

OFI TESTING EQUIPMENT, INC.
MATERIAL SAFETY DATA SHEET

SECTION I - PRODUCT AND COMPANY IDENTIFICATION	
Chemical Name:	HYDROCHLORIC ACID SOLUTION
Trade Name:	SULFIDE ION TEST SOLUTION "B"
OFI Part No.	145-502
Chemical Family:	HYDROCHLORIC ACID
Formula:	HCl : H ₂ O
Manufacturer:	OFI Testing Equipment, Inc. 1006 West 34 th Street Houston, TX 77018 U.S.A. (713) 880-9885
In Case of Emergency Spills, Leaks, Fire, Exposure or Accident:	In the USA, call INFOTRAC at 1-800-535-5053 day or night Outside the USA, call collect, (352) 323-3500
SECTION II - COMPOSITION / INFORMATION ON INGREDIENTS	
CAS #:	CHEMICAL NAME
7647-01-0	Hydrogen Chloride <33%
7732-18-5	Water Balance
SECTION III - HAZARD IDENTIFICATION	
Emergency Overview:	Danger! Corrosive. Liquid And Mist Cause Severe Burns To All Body Tissue. May Be Fatal If Swallowed Or Inhaled.
Inhalation:	Corrosive! Inhalation of Vapors can cause Coughing, Choking, Inflammation, of the Nose, Throat, and Upper Respiratory Tract, and in Severe Cases, Pulmonary Edema, Circulatory Failure, and Death.
Ingestion:	Corrosive! Swallowing Hydrochloric Acid can cause Immediate Pain and Burns of the Mouth, Throat, Esophagus, and Gastrointestinal Tract. May cause Nausea, Vomiting, and Diarrhea, and in Severe Cases, Death.
Skin:	Corrosive! Can cause Redness, Pain, and Severe Skin Burns. Concentrated Solutions Cause Deep Ulcers and Discolor of Skin.
Eye Contact:	Corrosive! Vapors are Irritating and May cause Damage to Eyes. Contact May cause Severe Burns and Permanent Eye Damage.
Chronic Exposure:	Long-Term Exposure to Concentrated Vapors May cause Erosion of Teeth. Long-Term Exposures Seldom Occur due to the Corrosive Properties of the Acid.
Aggravated by Exposure:	Persons with Pre-Existing skin Disorders or Eye Disease May be more Susceptible to the Effects of this Substance.
SECTION IV - FIRST AID MEASURES	
Inhalation:	Remove to Fresh Air. If not Breathing, Give Artificial Respiration. If Breathing is Difficult, Give Oxygen. Get Medical Attention.
Ingestion:	Do Not Induce Vomiting! Give Large Quantities of Water or Milk if Available. Never Give Anything by Mouth to an Unconscious Person. Get Medical Attention Immediately.
Skin:	In Case of Contact, Immediately Flush Skin with Plenty of Water for at Least 15 Minutes while Removing Contaminated Clothing and Shoes. Wash Clothing and Shoes Before Reuse.
Eyes:	Immediately Flush Eyes with Plenty of Water for at Least 15 Minutes, Lifting Lower and Upper Eyelids Occasionally. Get Medical Attention Immediately.
SECTION V - FIRE FIGHTING MEASURES	
Fire:	Not Considered to be a Fire Hazard. May React with Metals or Heat to Release Flammable Hydrogen Gas.
Explosion:	Not Considered to be an Explosion Hazard.
Fire Extinguishing Media:	Water or Water Spray. Neutralize with Soda Ash or Slacked Lime.
Special Information:	In the Event of Fire, Wear Full Protective Clothing and NIOSH-Approved Self-Contained Breathing Apparatus with Full Facepiece Operated in the Pressure Demand or Other Positive Pressure Mode. Structural Firefighter's Protective Clothing is Ineffective for Fires Involving Hydrochloric Acid. Cool Tanks with Water Spray until Well After Fire is Out.

