



DEEPAK FERTILISERS
AND PETROCHEMICALS
CORPORATION LIMITED

MSDS - STRONG NITRIC ACID (SNA)

SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Chemical Name	: Nitric Acid 68 -70 %
Chemical Formula	: HNO ₃
CAS Number	: 7697-37-2 UN No. : 2031
Synonyms	: Aqua fortis, Azotic Acid
General Use	: Industrial chemicals
Manufacturer's Name	: Deepak Fertilisers And Petrochemicals Corporation. Ltd.
Address :	: Plot K-1, MIDC Indl Area, Talaja A.V., Dist: Raigad – 410 208
Telephone no. for info.	: +91 - 022 - 50684000

SECTION 2 - COMPOSITION / INFORMATION ON INGREDIENTS

Composition	: Nitric Acid 68- 70%
Hazardous components	: Nitric Acid
ACGIH TLV	: 2 ppm ,STEL - 4ppm (10.0mg/m ³)

SECTION 3 - HAZARDS IDENTIFICATION

Primary Entry Routes	: Inhalation, skin, eyes and ingestion
Acute Effects	: Inhalation of vapours can cause breathing difficulties,severe exposure may lead to pneumonia and pulmonary edema. Ingestion can cause immediate pain & burns of mouth, throat and gastrointestinal tract, Skin contact can cause redness,pain and skin burns. Eye contact – vapours are irritating and may cause damage to eyes.
Carcinogenicity	: Not listed as carcinogenic.
Chronic Effects	: Long term exposures seldom occur due to corrosive properties of the acid,it may cause erosion of teeth and lung damage.
NFPA rating	: Health -3, Reactivity -0, Flammability- 0

SECTION 4 - FIRST AID MEASURES

Eyes	: Immediately flush eyes with plenty of water for at least 15 minutes, lifting lower and upper lids occasionally get medical attention immediately.
Skin	: Remove contaminated clothing and shoes, flush skin with plenty of water for at least 15 minutes, get medical attention immediately.
Inhalation	: Remove victim to fresh air. If not breathing give artificial respiration, If breathing is difficult, give oxygen and get medical attention immediately

SECTION 5 - FIRE FIGHTING MEASURES

Flammable Properties	: Not flammable by WHMIS criteria. Not flammable, but reacts with most metals to form flammable hydrogen gas. Oxidizing agent, may cause spontaneous ignition of combustible materials.
Suitable Extinguishing Media	: Use water on fires involving nitric acid to dilute and to absorb liberated oxides of nitrogen.
Unsuitable Extinguishing Media	Do not use dry chemical powders containing sodium bicarbonate, potassium bicarbonate, sodium carbonate, calcium carbonate, ammonium phosphate or ammonium sulfate. Nitric acid can react violently with these extinguishing agents.
Specific Hazard Arising from the Chemical	: Container may explode in heat of fire.
Protective Equipment for Firefighters	: Firefighters should wear full protective clothing including self contained breathing apparatus.
Hazardous Combustion Products	: May include and are not limited to: Oxides of nitrogen. Toxic fumes.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

Small Spills	: Shut off leaks without risk, dilute with alkali and drench with water.
Clean Up	: Prevent spillage from entering drains or water sources. Dilute with alkali and wash with water.

SECTION 7 - HANDLING AND STORAGE

Handling Precautions	: Use good industrial hygiene practices in handling this material. Do not get in eyes, on skin or on clothing. Keep away from combustible material. Use only with adequate ventilation. Keep container tightly closed. Wash thoroughly after handling.
Storage Requirements	: Keep out of reach of children. Keep away from heat, open flames or other sources of ignition. Store in a tightly closed container in a cool, dry, well ventilated and dark place away from incompatible materials.

SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Controls	: Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits.
Eye Protection	: Chemical splash goggles.
Hand Protection	: Impervious gloves. Confirm with reputable supplier first.
Skin and Body Protection	: Use of an impervious apron is recommended.
Respiratory Protection	: If airborne concentrations are above the applicable exposure limits, use NIOSH approved respiratory protection.
General Hygiene Considerations	: Handle in accordance with good industrial hygiene and safety practice. When using do not eat or drink. Wash hands before breaks and immediately after handling the product.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Physical State	: Liquid
Appearance & Odour	: Colourless to light yellow liquid, Chocking odour.
Vapor Pressure	: 48 mmHg at 20°C
Specific Gravity	: 1.36
Water Solubility	: Soluble
Freezing Point	: (-) 42 °C
Boiling Point	: 84 °C
Vapour density	: 2 - 3
SECTION 10 - STABILITY AND REACTIVITY	
Stability	: Stable under ordinary condition.
Chemical incompatibilities	: It is powerful oxidizing agent and is incompatible with strong bases, metallic powder, carbides, hydrogen sulphide, turpentine and combustible organics.
Conditions to Avoid hazards Hazardous Decomposition product	: Light and heat. Emits toxic nitrogen oxides, fumes and hydrogen nitrate when heated to decomposition.
SECTION 11 - TOXICOLOGICAL INFORMATION	
TLV as per ACIGH	: 2 ppm
Acute - Inhalation	: Corrosive Inhalation of vapour can cause breathing difficulties, over
SECTION 12 - ECOLOGICAL INFORMATION	
Environmental toxicity	: Ecotoxicity: Not available. : BOD5 and COD: Not available. : Products of Biodegradation: ; Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise. Toxicity of the Products of Biodegradation: The product itself and its products of degradation are not toxic. Special Remarks on the Products of Biodegradation: Not available
SECTION 13 - DISPOSAL CONSIDERATIONS	
Disposal	: It may be disposed off by neutralizing with alkaline materials and water.
SECTION - 14 - TRANSPORT INFORMATION	
Shipping Name	: Nitric Acid
Shipping Lables	: Nitric Acid
Hazard class	: 8
UN Number	: 2031
SECTION 15 - REGULATORY INFORMATION	
: Oxidizing, Corrosive Material	
SECTION 16 - OTHER INFORMATION	
Prepared by	Deepak Fertilisers and Petrochemicals Corporation Ltd.

Disclaimer	This MSDS and the information it contains is offered to you in good faith as accurate. We believe that information to be correct but cannot guarantee its accuracy or completeness. Health and safety precautions in this data sheet may not be adequate for all individual and/or situations. It is the user's obligation to evaluate and use this product safely and to comply with all applicable laws and regulations. No statement made in this data sheet shall be construed as a permission or recommendation for the use of any product in a manner that might infringe existing patents
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