

Address: National industry, Pipodra GIDC, Surat-394110, Gujarat, India.  
Email: cynorlaboratories@gmail.com Mobile No.: +91 8799070507

**MATERIAL SAFETY DATA SHEET**

<b>Product Name</b>	<b>HYDROFLUORIC ACID</b>
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**1. Identification of the substance/mixture and of the company/undertaking**

**1.1. Product identifier**

Trade name : HYDROFLUORIC ACID

Product code : H0055,H0056,H0057

CAS NO: 7664-39-3

**1.2. Relevant identified uses of the substance or mixture and uses advised against Use :**

Industrial. For professional use only.

**1.3. Details of the supplier of the safety data sheet**

**Company identification:** CYNOR

National industry, Pipodra GIDC, Surat-394110, Gujarat, India.

**Email:** cynorlaboratories@gmail.com **Mobile No.:** +91 8799070507

**2. Hazards identification -DSD**

**2.1. Classification of the substance or mixture**

**Classification EC 67/548 or EC 1999/45**

**Classification :** T+; R26/27/28

C; R35

**Hazard Class and Category Code(s), Regulation (EC) No 1272/2008 (CLP)**

**Health hazards :** Acute toxicity, Oral - Category 1 - Danger (CLP : Acute Tox. 1) H300 Acute

toxicity, Inhalation - Category 2 - Danger (CLP : Acute Tox. 2) H330

Skin corrosion - Category 1A - Danger (CLP : Skin Corr. 1A) H314 Acute

toxicity, dermal - Category 1 - Danger (CLP : Acute Tox. 1) H310

**2.2. Label elements**

**Labelling EC 67/548 or EC 1999/45**

**Symbol(s) :** T+ : Very toxic

C : Corrosive



**R Phrase(s) :** R26/27/28 : Very toxic by inhalation, in contact with skin and if swallowed.

R35 : Causes severe burns.

**S Phrase(s) :** S4 : Keep away from living quarters.

S7/9 : Keep container tightly closed and in a well ventilated place.

S24 : Avoid contact with skin.

S26 : In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S28 : After contact with skin, wash immediately with

S35 : This material and its container must be disposed of in a safe way.

S36/37/39 : Wear suitable protective clothing, gloves and eye/face protection.

S38 : In case of insufficient ventilation, wear suitable respiratory equipment.

S45 : In case of accident or if you feel unwell, seek medical advice immediately (show the label when possible).

S59 : Refer to manufacturer/supplier for information on recovery/recycling.

#### **Labelling Regulation EC 1272/2008 (CLP)**

#### **Hazard pictograms**



**Signal words** : Danger

**Hazard statements** : H300 : Fatal if swallowed.

H310 : Fatal in contact with skin.

H330 : Fatal if inhaled.

H314 : Causes severe skin burns and eye damage.

#### **Precautionary statements**

• **Prevention** : P284: Wear respiratory protection.

P280: Wear protective gloves, protective clothing, eye protection, face protection.

P271: Use only outdoors or in a well-ventilated area.

P260: Do not breathe dust, fume, gas, mist, vapours, spray.

P264: Wash thoroughly after handling.

P270: Do not eat, drink or smoke when using this product.

• **Response** : P301+P330+P331: IF SWALLOWED : Rinse mouth. Do NOT induce vomiting.

P305+P351+P338: IF IN EYES : Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing.

P304+P340: IF INHALED : Remove to fresh air and keep at rest in a position comfortable for breathing.

P302+P350: IF ON SKIN : Gently wash with plenty of soap and water.

P303+P361+P353: IF ON SKIN (or hair) : Remove immediately all contaminated clothing. Rinse skin with water/shower.

P363: Wash contaminated clothing before reuse.

P361: Remove immediately all contaminated clothing.

• **Storage** : P403+P233: Store in well-ventilated place. Keep container tightly closed.

P405: Store locked up.



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• **Disposal considerations** : P501: Dispose of this material and its container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

### 2.3. Other hazards

**Other hazards** : The substance does not fulfil the criteria to be identified as PBT substance or vPvB substance according to Annex XIII of Regulation REACH.

### 3. Composition/information on ingredients

**Substance / Preparation** : Preparation.

**Hazardous component(s)** : This product is hazardous.

Substance name	Contents	CAS No
Hydrofluoric acid - solution :	> 25 < 50 %	7664-39-3
Water :	> 50 < 75 %	7732-18-5

### 4. First aid measures

#### 4.1. Description of first aid measures

**Inhalation** : Specific treatment is urgent (see on this label). Remove to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor.

**Skin contact** : Wash with plenty of soap and water. Remove/Take off immediately all contaminated clothing. Wash contaminated clothing before reuse. Specific treatment (see on this label). Immediately call a POISON CENTER or doctor.

**Eye contact** : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor.

**Ingestion** : Rinse mouth. Immediately call a POISON CENTER or doctor. Specific treatment (see on this label). Do NOT induce vomiting.

