1. Product and Company Identifaction

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Porduct Name	Nitric acid fuming 100%
Part Number	RXSOL-19-1390-060

Company Details:

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

Branch : Kandla, Mumbai , Chennai, Vizag, Kolkata, UAE , OMAN , CANADA and KENYA

Phone	+91 22 20871200 - 1400
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Email	mail@rxmarine.com
Website	www.rxmraine.com

2. Composition / Information on ingredients

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Chemical Name	Cas No	EC No	Weight	Formula
Nitric acid	7697-37-2	231-714-2	63,01 g/mol	HNO_3

3. Hazards Identification

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Signal Word	Danger
Hazard Statements	H272 May intensify fire; oxidizer. H290 May be corrosive to metals. H314 Causes severe skin burns and eye damage. H330 Fatal if inhaled.
Precautionary statements	P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P220 Keep away from clothing and other combustible materials. P280 Wear protective gloves/ protective clothing/ eye protection/ face protection. P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. P304 + P340 + P310 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/ doctor. P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Supplemental Hazard information (EU) EUH071 Corrosive to the respiratory tract.
Classification of the substance or mixture	None
Supplemental Hazard Statements	EUH071 Corrosive to the respiratory tract.
Other hazards	This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

4. First Aid Measures

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General advice	First aiders need to protect themselves. Show this material safety data sheet to the doctor in attendance.
If inhaled	After inhalation: fresh air. Immediately call in physician. If breathing stops: immediately apply artificial respiration, if necessary also oxygen.
Eye Contact	After eye contact: rinse out with plenty of water. Immediately call in ophthalmologist. Remove contact lenses.

Swallowed	After swallowing: make victim drink water (two glasses at most), avoid vomiting (risk of perforation). Call a physician immediately. Do not attempt to neutralise
Skin Contact	In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower. Call a physician immediately.
Inhalation	None
Ingestion	None
Most important symptoms and effects, both acute and delaye	The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11
Indication of any immediate medical attention and special treatment needed	No data available

5. Fire-fighting Measures

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Suitable extinguishing media	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Unsuitable extinguishing media	For this substance/mixture no limitations of extinguishing agents are given.
Special hazards arising from the substance or mixture	Nature of decomposition products not known. Not combustible. Fire may cause evolution of: nitrogen oxides, nitrous gases Has a fire-promoting effect due to release of oxygen. Ambient fire may liberate hazardous vapours.
Further information	Suppress (knock down) gases/vapors/mists with a water spray jet. Prevent fire extinguishing water from contaminating surface water or the ground water system.
Hazardous combustion products	None
Advice for firefighters	Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.
Protective Equipment	Use personal protective equipment.
Specific Hazards Arising from the Chemical	None

6. Accidental Release Measures

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Personal precautions, protective equipment and emergency procedures	Advice for non-emergency personnel: Do not breathe vapors, aerosols. Avoid substance contact. Ensure adequate ventilation. Evacuate the danger area, observe emergency procedures, consult an expert. For personal protection see section 8.
Spillage	None
Personal Protection	None
Enviromental Precaution	Do not let product enter drains.
Methods and materials for containment and cleaning	Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up carefully with liquid-absorbent material (e.g. Chemizorb®). Dispose of properly. Clean up affected area
Reference to other sections	For disposal see section 13.

7. Handling and Storage

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Advice on protection against fire and explosion	Keep away from open flames, hot surfaces and sources of ignition.
Incompatible materials	Keep away from alkalis, strong oxidizing agents and metals. Provide containment walls of adequate capacity to hold any accidental spills.
Hygiene measures	Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance. For precautions see section 2.2.

Advice on safe handling	Work under hood. Do not inhale substance/mixture. Avoid generation of vapours/aerosols.
Conditions for safe storage, including any incompatibilities	No data available
Storage conditions	No metal or light-weight-metal containers. No metal containers. Protected from light.Tightly closed. Keep locked up or in an area accessible only to qualified or authorized persons. Separately or together with other oxidising substances only and away from sources of ignition and heat.Because of their oxidation potential these products can raise the burning rate of combustible substances substantially or ignite combustible substances on contact with them. Recommended storage temperature see product label.
Storage class	Storage class (TRGS 510): 5.1A: Strongly oxidizing hazardous materials
Specific end use(s)	Apart from the uses mentioned in section 1.2 no other specific uses are stipulated
Advice on general occupational hygiene	Advice on safe handling Observe label precautions. Change contaminated clothing. Wash hands after working with substance.

8. Exposure controls and personal protection

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Exposure controls	Personal protective equipment
Engineering Control	None
Eye/face protection	Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Tightly fitting safety goggles
Body Protection	Acid-resistant protective clothing
Skin protection	This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN374 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de). Splash contact Material: butyl-rubber
Respiratory protection	Recommended Filter type: Filter E-(P3) The entrepeneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be properly documented. Not required; except in case of aerosol formation.
Other Protection Measure	None
Control of environmental exposure	Do not let product enter drains.

