Material Safety Data Sheet

Section1. Product Information and Company Identification			
Product name	Hydrofluoric Acid, 40%		
Mol.formula	G011	**Cas no**	7664-39-3
Mol.wt	20,01 g/mol	**Cat no**	H010
Manfactre name	Pioneers for laboratory chemicals		
Brand name	Piochem		
Adress	Area 540, Industrial Zone 6th October city Giza, Egypt.		
Website	www.piochem.com		
E-mail	info@piochem.com		
Phone number	+201225728304 , +201023932115		

Section 2.Hazards Identification

Potential Acute Health Effects: Very hazardous in case of skin contact (corrosive, irritant, permeator), of eye contact (irritant, corrosive), of ingestion. Liquid or spray mistmay produce tissue damage particularly on mucous membranes of eyes, mouth and respiratory tract. Skin contact may produce burns. Inhalation of the spray mist may produce severe irritation of respiratory tract, characterized by coughing, choking, or shortness of breath. Severe over-exposure can result in death. Inflammation of the eye is characterized by redness, watering, and itching. Skin inflammation is characterized by itching, scaling, reddening, or, occasionally, blistering. Potential Chronic Health Effects: Non-corrosive for skin. Non-irritant for skin. Non-sensitizer for skin. Non-permeator by skin. Non-irritating to the eyes. Non-hazardous in case of ingestion. Non-hazardous in case of inhalation. Non-irritant for lungs. Non-sensitizer for lungs. carcinogenic effects: not available. mutagenic effects: not available. teratogenic effects: not available. developmental toxicity: not available. The substance may be toxic to lungs, mucousmembranes, skin, eyes, bonesteeth. Repeated or prolonged exposure to the substancecan produce target organs damage. Repeated or prolonged contact with spray mist may produce chronic eye irritation and severe skin irritation. Repeated or prolonged exposure to spray mist may produce respiratory tract irritation leading to frequent attacks of bronchial infection. Repeated exposure to a highly toxic material may produce general deterioration of health by an accumulation in one or many human organs

Section 3.First Aid Measures

Eye Contact:
Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15-30
minutes. Cold water may be used. Keep the eyelids apart and away from the eyeballs during irrigation. Do not use oily drops
or ointment or HF skin burn treatments on the eyes. Get medical attention immediately, preferrably an eye specialist. If a
physician is not immediately available, apply one or two drops of ophthalmic anesthetic (e.g. 0.5% Pontocaine Hydrochloride
solution). Place ice pack on eyes until reaching emergency room.

Skin Contact:
In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing
and shoes. Cover the irritated skin with an emollient. Cold water may be used. Wash clothing before reuse. Thoroughly clean
shoes before reuse. Get medical attention immediately. While waiting for medical attention, it has been shown that flushing
the affected area with water for one minute and then massaging HF Antidote Gel into the wound until there is a cessation of
pain is a most effective first aid treatment. HF Antidote Gel contains Calcium Gluconate which combines with HF for insoluble
Calcium Fluoride, thus preventing the extraction of calcium from the body tissue and bones. Another alternativ
e first aid
treatment, after thorough washing of the burned area, is to immerse the burned area in a solution of 0.2% iced aqueous
Hyamine 1622 or 0.13% iced aqueous Zephiran Chloride. If immersion is inpractical, towels should be soaked with one of
the above solutions and used as compresses for the burn area. Hyamine 1622 is a trade name for Tetracaine Benzethonium
Chloride. Zephiran is a trade name for Benzalkonium Chloride. Again, seek medical attention as soon as possible for all burns
regardless of how minor they may appear initially.

Serious Skin Contact:
Wash with a disinfectant soap and cover the contaminated skin with an anti-bacterial cream. Seek immediate medical
attention.

Inhalation:
If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical
attention immediately.

Serious Inhalation: Evacuate the victim to a safe area as soon as possible. Loosen tight clothing such as a collar, tie, belt or waistband.

If breathing is difficult, administer oxygen. If the victim is not breathing, perform mouth-to-mouth resuscitation. WARNING: It may
be hazardous to the person providing aid to give mouth-to-mouth resuscitation when the inhaled material is toxic, infectious or corrosive. Seek immediate medical attention.
Ingestion:
If swallowed, do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an
unconscious person. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention immediately.
Serious Ingestion: Not available.

Section 4. Fire Fighting Measures

Flammability of the Product: Non-flammable.
Auto-Ignition Temperature: Not applicable.

Flash Points: Not applicable.
Flammable Limits: Not applicable.
Products of Combustion: Not available.
Fire Hazards in Presence of Various Substances: Not applicable.
Explosion Hazards in Presence of Various Substances:
Explosive in presence of metals. Non-explosive in presence of open flames and sparks, of shocks.
Fire Fighting Media and Instructions: Not applicable.
Special Remarks on Fire Hazards: Hazardous decompostion: May form acid vapors, hydrogen fluoride.
Special Remarks on Explosion Hazards:
It's corrosive action on metals can result in formation of hydrogen gas in containers and piping to create explosion hazard.
Reacts explosively with Cyanogen fluoride (polymerizes explosively), glycerol plus nitric acid (evolves gas from oxidation),
methanesulfonic acid (evolves oxygen difluoride). Hydrofluoric acid reacts with most metals to release hydrogen gas whichcan form explosive mixtures with air.

Section 5.Accidental Release Measures

Small Spill:
Dilute with water and mop up, or absorb with an inert dry material and place in an appropriate waste disposal container. If
necessary: Neutralize the residue with a dilute solution of sodium carbonate.
Large Spill:
Corrosive liquid. Poisonous liquid. Stop leak if without risk. Absorb with DRY earth, sand or other non-combustible material.
Do not get water inside container. Do not touch spilled material. Use water spray curtain to divert vapor drift. Use water spray
to reduce vapors. Prevent entry into sewers, basements or confined areas; dike if needed.Call for assistance on disposal.

Neutralize the residue with a dilute solution of sodium carbonate. Be careful that the product is not present at a concentrationlevel above TLV. Check TLV on the MSDS and with local authorities.

Section 6. Handling and Storage

Precautions:
Do not ingest. Do not breathe gas/fumes/ vapor/spray. Never add water to this product. In case of insufficient ventilation,
wear suitable respiratory equipment. If ingested, seek medical advice immediately and show the container or the label. Avoid
contact with skin and eyes. Keep away from incompatibles such as organic materials, metals, alkalis, moisture. May corrode
metallic surfaces and glass. Store in a polyethylene container.
Storage: Keep container tightly closed. Keep container in a cool, well-ventilated area.

Section 7. Additional 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 we assumeno 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 Finar Limited 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 Finar Limited has been advised of the possibility of such damages.