

# Hydrochloric Acid

## DESCRIPTION

HydroChloric Acid is produced by the photo chemical synthesis of Hydrogen and Chlorine which are generated as a by product during the production of Caustic Soda.

## CHEMICAL NAME & FORMULA

Hydrochloric Acid  
HCl

## CHEMICAL FORMATION

Aqueous Solution

## INPUT

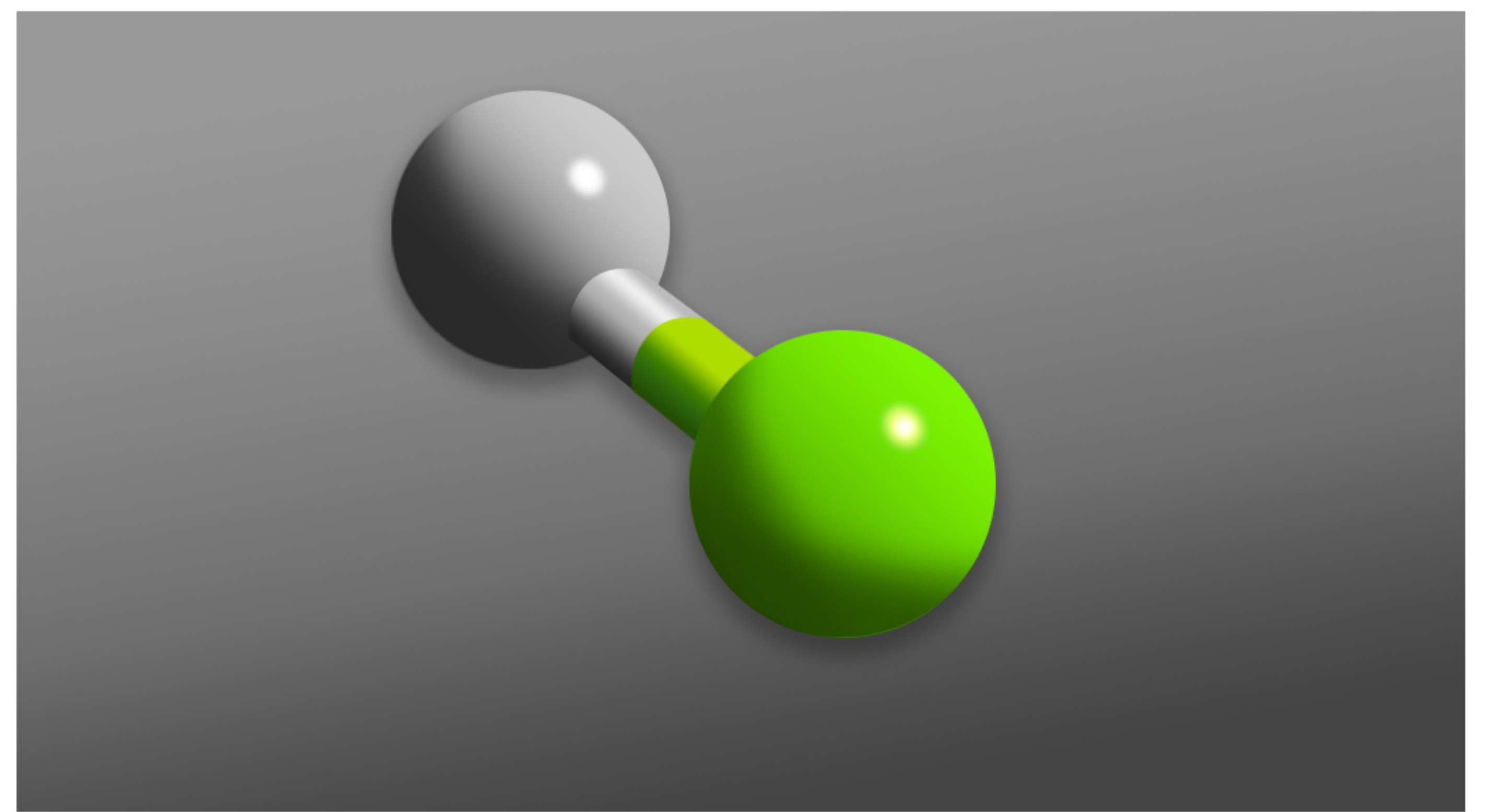
Hydrogen,  
Chlorine

## OUTPUT

Hydrochloric Acid

## APPLICATIONS

Hydrochloric Acid (HCl) is commonly used in the process of water treatment, leaching, and as an analytical agent.



