Material Safety Data Sheet

Pickling Paste Green (RXSOL-68-6802-001)

1. Product and Company Identifaction

Product Name	**Pickling Paste Green**
Product Type	**RXSOL-68-6802-001**

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

Phone	+91 22 65113333/ 5555 / 9999 / 27611360 / 27815540
Fax	+91 22 2781 1318 :::AOH :0091 9322594669
Email	mail@rxmarine.com

2. Composition / informationon ingredients

Preparation:
Chemical Nature: Strong acid paste with corrosive properties:

Hazardous components Chemical name/formula	CAS-No	EEC-No	Contents	Risk Code (for the preparation of R-phrase)
Nitric Acid / HNO	7697-37-2	231-714-2	Approx. 20%	C-corrosive / R35
Hydrofluoric Acid / HF	7664-39-3	231-634-8	Approx. 5%	T-toxic / R23, 24, 25, 35

3. Hazards Identification

Health hazard in case of accidental exposure (R/phrases):
R23/24/25 Toxic by inhalation, in contact with skin and if swallowed. R35 Causes severe burns.

Environmental effects :
Pickling paste will reduce pH in water. Must be neutralised.

Physical and chemical Risks :
When heated, nitrous gases will develop. Only for treatment of stainless steel. Not to be used on any other Metals**.**

4. First Aid Measures

Measures to be taken immediately after contact with pickling acids (5% W/W Hydrofluoric Acid):

Inhalation:	Fresh air and rest. Rinse nose and mouth with fresh water. Oxygen breathing apparatus may be necessary. Seek medical attention if necessary.
Ingestion:	Drink either water or milk immediately. Thereafter take 10-15 lime tablets dissolved in water. Do not induce vomiting. Seek medical care.
Skin Contact :	Rinse immediately with plenty of water. Rinse and remove contaminated clothes. Treat with calcium containing agent to neutralise harmful fluoride-ions. Alternatives a) HF antidote gel containing 2.5% Calcium Gluconate manufactured by Industrial Pharm. Serv. Manchester UK. b) Dissolve calcium tables (mnfg – Sandoz-Pharm) 20 tablets into 2 litres of water, swab or immerse affected area. If A or B could not be done, the skin could be bathed with milk or calcium containing c) solution.After the above, seek medical attention.
Eye Contact :	Rinse immediately with plenty of fresh water for at least 15 minutes. Thereafter consult an eye doctor.Information for medical care Inform the doctor the injury has been caused by contact with Hydrofluoric and Nitric acid solution. Antidote treatment after contact is with 2.5% Gluconate Gel (HF-Antidote Gel, supplier Industrial Pharm. Serv. Manchester UK).

5. Fire-fighting Measures

Danger of fire/explosion Extinguishing media Chemical exposure risks Caused by :
Paste is non flammable. If in contact with metals, hydrogen gas is formed in small quantities which together with air can give an explosion. Bottles close to fire should be removed or cooled with water.Released product should be neutralised with slaked lime.

SWP Pickling Paste Released gases/vapours Protective clothing for the Firemen How to clean or destroy Soiled fire equipment:
The product will cause redness and blisters on skin contact The product will emit toxic fumes and nitrous gases in the presence of heat/fire.Normal protective clothes. Breathing protection gas mask chlorine filter type B (grey) and dust filter P2 to CENWash thoroughly with large volumes of water.

6. Accidental Release Measures

Personal precautions	Avoid direct contact with product. Wear eye and skin protection, rubber gloves and breathing apparatus. Maintain adequate ventilation.
Environmental precautions(water, air,soil)	Prevent any spillage from entering sewage or public water
Cleaning up methods	Neutralise with Neutralising Agent or strong alkaline compound i.e. slaked lime. Contain with sand. Arrange for pick up. Rinse with large volumes of water.
Spillage and decontamination	Spillages should be collected and disposed of via approved waste disposal authority.

7. Handling and Storage

Handling Technical measures:
Work area and operational procedures should be designed to avoid direct contact with product. Work in a well ventilated area. Rinse water should be contained for treatment and disposal.

To prevent fire and explosion water:
Bottles close to fire should be removed or cooled down Precautions with water.Avoid fume accummulation by using in a well ventilated area. Use in areas with general ventilation and, if inadequate, use forced ventilation. Facilities to rinse eyes with water must be available at all times. Eye bath 3% Magnesium sulphate solution and Calcium Gluconate Gel for treatment after skin contact should be readily available at the work place.

Storage Technical measures Incompatible products Storage conditions Packaging materials Shelf life:
Store room should be separate, warm, dry and closed to all unauthorised personnel.
Not applicable.All containers should be kept securely closed when not in use and in an upright position. Store in areas where temperature remains constant between 0 – 40ºC.Must be of an acid resistant plastic material.If bottles are stored correctly – 1 year..