9. Physical and chemical properties

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Physical state	liquid
Colour	yellow
Odour	stinging
Odor Threshold	Not Applicable
pH	< 1 at 20 °C
Melting Point	-41,59 °C
Boiling Point	100 °C at 1.013 hPa
Evaporation Rate	Not Applicable
Flammability (solid, gas)	No data available
Explosive limits	No Data Available
Upper/lower flammability or explosive limits	No data available
Autoignition temperature	No data available
Decomposition temperature	No data available
Vapour pressure	10 hPa at 20 °C

Viscosity	Viscosity, kinematic: No data available Viscosity, dynamic: 0,746 mPa.s at 25 °C
Density	1,9 g/cm3 at 20 °C
Relative Density	No data available
Specific Gravity	No data available
Partition coefficient	No data available
Explosive properties	No data available
Solubility	1.000 g/l at 20 °C - soluble, (development of heat)
Ignition temperature	No information available.
Particle characteristics	No data available

10. Stability and reactivity

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Reactivity	strong oxidising agent
Chemical stability	Sensitivity to light The product is chemically stable under standard ambient conditions (room temperature) .
Possibility of hazardous reactions	Risk of explosion with: Acetone acetonitrile acetylidene Alcohols anilines antimony hydride arsenic hydride organic combustible substances phosphides benzene/benzene derivatives Amines alkenes Halogenated hydrocarbon Ether hydrazine and derivatives Sulfides Dioxane acetic acid Acetic anhydride Flurine
Conditions to avoid	May discolor on exposure to air and light. no information available
Incompatible materials	Cellulose, MetalsContact with metals may lead to the formation of nitrous gases and hydrogen.
Hazardous decomposition products	In the event of fire: see section 5

11. Toxicological information

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Acute toxicity	Oral: No data available Acute toxicity estimate Inhalation - 4 h - 0,05 mg/l - vapor (Expert judgment) Dermal: No data available
Skin corrosion/irritation	Skin - Rabbit Result: Causes severe burns. Remarks: (IUCLID) Remarks: Causes poorly healing wounds
Serious eye damage/irritation	Eyes - Rabbit Result: Causes burns. Remarks: (IUCLID) Remarks: Causes serious eye damage.
Respiratory or skin sensitization	No data available
Carcinogenicity	No data available
Germ cell mutagenicity	Test Type: Ames test Test system: Salmonella typhimurium Metabolic activation: with and without metabolic activation Method: OECD Test Guideline 471 Result: negative
Reproductive toxicity	No data available
Specific target organ toxicity -single exposure	No data available
Additional Information	Assessment : The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher. Liver - Irregularities - Based on Human Evidence

12. Ecological information

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Persistence and degradability	The methods for determining the biological degradability are not applicable to inorganic substances.
Toxicity to fish	No data available
Toxicity to daphnia and other aquatic invertebrates	No data available
Toxicity	No data available

Toxicity to bacteria	No data available
Toxicity to algae	No data available
Products Biodegradation	No data available
Mobility in soil	No data available
Results of PBT and vPvB assessment	This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.
Endocrine disrupting properties	Assessment : The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.
Other adverse effects	Biological effects: Harmful effect due to pH shift. Hazard for drinking water supplies. Forms corrosive mixtures with water even if diluted. Discharge into the environment must be avoided. May be harmful to aquatic organisms due to the shift of the pH.

13. Disposal considerations

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No data available

14. Transport information

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UN number	ADR/RID: 2032 IMDG: 2032 IATA: 2032
UN proper shipping name	ADR/RID: NITRIC ACID, RED FUMING IMDG: NITRIC ACID, RED FUMING IATA: Nitric acid, red fuming Passenger Aircraft: Not permitted for transport Cargo Aircraft: Not permitted for transport
Transport hazard class(es)	ADR/RID: 8 (5.1, 6.1) IMDG: 8 (5.1, 6.1) IATA:8 (5.1, 6.1)
Packaging group	ADR/RID: I IMDG: I IATA:-
Environmental hazards	ADR/RID: no IMDG Marine pollutant: no IATA: no
Special precautions for user	Tunnel restriction code : (C/D) Further information : No data available
Further information	None

15. Regulatory information

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Safety, health and environmental regulations/legislation specific for the substance or mixture	This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006.
Other regulations	Observe work restrictions regarding maternity protection in accordance to Dir 92/85/EEC or stricter national regulations where applicable. Take note of Dir 94/33/EC on the protection of young people at work.
Chemical Safety Assessment	A Chemical Safety Assessment has been carried out for this substance.

16. Other information

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Other Information	The information above is believed to be accurate and 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 weassume 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 event shall 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 Rx Marine International has been advised of the possibility of such damages.

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