Material Safety Data Sheet

Nitric Acid (RXSOL-19-1390-060)

1. Product and Company Identifaction

Product Name	:	**NITRIC ACID**
Product Type	:	**PASSIVATION GRADE**

Company Details:

RX MARINE INTERNATIONAL
105, A wing , BSEL , TECH PARK.
VASHI ,NEW BOMBAY 400703 INDIA

Phone	:	+91 22 65113333 / 5555 / 9999 / 27611360
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2. Composition / informationon ingredients

Chemica Name	CAS #	% by weight
NITRIC ACID	7697-37-2	60.0- 70.0
WATER	7732-18-5	30.0- 40.0

3. Hazards Identification

Eye	Can cause permanent eye injury. Symptoms include stinging, tearing, redness, and swelling of eyes. Can injure the cornea and cause blindness.
Skin	Can cause permanent skin damage. Symptoms may include redness, burning, and swelling of skin, burns, and other skin damage
Swallowing	Swallowing this material may be harmful or fatal. Symptoms may include severe stomach and intestinal irritation (nausea, vomiting, diarrhea), abdominal pain, and vomiting of blood. Swallowing this material may cause burns and destroy tissue in the mouth, throat, and digestive tract. Low blood pressure and shock may occur as a result of severe tissue injury.
Inhalation	It is possible to breathe this material under certain conditions of handling and use (for example, during heating, spraying, or stirring). Breathing this material may be harmful or fatal. Symptoms may include severe irritation and burns to the nose, throat, and respiratory tract.
Symptoms of Exposure	No Data
Target Organ Effects	No Data
Developmental Information	No Data
Cancer Information	No Data
Other Health Effects	No Data

Primary Route(s) of Entry
Inhalation, Skin contact, Eye contact

4. First Aid Measures

Eyes	If material gets into the eyes, immediately flush eyes gently with water for at least 15 minutes while holding eyelids apart. If symptoms develop as a result of vapor exposure, immediately move individual away from exposure and into fresh air before flushing as recommended above. Seek immediate medical attention..
Skin	Immediately flush skin with water for at least 15 minutes while removing contaminated clothing and shoes. Seek immediate medical attention. Wash clothing before reuse and discard contaminated shoes.
Swallowing	Seek immediate medical attention. Do not induce vomiting. Vomiting will cause further damage to the mouth and throat. If individual is conscious and alert, immediately rinse mouth with water and give milk or water to drink. If possible, do not leave individual unattended
Inhalation	If symptoms develop, immediately move individual away from exposure and into fresh air. Seek immediate medical attention; keep person warm and quiet. If person is not breathing, begin artificial respiration. If breathing is difficult, administer oxygen.
Note to Physicians	Preexisting disorders of the following organs (or organ systems) may be aggravated by exposure to this material: skin, lung (for example, asthma-like conditions).

5. Fire-fighting Measures

Flash Point	Not applicable
Explosive Limit	Not applicable
Autoignition Temperature	No data
Hazardous Products of Combustion	May form: acid vapors, nitrogen compounds.

Fire and Explosion Hazards	No data
Extinguishing Media	water fog.
Fire Fighting Instructions	Wear a self-contained breathing apparatus with a full facepiece operated in the positive pressure demand mode with appropriate turn-out gear and chemical resistant personal protective equipment. Refer to the personal protective equipment section of this MSDS.
NFPA Rating	Health - 3, Flammability - 0, Reactivity - 0

6. Accidental Release Measures

Small Spill	Cover the contaminated surface with sodium bicarbonate or a soda ash/flaked lime mixture (50-50). Mix and add water if necessary to form a slurry. Scoop up slurry and wash site with soda ash solution.Proper mixing procedures are essential. Trained personnel should conduct this procedure.Untrained personnel should be removed from the spill area.
Large Spill	Eliminate all ignition sources (flares, flames including pilot lights, electrical sparks). Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed. Stop spill at source. Prevent from entering drains, sewers, streams or other bodies of water. Prevent from spreading. If runoff occurs, notify authorities as required. Pump or vacuum transfer spilled product to clean containers for recovery. Absorb unrecoverable product. Transfer contaminated absorbent, soil and other materials to containers for disposal.

7. Handling and Storage

Handling	Containers of this material may be hazardous when emptied. Since emptied containers retain product residues (vapor, liquid, and/or solid), all hazard precautions given in the data sheet must be observed. Addition to water releases heat which can result in violent boiling and spattering. Always add slowly and in small amounts. Never use hot water. Never add water to acids. Always add acids to water.

8. Exposure controls and personal protection

Eye Protection	Chemical splash goggles and face shield (8" min.) in compliance with OSHA regulations are advised; however, OSHA regulations also permit other type safety glasses. (Consult your industrial hygienist.)
Skin Protection	Wear resistant gloves such as: neoprene, polyvinyl chloride, To prevent skin contact, wear impervious clothing and boots..
Respiratory Protections	If workplace exposure limit(s) of product or any component is exceeded (see exposure guidelines), a NIOSH/MSHA approved air supplied respirator is advised in absence of proper environmental control. OSHA regulations also permit other NIOSH/MSHA respirators (negative pressure type) under specified conditions (see your industrial hygienist). Engineering or administrative controls should be implemented to reduce exposure.
Engineering Controls	Provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below TLV(s).

Exposure Guidelines Component	NITRIC ACID (7697-37-2) OSHA VPEL 2.000 ppm - TWA OSHA VPEL 4.000 ppm - STEL ACGIH TLV 2.000 ppm - TWA ACGIH TLV 4.000 ppm - STEL WATER (7732-18-5) No exposure limits established

9. Physical and chemical properties

Boiling Point	(for product) 185.0 F (85.0 C) @ 760 mmHg
Vapor Pressure	(for product) 51.000 mmHg @ 77.00 F
Specific Vapor Density	2.200 @ AIR=1
Specific Gravity	1.424 @ 77.00 F
Liquid Density	11.850 lbs/gal @ 77.00 F 1.424 kg/l @ 25.00 C
Percent Volatiles	100.0 %
Evaporation Rate	SLOWER THAN ETHYL ETHER
Appearance	No data
State	LIQUID
Physical Form	HOMOGENEOUS SOLUTION
Color	CLEAR,YEL-RED-BRN, ACRID ODOR
Odor	No data
pH	No data\

10. Stability and reactivity

Hazardous Polymerization	Product will not undergo hazardous polymerization.
Hazardous Decomposition	May form: acid vapors, nitrogen compounds.
Chemical Stability	Stable.

Incompatibility	Avoid contact with: organic materials, reducing agents, strong alkalies, Acid reacts with most metals to release hydrogen gas which can form explosive mixtures with air..

11. Toxicological information

No Data

12. Ecological information

No Data

13. Disposal considerations

Waste Management Information
Collect and add slowly to large volume of agitated solution of soda ash and slaked lime. Add neutralized solution to excess running water in accordance with applicable regulations.

14. Transport information

DOT Information - 49 CFR 172.101
DOT Description:
NITRIC ACID, RED FUMING - HAZARD ZONE B,8,UN2032,I
Container/Mode:
55 GAL DRUM/TRUCK PACKAGE
NOS Component:
None
RQ (Reportable Quantity) - 49 CFR 172.101
Product Quantity (lbs) Component
1064 NITRIC ACID

15. Regulatory information

US Federal Regulations
TSCA (Toxic Substances Control Act) Status
TSCA (UNITED STATES) The intentional ingredients of this product are listed.
CERCLA RQ - 40 CFR 302.4(a)
Component RQ (lbs)
NITRIC ACID 1000
CERCLA RQ - 40 CFR 302.4(b)