

**SUNTEK CHLORIDES PRIVATE LIMITED****SAFETY DATA SHEET****HYDROCHLORIC ACID**

Ref: SDS/SCPL/HCl
Revision Date: Rev-0 /Sept, 2021

1. IDENTIFICATION OF SUBSTANCE

Trade Marks and Synonyms (if any)	Hydrochloric Acid , Muriatic Acid, Hydrogen Chloride, Chlorohydric Acid, Spirit of salts
Chemical Names and Synonyms	Hydrochloric Acid
Physical Form	Colorless or slightly yellow liquid with pungent odor
Molecular Formula	HCl
Manufacturer Name & Address	Suntek Chlorides Pvt. Ltd, Rehla, Near Grasim Industries Ltd., Palamau - 822124
Information department	Sales & Marketing Department, Suntek Chlorides Private Ltd. Ranibagh, Pitampura, Delhi-110034 www.thesuntek.com
Emergency information	Telephone: 1800-1200-09181

2. INFORMATION OF MAJOR INGREDIENTS

Chemical Name	Hydrochloric Acid
CAS No	7647-01-0
Formula	HCl
Percentage	30% minimum

3. HAZARD IDENTIFICATION**3.1 Classification of the substance or mixture**

Classification according to Regulation (EC) No 1272/2008 / GHS

Physical Hazards	Corrosive to metals	Category 1, H 290
Health Hazards	Acute Toxicity (Oral)	Category 4
	Acute Toxicity (Inhalation)	Category 2
	Skin Corrosion/Irritation	Category 1B
	Serious Eye Damage	Category 1
	Specific target organ toxicity – single exposure	Category 3

3.2 Label Element

Labelling according to Regulation (EC) No 1272/2008

The substance is classified and labelled according to the CLP regulation.

Single Word Danger

Hazard pictogram:



Hazard Statements

- H314 Causes severe skin burns and eye damage.
- H335 May cause respiratory irritation.
- H290 May be corrosive to metals.

Precautionary Statements

- Prevention
- P233: Keep container tightly close.
 - P202: Do not handle until all safety precaution have been read and understood
 - P262: Do not get in eye, on skin or on clothing
 - P280: wear protective glove, clothing's, and eye protection/face protection.
 - P264: wash thoroughly after handling
 - P270: Do not eat, drink or smoke when using this products.
 - P273: Avoid release to environments.

- Response
- P301+P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
 - P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
 - P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
 - P304+P340 IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.
 - P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 - P363 Wash contaminated clothing before reuse.
 - P390 Absorb spillage to prevent material damage.
- Storage
- P405 Store locked up.
 - P406 Store in corrosive resistant container with a resistant inner liner
- Disposal
- P501:- Dispose of contents/container in accordance with local/regional /national/ international regulations

3.3 Other Hazards :- None

4 FIRST AID MEASURES

Description of first aid measures

Skin Contact	Wash the affected area with plenty of water. Remove contaminated clothing. Seek medical Aid immediately
Eye Contact	If in eyes, hold eyelids apart and flush the eye continuously with running water. Continue flushing for at least 15 minutes. Seek medical aid immediately.
Inhalation	Leave the area of exposure immediately. If symptoms occur, seek urgent medical attention. If assisting a victim avoid becoming a casualty, wear a Full-face Type B (inorganic and acid gas) respirator or Air – line respirator (in poorly ventilated areas). If victim is not breathing apply artificial respirator.
Ingestion	Have the victim drink water or milk or fruit juice. Do not induce vomiting. Seek medical aid immediately.
Further Medical Advice	Seek medical attention immediately.

Most important symptoms and effects, both acute and delayed	May cause serious permanent damage. Forms blisters, ulceration and chemical burns to the skin, corneal burns with dangers of vision impairment / blindness, burns in the mouth, throat and esophagus, and can cause itching, cough and chemical burns to the respiratory tract.
Indication of any immediate medical attention and special treatment needed	Treat corrosive burns on the skin as thermal burns. Do NOT use sodium bicarbonate to neutralize the acid. Do NOT use oils or ointments in eye. Airway problems may arise from laryngeal edema and inhalation exposure. Treat with 100% Oxygen initially.

