

Hydrochloric Acid

CAS 7647-01-0 · HCl · 30% – 33% commercial

Velora Chemicals Private Limited
Ahmedabad, Gujarat, India
+91 99255 22674 · info@velorachemicals.com

1. Product identity

Product name	Hydrochloric Acid
Synonyms	muriatic acid, HCl acid, spirit of salt
C.A.S. number	7647-01-0
Molecular formula	HCl (aqueous solution)
Molecular weight	36.46 g/mol (HCl solute; not the molar mass of the 30-33% solution)
Grade supplied against	30% – 33% commercial
Appearance	Clear, colourless to light yellow fuming liquid with a sharp, pungent, suffocating odour; commercial grade is frequently yellow-green from dissolved iron
Product group	Mineral & Organic Acids
HSN code	2806 10 00
Country of origin	As stated on the producer's documents for the lot supplied; confirmed at offer stage
Packing	Road tanker · 250 kg HDPE drum
Storage	Store in a cool, well-ventilated area in closed, vented containers of HDPE, FRP, PVC/CPVC, rubber-lined steel or PTFE-lined equipment; Chem-Lab specifies 2-25 C. Never use uncoated metal. Keep segregated from bases, oxidisers (especially hypochlorite), metals, cyanides and sulphides, and from food and feedstuffs. The acid fumes, and the fumes corrode metal structures, switchgear and adjacent stock some distance away — locate the store accordingly and use acid-resistant bunding. Provide eyewash, safety shower and a lime or soda ash spill kit.

2. Analytical specification

S. No.	Test parameter	Specification	Method
1	Description	Clear, colourless to light yellow fuming liquid with a sharp, pungent, suffocating odour; commercial grade is frequently yellow-green from dissolved iron	Visual
2	Identification	Conforms to the substance supplied	Instrumental or chemical test, per method agreed
3	Assay / grade	30% – 33% commercial	Titrimetry or instrumental, per method agreed
4	Physical state	Liquid (aqueous solution, 30-33% w/w HCl)	Visual
5	Solubility in water	Completely miscible with water in all proportions	Per the test method agreed
6	pH	<1 (as supplied, 30-33%)	Potentiometry

S. No.	Test parameter	Specification	Method
7	Relative density	1.16-1.18 g/cm ³ at 20 C (31% solution, Columbus Chemical SDS); 1.16-1.19 g/cm ³ for the 31-36.7% range (INEOS SDS). A figure specific to exactly 30-33% should be taken from the producer CoA	Densitometry / hydrometry
8	Melting / freezing point	Approx. -30 C (INEOS SDS for 31-36.7% grade); -25 C is quoted for 37% acid (Chem-Lab SDS). Strength-dependent	Capillary / thermal
9	Boiling point	>100 C for the 31-36.7% grade (INEOS SDS). The value is not a single sharp figure because HCl gas is evolved on heating; a precise boiling point for 30-33% is Not available	Distillation range
10	Flash point	Not flammable (not applicable). Caution: reaction with metals liberates flammable hydrogen gas	Not applicable — the substance is not combustible
11	Additional parameters	To the specification agreed before order	As agreed

3. Transport classification

UN 1789 · Class 8 (Corrosive) · Packing group II

Proper shipping name: HYDROCHLORIC ACID

What this document is. This is a product specification sheet. It states the grade this material is supplied against, its packing and its identity. **It is not a certificate of analysis, it carries no test results, and it certifies no batch.** Tested values for the consignment actually loaded appear on the batch certificate of analysis issued against that batch, which travels with the despatch documents. Identity and physical data are drawn from PubChem, the ECHA CLP inventory and ILO safety cards; the producer's documents for the grade quoted govern. Velora Chemicals Private Limited is a bulk supplier and trader, not a manufacturer.