DEEPAK FERTILISERS AND PETROCHEMICALS CORPRN.LTD.

MATERIAL SAFETY DATA SHEET

CONCENTRATED NITRIC ACID

SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Chemical Name	:	Concentrated Nitric Acid
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, Taloja A.V., Dist: Raigad – 410 208
Telephone no.for info.	:	+91 - 022 - 67684000

SECTION 2 - COMPOSITION / INFORMATION ON INGREDIENTS

Composition	:	Nitric Acid 98%
Hazardous components	:	Nitric Acid
ACGIH TLV	:	2 ppm

SECTION 3 - HAZARDS IDENTIFICATION

Primary Entry Routes	:	Inhalation, skin, eyes and ingestion
Acute Effect	:	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.
Carcinogenicity	:	Eye contact – vapours are irritating and may cause damage to eyes.
Chronic Effect	:	Not listed as carcinogenic.
NFPA rating	:	Long term exposures seldom occur due to corrosive properties of the acid,it may cause erosion of teach and lung damage. Health -3, Flammability- 0

SECTION 4 - FIRST AID MESURES

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

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		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
Ingestion	:	Do not induce vomiting,give large quantities of water or milk if available ;Never give anything by mouth if victim is unconscious, or is convulsing. Obtain medical attention immediately.

SECTION 5 - FIRE FIGHTING MEASURES

Flash Point	:	Not Flammable.
Flash Point method	:	Not applicable
Auto-ignition Temperature	:	Not applicable.
LEL	:	Not applicable.
UEL	:	Not Flammable.
Flammable classifn	:	It is not combustible,however,water spray may be used to keep fire exposed containers cool.
Extinguishing Media		
Unusual fire or explosion	:	It is not combustible but reacts with explosively with combustible organic or readily oxidisable materials,react with most metal to release hydrogen gas.
Hazardous combustion Product	:	Emits toxic nitrogen oxides fumes and hydrogen nitrate fumes and hydrogen nitrate when heated to decomposition. Will react with water or steam to produce heat and toxic and corrosive fumes.
Fire Fighting Instructions	:	Water spray may be used to keep fire exposed containers cool, Ensure that water doesn't enter inside the containers.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

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

SECTION 7 - HANDLING AND STORAGE

Handling Precautions	:	Protect from physical damage.
Storage Requirements	:	Store in a cool dry ventilated storage area with acid resistance floors. Keep away from heat,water and incompatible materials.

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SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Controls	:	Provide proper ventilation so as to maintain environment below air borne exposure limit.
Respiratory Protection	:	If exposure limit is exceeded,use respiratory protection.
Protective Clothing / equipment	:	Use full PVC Suit, PVC hand gloves and safety shoes.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Physical State	:	Liquid
Appearance & Odour	:	Colourless to pale yellow liquid,Chocking odour.
Vapour Pressure	:	48 mmHg at 20^0C
Specific Gravity	:	1.49
Water Solubility	:	Soluble
Freezing Point	:	(-) 42 ^{0}C
Boiling Point	:	84 ^{0}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.
Condition to Avoid	:	Light and heat.
Hazardous Decomposition product	:	Emits toxic nitrogen oxides,fumes and hydrogen nitrate when heated to decomposition.

SECTION 11 - TOXICOLOGICAL INFORMATION

TLV as per ACIGH	:	2 ppm
Acute Inhalation Effect	:	Corrosive. Inhalation of vapour can cause breathing difficulties,over exposure may lead to pneumonia and pulmonary edema.

SECTION 12 - ECOLOGICAL INFORMATION

Information not available

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SECTION 13 - DISPOSAL CONSIDERATIONS

Disposal Instructions : It may be disposed off by neutralizing with alkaline materials and water.

SECTION - 14 - TRANSPORT INFORMATION

Shipping Name : Nitric Acid

	DOT
Shipping name	Nitric Acid
Hazard class	8
UN Number	UN2031

SECTION 15 - REGULATORY INFORMATION

Oxidizing, Corrosive Material

SECTION 16 - OTHER INFORMATION

Prepared by : Deepak fertiliser and petrochemical corporation Ltd.Taloja

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