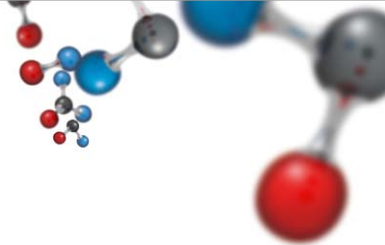


TECHNICAL DATA SHEET (TDS)

HYDROCHLORIC ACID SOLUTION



- **Chemical formula:** HCl+H₂O
- **Other name of material:** hydrochloric acid, according to ADR/RID: chlorine hydride acid (hydrochloric acid)
- **Molecular mass:** 36.5
- **Hazard identification number:** 80
- **UN number:** 1789
- **Appearance:** Colourless or yellow air-fuming solution with pungent odour

SPECIFICATIONS

Tested properties		Synthetic grade	Technical grade	Industrial grade	Test method
Hydrochloric acid (HCl) content	min.	33.0 m/m %	30.0 m/m %	30.0 m/m %	MSZ 23118:1985 (ISO 904:1976)
Ignition residue in form of sulphate	max.	0.06 m/m %	0.06 m/m %	0.06 m/m %	MSZ 901:1986 (ISO 907:1976)
Oxidising or reducing substance content in form of chlorine (Cl) and sulphuric dioxide (SO ₂)	max.	0.01 m/m %	0.01 m/m %	0.01 m/m %	MSZ 901:1986 (ISO 908:1980)
Iron (Fe) content	max.	0.002 m/m %	0.003 m/m %	0.003 m/m %	MFF-232* MSZ 901:1986 (ISO/R 909:1968)
Organic pollution	max.	-	0.0001 m/m % (under detection limit)	0.01 m/m %	MFF-226*

* BorsodChem own method

APPLICATION AREAS

The largest hydrochloric acid consumer is the chemical industry. Its other application areas are the pharmaceutical, sugar, textile and paint industries. It is also used for metal etching, pickling, surface cleaning and for the regeneration of ion-exchange resins in water treatment.

HAZARD CLASSIFICATION

According to ADR and RID hydrochloric acid solution is classified in Class 8 (corrosive substances) on the basis of its major hazardous properties.

Any further measures to be taken during transportation can be determined on the basis of this classification.

PACKAGING AND TRANSPORT

Hydrochloric acid solution can be loaded and delivered in rubber-lined tankers and plastic tanks. It shall be transported in packaging devices in compliance with ADR and RID

regulations by both road and rail.

STORAGE

It can be stored in rubber or plastic lined steel or plastic containers. Contact with substances (e.g. metals, oxidising agents) reacting with hydrochloric acid that may result in toxic, inflammable or other hazardous substances, should be avoided. It should be stored in a well-ventilated place.

No expiry date in properly closed container or storage tank.

SAFETY MEASURES

Its concentrated aqueous solution in contact with the skin is extremely corrosive and the inhalation of its vapour damages the respiratory tracts and lung tissues.

It is obligatory to wear suitable protective clothing, rubber gloves, rubber boots and safety goggles when handling hydrochloric acid.

For more information please see the material Safety Data Sheet.

TECHNICAL DATA SHEET (TDS) HYDROCHLORIC ACID SOLUTION

BorsodChem Zrt.
Sales HCl/NA
H-3700 Kazincbarcika,
Bolyai tér 1.
Phone: +36-48 511 073
Fax: +36-48 511 511
E-mail: chlorkali@borsodchem.eu

BorsodChem Zrt.
Chlorine Manufacturing
H-3700 Kazincbarcika,
Bolyai tér 1.
Phone: +36-48 511 020
Fax: +36-48 310 294
E-mail: chlorine.man@borsodchem.eu

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Technical Data Sheet (TDS)
Hydrochloric acid solution

www.borsodchem-group.com

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Manufactured by:

BorsodChem Zrt.
Bolyai tér 1.
3700 Kazincbarcika
Hungary
Phone: +36-48 511 211
Fax: +36-48 511 511