SECTION VI - ACCIDENTAL RELEASE MEASURES	
	Ventilate area of Leak or Spill. Wear Appropriate Personal Protective Equipment as Specified in Section 7. Isolate Hazard Area. Keep Unnecessary and Unprotected Personnel from Entering. Contain and Recover Liquid when Possible. Neutralize with Alkaline Material (Soda-Ash, Lime), then Absorb with an Inert Material (e.g., Vermiculite, Dry Sand, Earth), and place in a Chemical Waste Container. Do Not Use Combustible Materials, such as Saw Dust.
SECTION VII - HANDLING AND STORAGE	
	Store in a Cool, Dry, Ventilated Storage Area with Acid Resistant Floors and Good Drainage. Protect from Physical Damage. Keep Out of Direct Sunlight and Away from Heat, Water, and Incompatible Materials. Do Not Wash out Container and Use it for Other Purposes. Never Use Hot Water and Never Add Water to Acid when Diluting. Water Added to Acid can Cause Uncontrolled Boiling and Splashing. Containers of this Material May be Hazardous when Empty Since they Retain Product Residues (Vapors, Liquid).
SECTION VIII - EXPOSURE CONTROL / PERSONAL PROTECTION	
Ventilation System:	A System of Local and/or General Exhaust is Recommended to Keep Employee Exposures Below the Airborne Exposure Limits. Local Exhaust Ventilation is Generally Preferred Because it can Control the Emissions of the Contaminant at its Source, Preventing Dispersion of it into the General Work Area.
Airborne Exposure Limits:	OSHA Permissible Exposure (PEL) 5 ppm (Ceiling)-ACGIH (TLV) 5 ppm (STEL/Ceiling)
Personal Respirators: (NIOSH APPROVED)	If the Exposure Limit is Exceeded, a Full Facepiece Respirator with an Acid Gas Cartridge may be Worn up to 50 times the Exposure Limit or the Maximum use Concentration Specified by the Appropriate Regulatory Agency or Respirator Supplier, Whichever is Lowest. Emergencies Where Exposure Limits are Not Known, use Full-Facepiece Positive-Pressure Air Supplied Respirator.
Skin Protection:	Rubber or Neoprene Gloves and Additional Protection Including Impervious Boots, Apron, or Coveralls, as Needed in Areas of Unusual Exposure to Prevent Skin Contact.
Eye Protection:	Use Chemical Safety Goggles and/or Full Face Shield where Splashing is Possible. Maintain Eye Wash Fountain and Quick-Drench Facilities in Work Area.
SECTION IX - PHYSICAL AND CHEMICAL PROPERTIES	
Appearance / Odor:	Clear Colorless Liquid / Pungent Odor
Solubility:	Infinitely Soluble
Specific Gravity:	1.05 at 59 °F (15 °C)
% Volatiles by Vol.:	100% @ 70 °F (21 °C)
Melting Point:	No Information Found
Boiling Point:	214 to 217 ° F (101 to 103 °C)
Vapor Density (Air=1):	No Information Found
Vapor Pressure (mmHg):	No Information Found
SECTION X - STABILITY AND REACTIVITY	
General Reactivity:	Stable Under Ordinary Conditions of Use and Storage.
Hazardous Decomposition:	A Strong Mineral Acid, Concentrated Hydrochloric Acid is Highly Reactive with Strong Bases, Metals, Metal Oxides, Hydroxides, Amines, Carbonates and Other Alkaline Materials.
Incompatibilities:	Incompatible with Materials Such as Cyanides, Sulfides, Sulfites, and Formaldehyde. When Heated to Decomposition, Emits Toxic Hydrogen Chloride Fumes and will React with Water or Steam to Produce Heat and Toxic and Corrosive Fumes. Thermal Oxidative Decomposition Produces Toxic Chlorine Fumes and Explosive Hydrogen Gas.
Hazardous Polymerization:	Will Not Occur.
SECTION XI - TOXICOLOGICAL INFORMATION	
	Hydrogen Chloride - IARC Category 3, NTP Carcinogen - Known: No
SECTION XII - ECOLOGICAL INFORMATION	
	When Released into the Soil, this Material is Not Expected to Biodegrade. When Released into the Soil, this Material may Leach into Groundwater.
SECTION XIII - DISPOSAL CONSIDERATIONS	
	Whatever cannot be saved for recovery or recycling should be handled as hazardous waste and sent to a RCRA approved waste facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.

SECTION XIV - TRANSPORT INFORMATION																
Shipping Name:	HYDROCHLORIC ACID SOLUTION															
Hazard Class:	8															
Identification No.:	UN1789 , Packing Group II															
SECTION XV - REGULATORY INFORMATION																
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Chemical Weapons Convention:	No															
TSCA 12 (b):	No															
CDTA:	Yes															
SARA 311/312:	Acute: Yes Chronic: Yes Fire: No Pressure: No Reactivity: No (Mixture / Liquid)															
Australian Hazchem Code:	None															
Poison Schedule:	None allocated.															
SECTION XVI - OTHER INFORMATION																
NFPA Rating:	HEALTH-3, FLAMMABILITY-0, REACTIVITY-0															
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