5 FIRE FIGHTING MEASURES

Extinguishing media	
Suitable extinguishing media	Co-ordinate fire-fighting measures to the fire surroundings water spray, foam, dry extinguishing powder, carbon dioxide (CO ₂)
Unsuitable extinguishing media	water jet
Special hazards arising from the substance or mixture	Non-combustible. Hydrogen may form upon contact with metals (danger of explosion). Ambient fire may liberate hazardous vapors. The following may develop in event of fire: Hydrochloric acid. Heating can cause expansion or decomposition leading to violent rupture of containers.
Advice for firefighters	Fight fire from safe location. Do not breathe fumes. Wear self-contained breathing apparatus and acid-resistant clothing. Containers close to fire should be removed immediately or cooled with water. Do not allow contaminated extinguishing water to enter the soil, ground water or surface water.
Further information	Contain escaping vapors with water. Prevent fire-fighting water from entering surface water or ground water

6 ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	
Personal Precautions:	Ventilate the area to dispel possible toxic decomposition fumes. Wear appropriate protective clothing. Use PPE. Keep away unprotected persons. Danger of slipping if spilled. Avoid contact with skin and eyes. Do not breathe vapours or spray mist. For personal protection see section 8

Environmental precautions:	Contain and absorb using earth, sand or other inert material. Transfer into suitable containers for recovery or disposal. Do not flush into surface water or sanitary sewer system. Avoid subsoil penetration. If the product contaminates rivers and lakes or drains inform respective authorities. If material reaches soil inform authorities responsible for such cases
Methods and materials for containment and cleaning up:	Absorb with liquid-binding material (sand, diatomite, acid binders, and Universal binders) Keep in suitable, closed containers for disposal.
Further Information	Advise Authorities if spillage has entered water course or sewer or has contaminated soil or vegetation.

7 HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling: Keep containers tightly closed. Use personal Protective equipment. Provide sufficient air exchange and/ or exhaust in work rooms. Avoid formation of aerosol. In case of mist, spray or aerosol exposure wear suitable personal respiratory protection and protective suit. Avoid contact with the skin and the eyes. Avoid inhalation of vapour or mist. Emergency eye wash fountains and emergency showers should be available in the immediate vicinity.

Hygiene measures Keep away from food, drink and animal feeding stuffs. Smoking, eating and drinking should be prohibited in the application area. Wash hands before breaks and at the end of workday. Take off all contaminated clothing immediately. Avoid contact with the skin and the eyes. Do not breathe vapours or spray mist

Conditions for safe storage, including any incompatibilities

Requirements for storage area containers Storage area should be: well ventilated Stock tanks should be bunded and consideration should be given to vent system with a water scrubber to dispel fumes. Tanks should be equipped with airflow pipes directed into the base of the bund with a frost-protected seal to contain fumes. Suitable storage materials are:- polyethylene. PVC, Rubber lined tanks. Do not store in Stainless steel, metal drums. Store below 15C and keep away from moisture

Advice on Protection Against fire and explosion The product is not flammable. Normal measures for preventive fire protection.

Further information on storage conditions	Keep tightly closed in a dry and cool place. Keep in well ventilated place.
Advice on common storage:	Keep away from food, drink and animal feeding stuffs. Do not store together with acids and ammonium salts. Materials to avoid: Organic peroxides
Incompatible materials	Away from oxidizing agents, alkalis, most metals, alcohols, acids (sulfuric acid), di nitro aniline, cyanides, sulfides, heat sources and foodstuffs

8 EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure limits	OSHA PEL - 5 ppm (Ceiling) (7 mg/m ³) ACGIH TLV (8-hr TWA) - 2 ppm (Ceiling) (3 mg/m ³) NIOSH PEL- 5 ppm (Ceiling) (7 mg/m ³)
-----------------	---

Exposure controls

Appropriate engineering controls	The product should only be used in ventilation hoods and fans.
Individual protection measures (Personal protective equipment, PPE)	

Eye/face protection Goggles giving complete protection to eyes

Skin protection Chemical resistant apron / corrosive protective clothing, heavy duty work shoes.
Handle with gloves

- Full contact wears gloves from nitrile rubber material.
- Splash contact wears gloves from natural latex material.

Respiratory protection In case of insufficient ventilation, wear suitable respiratory equipment.

Other information Do not eat, drink or smoke during use.

9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance and Odour	Colorless to slightly yellow liquid with pungent odour
pH	Acidic
Specific Gravity	1.147-1.165gm/cc at 25 °C
Boiling Point	108 ° C
Flash Point	Not pertinent
Auto ignition	Not pertinent

Flammable Limit	Not Applicable
Vapour Pressure (mm Hg)	Not determined
Solubility in Water (at 30 °C)	Soluble
Solubility in Organic Solvents	Soluble in ethanol & ethyl ether
Oxidizing /Explosive Properties	Stable