#### 4.2. Most important symptoms and effects, both acute and delayed Symptoms

**relating to use** : Fatal if swallowed. Fatal in contact with skin. Fatal if inhaled. Causes severe skin burns and eye damage.

#### 4.3. Indication of any immediate medical attention and special treatment needed

**General information** : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

### 5. Fire-fighting measures

#### 5.1. Extinguishing media

**Suitable extinguishing media** : Foam. Dry powder. Carbon dioxide. Water spray. Sand.

**Unsuitable extinguishing media** : Do not use a heavy water stream.

**Surrounding fires** : Use water spray or fog for cooling exposed containers.



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### **5.2. Special hazards arising from the substance or mixture**

**Hazardous combustion products** : Under fire conditions, hazardous fumes will be present. Thermal decomposition generates : Corrosive vapours.

### **5.3. Advice for fire-fighters**

**Protection against fire** : Do not enter fire area without proper protective equipment, including respiratory protection.

**Special procedures** : Exercise caution when fighting any chemical fire. Avoid (reject) fire-fighting water to enter environment.

## **6. Accidental release measures**

**6.1. Personal precautions, protective equipment and emergency procedures**  
**For emergency responders** : Equip cleanup crew with proper protection. Ventilate area.

**For non-emergency personnel** : Evacuate unnecessary personnel.

### **6.2. Environmental precautions**

**Environmental precautions** : Prevent entry to sewers and public waters. Notify authorities if product enters sewers or public waters.

### **6.3. Methods and material for containment and cleaning up**

**Clean up methods** : Soak up spills with inert solids, such as clay or diatomaceous earths soon as possible. Collect spillage. Store away from other materials.

### **6.4. Reference to other sections**

See section 8. Exposure controls/personal protection

## **7. Handling and storage**

### **7.1. Precautions for safe handling**

**Handling** : Use only outdoors or in a well-ventilated area. Do not breathe dust, fume, gas, mist, vapours, spray. Wash thoroughly after handling. Do not eat, drink or smoke when using this product.

**Technical protective measures** : Provide good ventilation in process area to prevent formation of vapour.

### **7.2. Conditions for safe storage, including any incompatibilities**

**Storage** : Keep only in the original container in a cool, well ventilated place. Keep container tightly closed.

**Storage regulation** : Comply with applicable regulations.

**Storage - away from** : Strong bases. Strong acids. Sources of ignition. Direct sunlight.

### **7.3. Specific end use(s)**

**Specific end use(s)** : None.

## **8. Exposure controls/personal protection**

### **8.1. Exposure controls**

**Personal protection** : Avoid all unnecessary exposure.

- **Respiratory protection** : Wear respiratory protection.
- **Hand protection** : Wear protective gloves.
- **Skin protection** : Wear suitable protective clothing.
- **Eye protection** : Chemical goggles or face shield.
- **Others** : When using, do not eat, drink or smoke.

### **8.2. Control parameters**

**Occupational Exposure Limits** : No data available.

## **9. Physical and chemical properties**

### **9.1. Information on basic physical and chemical properties**

**Physical state at 20 °C** : Liquid.

**Odour threshold** : No data available.

**pH value** : No data available.

**Melting point [°C]** : < -360C

**Decomposition point [°C]** : N/A

**Critical temperature [°C]** : No data available.

**Auto-ignition temperature [°C]** : No data available.

**Flammability (solid, gas)** : N/A

**Flash point [°C]** : No data available.

**Boiling point [°C]** : 108<sup>0</sup>C

**Initial boiling point [°C]** : No data available.

**Final boiling point [°C]** : No data available.

**Evaporation rate** : N/A

**Vapour pressure [20°C]** : No data available.

**Vapour pressure mm/Hg** : 25 mm Hg @ 200C

**Vapour density** : 1,97

**Density [g/cm<sup>3</sup>]** : 1.15 -1.18

**Relative density, gas (air=1)** : N/A

**Relative density, liquid (water=1)** : N/A

**Solubility in water [% weight]** : Infinitely soluble

**Solubility in water** : No data available.

**Log Pow octanol / water at 20°C** : No data available.

**Solubility** : Acidic.

**Viscosity at 40°C [mm<sup>2</sup>/s]** : No data available.

### **9.2. Other information**

**Explosive properties** : N/A



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**Explosion limits - upper [%]** : No data available.

