vapors may travel considerable distance to a source of ignition and flash back. During fire, gases hazardous to health may be formed.
Special protective equipment and precautions for firefighters	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Fire fighting equipment/instructions	In case of fire and/or explosion do not breathe fumes. Move containers from fire area if you can do so without risk.
Specific methods	Use standard firefighting procedures and consider the hazards of other involved materials.
General fire hazards	Flammable liquid and vapor.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep out of low areas. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Wear appropriate protective equipment and clothing during clean-up. Do not breathe mist or vapor. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

Methods and materials for containment and cleaning up

Refer to attached safety data sheets and/or instructions for use. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Take precautionary measures against static discharge. Use only non-sparking tools. Keep combustibles (wood, paper, oil, etc.) away from spilled material. This product is miscible in water. This material is classified as a water pollutant under the Clean Water Act and should be prevented from contaminating soil or from entering sewage and drainage systems which lead to waterways. Should not be released into the environment.

Large Spills: Stop leak if you can do so without risk. Use water spray to reduce vapors or divert vapor cloud drift. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Clean up in accordance with all applicable regulations. Following product recovery, flush area with water.

Small Spills: Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination. This material and its container must be disposed of as hazardous waste. For waste disposal, see section 13 of the SDS.

Never return spills in original containers for re-use.

Environmental precautions

Avoid release to the environment. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground. Inform appropriate managerial or supervisory personnel of all environmental releases.

7. Handling and storage

Precautions for safe handling

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. Explosion-proof general and local exhaust ventilation. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Use non-sparking tools and explosion-proof equipment. Do not breathe mist or vapor. Do not get in eyes, on skin, or on clothing. Avoid prolonged exposure. Do not taste or swallow. When using, do not eat, drink or smoke. Should be handled in closed systems, if possible. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Avoid release to the environment. Observe good industrial hygiene practices. Wash contaminated clothing before reuse.

Conditions for safe storage, including any incompatibilities

Store locked up. Keep away from heat, sparks and open flame. Prevent electrostatic charge build-up by using common bonding and grounding techniques. Material should be stored under an inert atmosphere. Store in a cool, dry place out of direct sunlight. Store in original tightly closed container. Store in a well-ventilated place. Keep in an area equipped with sprinklers. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Material	Type	Value
HYDRAZINE MONOHYDRATE (CAS 7803-57-8)	PEL	1.3 mg/m3
		1 ppm

US. ACGIH Threshold Limit Values

Material	Type	Value
HYDRAZINE MONOHYDRATE (CAS 7803-57-8)	TWA	0.01 ppm

US. NIOSH: Pocket Guide to Chemical Hazards

Material	Type	Value
HYDRAZINE MONOHYDRATE (CAS 7803-57-8)	Ceiling	0.04 mg/m3
		0.03 ppm

Biological limit values No biological exposure limits noted for the ingredient(s).

Exposure guidelines

US - Tennessee OELs: Skin designation

HYDRAZINE MONOHYDRATE (CAS 7803-57-8) Can be absorbed through the skin.

US. ACGIH Threshold Limit Values

HYDRAZINE MONOHYDRATE (CAS 7803-57-8) Can be absorbed through the skin.

US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants

HYDRAZINE (CAS 7803-57-8) Can be absorbed through the skin.

US. Minnesota Hazardous Substances List (Minn. Rules 5206.0400).

HYDRAZINE MONOHYDRATE (CAS 7803-57-8) Skin designation applies.

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

HYDRAZINE MONOHYDRATE (CAS 7803-57-8) Can be absorbed through the skin.

Appropriate engineering controls Explosion-proof general and local exhaust ventilation. Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Eye wash facilities and emergency shower must be available when handling this product.

Individual protection measures, such as personal protective equipment

Eye/face protection Chemical respirator with organic vapor cartridge and full facepiece.

Skin protection

Hand protection Wear appropriate chemical resistant gloves.

Other Wear appropriate chemical resistant clothing. Use of an impervious apron is recommended.

Respiratory protection Chemical respirator with organic vapor cartridge and full facepiece.

Thermal hazards Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations When using do not smoke. Keep away from food and drink. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Contaminated work clothing should not be allowed out of the workplace.

9. Physical and chemical properties

Appearance Clear.

Physical state Liquid.