10 STABILITY AND REACTIVITY

Reactivity	Substance or mixture corrosive to metals
Chemical stability	The material is stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.
Possibility of hazardous reactions	Risk of explosion in contact with alkali metals, conc. sulphuric acid, potassium permanganate. The substance can react dangerously with aluminium, alkali hydroxide, amines, ammonia, fluorine, bases, oxidizing agents, metal carbides, calcium hydride, formaldehyde, copper sulphide, lithium silicide, metals, sodium hydride, sodium hypochlorite and its solutions, silanes, silicon dioxide, vinyl methyl ether and zinc.
Conditions to avoid	Keep away from heat
Incompatible materials	Aluminium, amines, carbides, hydrides, fluorine, potassium permanganate, strong alkali, salts of oxyhalogenic acids, concsulfuric acid, semimetallic oxide, semimetallic hydrogen compounds, aldehydes, sulfides, lithium silicide, vinylmethyl ether. Incompatible with various metals and metal alloys.
Hazardous decomposition products	Hydrogen gas (Hazardous decomposition products from under contact with metals). Danger of explosion

11 TOXICOLOGICAL INFORMATION

Information on toxicological effects	
Acute toxicity	Not classified
Toxicity Data	LD ₅₀ (Oral, Rabbit) 900 mg/ kg LD ₅₀ (IPR, Mouse) 40 mg/ kg LC ₅₀ (IHL, Rat) 3124 ppm/ 1 hr LC _{Lo} (INH , HUMAN) 1300 ppm/ 30 minutes

In contact with skin	Highly Corrosive. Contact may result in rash, dermatitis, blistering, severe burns and discoloration. Effects may be delayed.
In contact with eyes	Highly corrosive-severe irritant. Contact may result in pain, lacrimation, redness, conjunctivitis, corneal burns and ulceration with possible permanent damage.
Inhalation	Toxic – corrosive. Over exposure may result in irritation, coughing and bronchitis. At high levels: intense thirst, ulceration, lung tissue damage, chemical pneumonitis and pulmonary edema. Symptoms may be delayed following exposure.
Ingestion	Ingestion may result in burns to the mouth and throat, nausea, vomiting and abdominal pain. Large doses may result in ulceration, unconsciousness, convulsions & death.
Chronic Toxicity	Classified 3 (not classifiable for humans) by IARC. Contains materials which may cause damage to the following organs: kidney, liver, mucous membrane, upper respiratory tract, skin, eyes & teeth. CLASS – D- 1A: material causing immediate serious toxic effects.
Carcinogenic Toxicity	IARC Group 3
Mutagenic Toxicity	Not known

12 ECOLOGICAL INFORMATION

Eco-toxicity:	Because of the low pH of this product, it would be expected produce significant eco-toxicity upon exposure to aquatic organisms and aquatic systems.
Toxicity to fish	LC50 Leuciscusidus: 862 mg/l (1N solution)
Persistence and degradability	The product contains essential inorganic compounds and the biodegradability is therefore not relevant.
Bio-accumulative potential	No bioaccumulation expected
Mobility in soil	No information available
Other adverse effects	Forms corrosive mixtures with water even if diluted. Damage to plant growth. The following applies to Hydrochloric acid general: Harmful effect on aquatic organisms. Harmful effect due to pH shift. Do not allow to enter waters, waste water or soil.

13 DISPOSAL CONSIDERATIONS

Waste Disposal

Neutralize to pH 6-8 by SLOW addition to a saturated sodium bicarbonate solution or similar basic solution. Dilute with excess water and flush to drain. Waste disposal should only be undertaken in a well-ventilated area or using a fume cupboard.

Do not add water to unreacted acidic products.

Packing materials gets contaminated & can be disposed off by appropriate methods in accordance with National / Regional requirement.

Ecology - waste materials

Avoid release to the environment.

14 TRANSPORT INFORMATION

Label



DOT (ADR/RID)

UN Number:-	UN1789
UN Proper Shipping Name:-	Hydrochloric Acid
Transport Hazard Classes	
Classes:-	8
Labels:-	8
Packing Group:-	II
Marine Pollutant:-	No

Maritime Transport- IMDG

UN Number:-	UN1789
UN Proper Shipping Name:-	Hydrochloric Acid
Transport Hazard Classes	
Classes:-	8
Labels:-	8
Ems No's:-	F-A, S-B
Packing Group:-	II
Marine Pollutant:-	No

Air Transport-IATA

UN Number:-	UN1789
-------------	--------

UN Proper Shipping Name:-	Hydrochloric Acid
Transport Hazard Classes	
Classes:-	8
Labels:-	8
Packing Group:-	II
Marine Pollutant:-	-

15 REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture:

None of the ingredients are listed.

Chemical Safety Assessment

Chemical safety assessments for substances in this mixture were not carried out

16. OTHER INFORMATION

Disclaimer:

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process unless specified in the text.

The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release, and neither it is to be considered a warranty or quality specification, nor as a binding statement on contractually agreed product qualities. Suntek Chlorides Pvt. Ltd. does not take any guarantee or legal liability expressed or implied under any circumstances in respect of the adequacy of this document for any particular purpose.