8. Exposure controls and personal protection

Engineering:	Isolate work area from carbon steel applications.
Control parameters:	Limiting values: CLV 1.7mg/m (8 hrs)–Hydrofluoric Acid LLC 5 mg/m (15mins) – Nitric Acid
Personal protective equipment: Respiratory:	Gas mask with chlorine filter type B(grey) & dust filter P2
Hands:	Rubber gloves
Eyes:	Face shield, goggles
Skin and body :	Rubber boots and acid resistant clothes
Specific hygiene measures:	Do not inhale fumes and avoid contact with eyes, skin and clothes. Do not drink, eat or smoke in the working area. Remove any contaminated clothing immediately. Always wash hands and face well after working with the product.Calcium Gluconate Gel 2.5% and 3% Magnesium Sulphate Solution must be readily available at all times at the working place.

9. Physical and chemical properties

Information on basic physical and chemical properties:

State at 20ºC	Colourless transparent colloid
Boiling point	80 – 100ºC
Flash point	Not Applicable
Vapour pressure at 20ºC	0.01 Kpa
PH	1.0 at 20ºC
Density	1.2 – 1.3 g/cm at 20ºC

Viscosity at 23ºC	>10000MPaS
Solubility	Freely soluble in water

10. Stability and reactivity

Stability :	Stable under normal conditions.
Conditions to avoid :	Direct sunlight and high temperatures. When heated nitrous gases develop.
Materials to avoid:	Alkaline compounds and water, will give an exothermal reaction with heat development.
Hazardous decomposition :	Will emit nitrous gases and hydrogen gas.
Acute Toxity:	LD (orally) : 650 mg/kg
LC (dermal):	200 ppm/1 hour Local Effects
On the skin :	Corrosive burns with yellowish discolouration, blisters and slow healing wounds.
On the eyes :	Intensive pain and corrosive damage. Risk of irreparable damage.
Ingestion:	Causes corrosive burns with burning pain, severe general effect and could damage the kidneys and liver
Inhalation:	Inhalation of fumes could cause aches, coughs and difficulty to breathe. Risk of oedema on the lungs.
Additional information:	Symptoms of corrosive damage will not appear immediately.

11. Toxicological information

Acute Toxity:	LD (orally) :650 mg/kg LC (dermal): 200 ppm/1 hour
Local Effects: On the skin	Corrosive burns with yellowish discolouration, blisters and slow healing wounds.
On the eyes:	Intensive pain and corrosive damage. Risk of irreparable damage.
Ingestion:	Causes corrosive burns with burning pain, severe general effect and could damage the kidneys and liver.
Inhalation:	Inhalation of fumes could cause aches, coughs and difficulty to breathe. Risk of oedema on the lungs.
Additional information:	Symptoms of corrosive damage will not appear immediately.

12. Ecological information

Effects on Environment :

The pickling paste will reduce the pH of fresh water and should not be discharged to any clean

water system without being pre-treated first.Information for constituent Nitric Acid

Environmental Effect Aquatic Fate:
Slightly toxic to living resourcesToxic to freshwater and saltwater fish. Biodegradable in fresh water and saltwater, leading to oxygen depletion. No evidence of bioaccumulation or tainting of seafood.Information for constituent Hydrofluoric Acid

Environmental Effect Aquatic Fate:
Gaseous HF attacks all plants, sensitivity varies between species.Slightly toxic to aquatic life. No evidence of bioaccumulation or tainting of seafood.

13. Disposal considerations

Methods of disposal:
Residue Waste Contaminated residues, waste water must be neutralised to pH 6-11 and any heavy metals resulting from the pickling of stainless should be removed.Neutralise with Neutralising Agent or lime Contaminated packing Rinse with copious amounts of water.Additional information All effluent must be separated and disposed of via Disposal recognised waste authority. Consult your local licensed waste disposal company for instructions on how to dispose of acidic waste.

14. Transport information

International Regulations (UN) UN-Classification Code UN	1790
Additional Information	The pickling paste is to be transported according to dangerous goods regulations.
UN Substance identification	2922
Shipping Name	PICKLING PASTE
Packing Group	11
Class 8 –	CORROSIVE
Subsidiary Risk	6. 1
Supply Symbol CORROSIVE	VERY TOXIC
Hazchem Code	2XE
HSCN (Tariff No.)	280800000

15. Regulatory information

Safety Phrases	S2, S7/9, S23, S26, S27, S36/37/39, S38, S45
Risk Phrases	R23, 24, 25, R35

Recipients of this MSDS must refer to relevant legislation that implements provisions relating to the protection of man or the environment.The information contained in this document

16. Other information

The information provided about the product on this Safety Data Sheet has been compiled from knowledge of the individual constituents The data given here is based on current knowledge and experience. This Safety Data Sheet describes the product in terms of safety requirements and does not signify any warranty with regard to the product's properties The data given here only applies when product used for proper application(s). The product is not sold as suitable for other applications usage in such may cause risks not mentioned in this sheet. Do not use for other application(s) without seeking advice from manufacturer.