Form Liquid.

Color Colorless.

Odor Ammoniacal.

Odor threshold Not available.

pH 10.5 (1% solution)

Melting point/freezing point -14.8 °F (-26 °C)

Initial boiling point and boiling range 236.3 °F (113.5 °C) 101.325 kPa

Flash point 165.2 °F (74.0 °C) Closed Cup

Evaporation rate Not available.

Flammability (solid, gas) Not available.

Upper/lower flammability or explosive limits

Flammability limit - lower (%) Not available.

Flammability limit - upper (%) Not available.

Explosive limit - lower (%) Not available.

Explosive limit - upper (%)	Not available.
Vapor pressure	1.92 kPa at 25 °C
Vapor density	Not available.
Relative density	Not available.
Solubility(ies)	
Solubility (water)	Miscible
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	74 °F (23.33 °C)
Decomposition temperature	Not available.
Viscosity	Not available.
Other information	
Density	1.03 g/cm3
Flammability class	Combustible II estimated
Flash point class	Combustible IIIA
Molecular formula	H2NNH2.H2O
Molecular weight	50.06 g/mol
Specific gravity	1.03 at 0 °C

10. Stability and reactivity

Reactivity	Reacts violently with strong acids. This product may react with oxidizing agents.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	Hazardous polymerization does not occur.
Conditions to avoid	Avoid heat, sparks, open flames and other ignition sources. Avoid temperatures exceeding the flash point. Reacts violently with strong acids. This product may react with oxidizing agents. Do not mix with other chemicals. Contact with incompatible materials.
Incompatible materials	Acids. Oxidizing agents.
Hazardous decomposition products	May include oxides of nitrogen.

11. Toxicological information

Information on likely routes of exposure

Inhalation	Toxic if inhaled.
Skin contact	Fatal in contact with skin. Causes severe skin burns. May cause an allergic skin reaction.
Eye contact	Causes serious eye damage.
Ingestion	Toxic if swallowed. Causes digestive tract burns.
Symptoms related to the physical, chemical and toxicological characteristics	Burning pain and severe corrosive skin damage. Convulsions. Dizziness. Nausea. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. Irritation of nose and throat.

Information on toxicological effects

Acute toxicity Fatal in contact with skin. Toxic if inhaled. Toxic if swallowed. May cause an allergic skin reaction.

Product	Species	Test Results
HYDRAZINE MONOHYDRATE (CAS 7803-57-8)		
Acute		
Dermal		
LD50	Guinea pig	190 mg/kg
	Rabbit	93 - 283 mg/kg
		91 mg/kg
Inhalation		
LC50	Mouse	252 mg/l, 4 Hours
	Rat	570 mg/l, 4 Hours
Oral		
LD50	Guinea pig	26 mg/kg

Product	Species	Test Results
	Mouse	59 mg/kg
	Rabbit	35 mg/kg
	Rat	60 mg/kg
Other		
LD50	Dog	25 mg/kg
	Mouse	62 mg/kg
		57 mg/kg
	Rabbit	20 mg/kg
	Rat	59 mg/kg
		55 mg/kg

* Estimates for product may be based on additional component data not shown.

Skin corrosion/irritation Causes severe skin burns and eye damage.

Serious eye damage/eye irritation Causes serious eye damage.

Respiratory or skin sensitization

Respiratory sensitization Not available.

Skin sensitization May cause an allergic skin reaction. Causes irritation.

Germ cell mutagenicity No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

Carcinogenicity May cause cancer.

IARC Monographs. Overall Evaluation of Carcinogenicity

HYDRAZINE MONOHYDRATE (CAS 7803-57-8) 2B Possibly carcinogenic to humans.

US. National Toxicology Program (NTP) Report on Carcinogens

HYDRAZINE MONOHYDRATE (CAS 7803-57-8) Reasonably Anticipated to be a Human Carcinogen.

Reproductive toxicity This product is not expected to cause reproductive or developmental effects.

Specific target organ toxicity - single exposure Not classified.

Specific target organ toxicity - repeated exposure Not classified.

Aspiration hazard Not available.

Chronic effects Hazardous by WHMIS criteria. Prolonged inhalation may be harmful. Prolonged exposure may cause chronic effects.