## Product Properties

<b>Description</b>	Hydrochloric Acid
<b>Appearance</b>	Pale Yellow Liquid
<b>Corrosive</b>	Yes
<b>Flammability</b>	Not Flammable
<b>Solubility</b>	Soluble
<b>Odour</b>	Pungent
<b>Boiling Point</b>	-101.2°F (-74°C)
<b>Melting Point</b>	228.2°F (109°C)
<b>Specific Gravity</b>	1.15 at 27°C
<b>Incompatibility</b>	Reacts violently with strong alkalis

## Product Specifications

Characteristics	Hydrochloric Acid (HCl)	
Total Acidity (as HCl), % by mass	30 to 33	min.
Relative Density, at 27 / 27°C	1.145 to 1.150	min.
Free Chlorine (as Cl), % by mass	0.004	max.

## Related Information

### PACKAGING & HANDLING

Hydrochloric Acid is packed in HMHDPE Barrels. It can also be transported in rubber lined tank trucks.

### TRANSPORT CLASSIFICATION

U.N. No. 1017  
 IMCO Class 2  
 CAS 7782-50-5  
 IMDG Page 2116

### PRODUCT USAGES

Manufacturing of Trichloro & Perchloro Ethylene, Refrigeration, Sanitation, Pesticides, Paper and pulp, Textile Bleaching.



## Product Safety Data

<b>Name of Product</b>	Hydrochloric Acid
<b>Composition / Components</b>	Hydrochloric Acid above 30%
<b>Hazard Identification</b>	IMCO Class 8
<b>First Aid Measures</b>	<p><b>If inhaled</b>, move victim to fresh air area.</p> <p>In case of <b>ingestion</b>, have the victim drink water and milk.</p> <p>If <b>eyes &amp; skin</b> are affected, flush with plenty of water for 15 Minutes.</p> <p>Seek medical aid.</p>
<b>Measures For Fire Fighting</b>	Not a Fire Hazard.
<b>First Aid Measures In Case Of Unintentional Release</b>	Shut off leaks and drench with water. Do not use metal containers for the spilled liquid. Try to do water spray or contain liquid with sand.
<b>Handling &amp; Storage</b>	Store in rubber lined or FRP coated steel tanks away from oxidizers in a well-ventilated place.
<b>Exposure Limit &amp; Staff Protection Equipment</b>	Provide rubber hand-gloves, airline mask, chemical protective suit with self contained breathing apparatus.
<b>Physical &amp; Chemical Properties</b>	<p>Pale Yellow or clear liquid with stamp irritating odour.</p> <p><b>Sp. Gravity (water=1) is 1.14 - 1.15</b></p> <p><b>Soluble in water, Ethyl Alcohol &amp; Ethyl Ether</b></p>
<b>Stability &amp; Reactivity</b>	<p>Chemically Stable.</p> <p>Reacts with most metals.</p>
<b>Information Of Toxicology</b>	Toxic if inhaled or ingested.
<b>Information About Waste Disposal</b>	Transportable in rubber-lined or FRP coated tanks mounted on road trucks.
<b>Information About Transport</b>	Transportable on road trucks.
<b>Statutory Regulatory Information</b>	<p>Shipping Name: Hydrochloric Acid</p> <p>Hazchem Code: 2 R</p> <p>Codes / Label Corrosive, Class 8</p>
<b>Other Information</b>	<p>U.N. No. 1789</p> <p>Hazard Class 8</p> <p>C.A.S. No. 7647-01-0</p>