**Explosion limits - lower [%]** : No data available.

**Oxidising properties** : No data available.

### **10. Stability and reactivity**

#### **10.1. Reactivity**

**Reactivity** : Not established.

#### **10.2. Chemical stability**

**Chemical stability** : Stable under recommended storage conditions.

#### **10.3. Possibility of hazardous reactions**

**Hazardous reactions** : Not established.

#### **10.4. Conditions to avoid**

**Conditions to avoid** : Direct sunlight. Extremely high or low temperatures.

#### **10.5. Incompatible materials**

**Materials to avoid** : Strong acids. Strong bases.

#### **10.6. Hazardous decomposition products**

**Hazardous decomposition products** : Fumes. Carbon monoxide. Carbon dioxide.

**Thermal decomposition generates** : Corrosive vapours.

### **11. Toxicological information**

#### **11.1. Information on toxicological effects**

**Toxicity information** : The product has been not fully tested. The calculated risk has been done under the requirements of the EU regulations.

#### **Acute toxicity**

- **Inhalation** : Fatal if inhaled.
- **Dermal** : Fatal in contact with skin.
- **Ingestion** : Fatal if swallowed.

**Corrosion** : Causes severe skin burns and eye damage.

**Irritation** : Based on available data, the classification criteria are not met.

**Sensitization** : Based on available data, the classification criteria are not met.

**Mutagenicity** : Based on available data, the classification criteria are not met.

**Carcinogenicity** : Based on available data, the classification criteria are not met.

**Toxic for reproduction** : Based on available data, the classification criteria are not met.

**STOT-single exposure** : Based on available data, the classification criteria are not met.

**STOT-repeated exposure** : Based on available data, the classification criteria are not met.

**Aspiration hazard** : Based on available data, the classification criteria are not met.



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### **12. Ecological information**

#### **12.1. Toxicity**

**Toxicity information** : The product has been not fully tested. The calculated risk has been done under the requirements of the EU regulations.

**12.2. Persistence - degradability Persistence - degradability** : Biodegradable.

#### **12.3. Bioaccumulative potential**

**Bioaccumulative potential** : Not established.

#### **12.4. Mobility in soil**

**Mobility in soil** : Not established.

#### **12.5. Results of PBT and vPvB assessment**

**Results of PBT and vPvB assessment** : The substance does not fulfil the criteria to be identified as PBT substance or vPvB substance according to Annex XIII of Regulation REACH.

#### **12.6. Other adverse effects**

**Environmental precautions** : Avoid release to the environment.

### **13. Disposal considerations**

#### **13.1. Waste treatment methods**

**General** : Avoid release to the environment. Dispose in a safe manner in accordance with local/national regulations. Dispose of this material and its container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

**Special precautions** : Hazardous waste due to toxicity.

### **14. Transport information**

#### **14.1. Land transport (ADR-RID)**

**Proper shipping name** : HYDROFLUORIC ACID, with not more than 60% strength hydrogen fluoride

UN N° : 1790

H.I. nr : 86

ADR - Class : 8

**Labelling - Transport** : 8 : Corrosive substance. 6.1 : Toxic substances.

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**ADR - Classification code** : CT1

CT1

CT1

**ADR - Group** : II

**ADR - Packing instructions** : P001



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**ADR - Limited Quantity : 1 L**

**ADR - Tunnel code : E : Passage forbidden through tunnels of category E.**

### **14.2. Sea transport (IMDG) [English only]**

**Proper shipping name : HYDROFLUORIC ACID, with not more than 60% strength hydrogen fluoride**

**UN N° : 1790**

**IMO-IMDG - Class or division : 8 : Corrosive substance. ( 6.1 : Toxic substances. )**

**IMO-IMDG - Packing group : II**

**IMO-IMDG - Packing instructions : P001**

**IMO-IMDG - Limited quantities : 1 L**

**IMO-IMDG - Marine pollution : No**

**EMS-Nr : F-A S-B**

### **14.3. Air transport (ICAO-IATA) [English only]**

**Proper shipping name : HYDROFLUORIC ACID, with not more than 60% strength hydrogen fluoride**

**UN N° : 1790**

**IATA - Class or division : 8 : Corrosive substance. ( 6.1 : Toxic substances. )**

**IATA - Packing group : II**

**- Passenger and Cargo - Packing : 851 instruction**

**- Passenger and Cargo - Maximum : 1 L Quantity/Packing**

**IATA - Cargo only : ALLOWED**

**- Cargo only - Packing instruction : 855**

**- Cargo only - Maximum Quantity/ : 30 L**

**Packing**

**IATA - Limited Quantities : 0.5L**

**ERG-Nr : 8P**

## **15. Regulatory information**

### **15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**

**Safety, health and environmental : Ensure all national/local regulations are observed. regulations/legislation specific for the substance or mixture**

**REACH Restrictions - Annex XVII : The components of this product are not subject to restrictions.**

**REACH Authorisation - Annex XIV : The components of this product are not subject to authorization.**

### **15.2. Chemical Safety Assessment**



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**Chemical Safety Assessment** : It has not been carried out.

### **16. Other information**

**Abbreviations and acronyms** : PBT: persistent, bioaccumulative and toxic.vPvB: very persistent and very bioaccumulative

**Sources of key data used** : REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006

**Further information** : None.

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### **End of document**

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