12. Ecological information

Ecotoxicity Very toxic to aquatic life with long lasting effects.

Product		Species	Test Results
HYDRAZINE MONOHYDRATE (CAS 7803-57-8)			
Aquatic			
Crustacea	EC50	Water flea (Daphnia pulex)	0.85 - 1.21 mg/l, 24 hours
			0.39 - 0.71 mg/l, 24 hours
			0.22 - 0.36 mg/l, 36 hours
			0.16 - 0.23 mg/l, 48 hours
			0.15 - 0.22 mg/l, 36 hours
			0.13 - 0.19 mg/l, 48 hours
			0.13 - 0.19 mg/l, 48 hours
	LC50	Scud (Gammarus pseudolimnaeus)	0.58 - 0.84 mg/l, 96 hours
		Scud (Hyalella azteca)	0.01 - 0.12 mg/l, 48 hours
		Water flea (Daphnia magna)	0.81 mg/l, 24 hours
Fish	EC50	Bluegill (Lepomis macrochirus)	0.226 - 0.348 mg/l, 48 hours
	LC50	Bluegill (Lepomis macrochirus)	219 - 335 mg/l, 1 hours
			60.9 - 79.7 mg/l, 1 hours

Product	Species	Test Results
		34.4 - 40.3 mg/l, 1 hours
		9 - 19.8 mg/l, 6 hours
		8.3 - 19.7 mg/l, 6 hours
		5.3 - 11 mg/l, 24 hours
		2.5 - 5.9 mg/l, 6 hours
		2.4 - 5.6 mg/l, 24 hours
		1.2 - 2.3 mg/l, 96 hours
		1.1 - 2.6 mg/l, 24 hours
		0.9 - 1.6 mg/l, 96 hours
		0.7 - 1.3 mg/l, 96 hours
		0.54 - 1.81 mg/l, 96 hours
		0.54 - 1.31 mg/l, 96 hours
		0.54 - 1.31 mg/l, 96 hours
	Channel catfish (Ictalurus punctatus)	0.32 - 2.07 mg/l, 96 hours
	Crucian carp (Carassius carassius)	1.48 mg/l, 24 hours
	Fathead minnow (Pimephales promelas)	7.24 - 11.6 mg/l, 18 hours
		6.2 - 9.66 mg/l, 24 hours
		5.01 - 7.69 mg/l, 48 hours
		4.83 - 7.4 mg/l, 72 hours
		4.83 - 7.4 mg/l, 96 hours
		2.07 - 3.89 mg/l, 96 hours
		1.81 - 2.79 mg/l, 96 hours
	Golden shiner (Notemigonus crysoleucas)	0.57 - 1.84 mg/l, 96 hours
	Guppy (Poecilia reticulata)	2.01 - 10.51 mg/l, 24 hours
		1.83 - 8.69 mg/l, 48 hours
		1.79 - 8.29 mg/l, 72 hours
		1.79 - 8.29 mg/l, 96 hours
		1.59 - 6.91 mg/l, 24 hours
		0.58 - 4.31 mg/l, 48 hours
		0.41 - 1.64 mg/l, 72 hours
		0.28 - 1.34 mg/l, 96 hours
	Threespine stickleback (Gasterosteus aculeatus)	8.5 mg/l, 24 hours
		5 mg/l, 96 hours
		5 - 8.8 mg/l, 96 hours
		3.4 mg/l, 96 hours
	Zebra danio (Danio rerio)	3.18 mg/l, 24 hours
		1.17 mg/l, 24 hours

* Estimates for product may be based on additional component data not shown.

Persistence and degradability No data is available on the degradability of this product.

Bioaccumulative potential No data available.

Mobility in soil No data available.

Other adverse effects No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Disposal instructions Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.

Local disposal regulations Dispose in accordance with all applicable regulations.

Hazardous waste code The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

US RCRA Hazardous Waste U List: Reference

HYDRAZINE MONOHYDRATE (CAS 7803-57-8) U133

Waste from residues / unused products Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

Contaminated packaging Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied.

14. Transport information

DOT

UN number	UN2030
UN proper shipping name	Hydrazine aqueous solution, with more than 37% hydrazine, by mass, MARINE POLLUTANT
Transport hazard class(es)	
Class	8
Subsidiary risk	6.1(PGI, II)
Label(s)	8, 6.1
Packing group	II
Environmental hazards	
Marine pollutant	Yes
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.
Special provisions	B16, B53, IB2, T7, TP2, TP13
Packaging exceptions	None
Packaging non bulk	202
Packaging bulk	243

IATA

UN number	UN2030
UN proper shipping name	Hydrazine, aqueous solution with more than 37% hydrazine by weight
Transport hazard class(es)	
Class	8
Subsidiary risk	6.1(PGI, II)
Packing group	II
Environmental hazards	No.
ERG Code	8P
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.
Other information	
Passenger and cargo aircraft	Forbidden
Cargo aircraft only	Allowed.

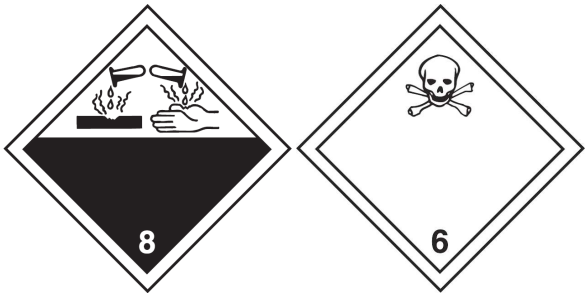
IMDG

UN number	UN2030
UN proper shipping name	HYDRAZINE, AQUEOUS SOLUTION with more than 37% hydrazine, by mass, MARINE POLLUTANT
Transport hazard class(es)	
Class	8
Subsidiary risk	6.1(PGI, II)
Packing group	II
Environmental hazards	
Marine pollutant	Yes
EmS	F-A, S-B
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not established.

DOT

IATA; IMDG



Marine pollutant

General information DOT Regulated Marine Pollutant. IMDG Regulated Marine Pollutant.

15. Regulatory information

US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.
All components are on the U.S. EPA TSCA Inventory List.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

HYDRAZINE MONOHYDRATE (CAS 7803-57-8) Listed.

SARA 304 Emergency release notification

HYDRAZINE MONOHYDRATE (CAS 7803-57-8) 1 LBS

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories
Immediate Hazard - Yes
Delayed Hazard - Yes
Fire Hazard - Yes
Pressure Hazard - No
Reactivity Hazard - No

SARA 302 Extremely hazardous substance

Chemical name	CAS number	Reportable quantity	Threshold planning quantity	Threshold planning quantity, lower value	Threshold planning quantity, upper value
HYDRAZINE MONOHYDRATE	7803-57-8	1	1000 lbs		

SARA 311/312 Hazardous chemical Yes

SARA 313 (TRI reporting)

Chemical name	CAS number	% by wt.
HYDRAZINE MONOHYDRATE	7803-57-8	100

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

HYDRAZINE MONOHYDRATE (CAS 7803-57-8)

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

HYDRAZINE MONOHYDRATE (CAS 7803-57-8)

Safe Drinking Water Act (SDWA) Contaminate candidate list

US state regulations WARNING: This product contains a chemical known to the State of California to cause cancer.

US. California Controlled Substances. CA Department of Justice (California Health and Safety Code Section 11100)

Not listed.

US. Massachusetts RTK - Substance List

HYDRAZINE MONOHYDRATE (CAS 7803-57-8)

US. New Jersey Worker and Community Right-to-Know Act

HYDRAZINE MONOHYDRATE (CAS 7803-57-8)

US. Pennsylvania Worker and Community Right-to-Know Law

HYDRAZINE MONOHYDRATE (CAS 7803-57-8)

US. Rhode Island RTK

HYDRAZINE MONOHYDRATE (CAS 7803-57-8)

US. California Proposition 65

WARNING: This product contains a chemical known to the State of California to cause cancer.

US - California Proposition 65 - CRT: Listed date/Carcinogenic substance

HYDRAZINE MONOHYDRATE (CAS 7803-57-8) Listed: January 1, 1988

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)
A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

Issue date June-08-2015

Version # 01

Disclaimer GFS Chemicals cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information in the sheet was written based on the best knowledge and experience currently available.

Revision Information Product and Company Identification: Alternate Trade Names
Composition / Information on Ingredients: Disclosure Overrides
Physical & Chemical Properties: Multiple Properties
Transport Information: Proper Shipping Name/Packing Group