

HYDROCHLORIC ACID 37% AR

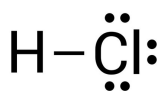
Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878
SDS Reference Number: 00172
Issue date: 5/18/2023 Revision date: 5/18/2023 Supersedes version of: 4/12/2016 Version: 1.0

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product form : Mixture
Trade name : HYDROCHLORIC ACID 37% AR
EC Index-No. : 017-002-01-X
EC-No. : 231-595-7
CAS-No. : 7647-01-0
Product code : 00173
Type of product : Acids
Formula : HCl
Chemical structure :



Synonyms : Hydronium chloride, Chlorhydric acid, Chlorane, Muriatic acid

1.2. Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses

Industrial/Professional use spec : Industrial
For professional use only
Use of the substance/mixture : Laboratory chemicals
Manufacture of substances

1.3. Details of the supplier of the safety data sheet

LOBA CHEMIE PVT.LTD.
107 Wode House Road, Jehangir Villa, Colaba
400005 Mumbai
INDIA
T +91 22 6663 6663, F +91 22 6663 6699
info@lobachemie.com, www.lobachemie.com

1.4. Emergency telephone number

Emergency number : + 91 22 6663 6663 (9:00am - 6:00 pm)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Skin corrosion/irritation, Category 1 H314
Specific target organ toxicity – Single exposure, Category 3, H335
Respiratory tract irritation
Full text of H- and EUH-statements: see section 16

Adverse physicochemical, human health and environmental effects

May cause respiratory irritation. Causes severe skin burns and eye damage.

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :



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	GHS05	GHS07
Signal word (CLP)	: Danger	
Hazard statements (CLP)	: H314 - Causes severe skin burns and eye damage. H335 - May cause respiratory irritation.	
Precautionary statements (CLP)	: P260 - Do not breathe dust/fume/gas/mist/vapours/spray. P280 - Wear protective clothing, eye protection, face protection, protective gloves. P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P310 - Immediately call a POISON CENTER or doctor.	

2.3. Other hazards

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or substance(s) are not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Water	CAS-No.: 7732-18-5 EC-No.: 231-791-2	60 – 65	Not classified
HYDROCHLORIC ACID	CAS-No.: 7647-01-0 EC-No.: 231-595-7 EC Index-No.: 017-002-01-X	35 – 40	Skin Corr. 1, H314 STOT SE 3, H335

Full text of H- and EUH-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general	: Call a physician immediately.
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing. Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/doctor. Call a POISON CENTER/doctor if you feel unwell. Call a poison center or a doctor if you feel unwell.
First-aid measures after skin contact	: Take off immediately all contaminated clothing. Rinse skin with water/shower. Immediately call a POISON CENTER/doctor. Call a physician immediately.
First-aid measures after eye contact	: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor. Call a physician immediately.
First-aid measures after ingestion	: Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER/doctor. Do not induce vomiting. Call a physician immediately.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/effects	: Causes severe skin burns and eye damage.
Symptoms/effects after inhalation	: May cause respiratory irritation.
Symptoms/effects after skin contact	: Burns.
Symptoms/effects after eye contact	: Serious damage to eyes.
Symptoms/effects after ingestion	: Burns.

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

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SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Carbon dioxide. Dry powder. Foam. Water spray. Water spray.
Unsuitable extinguishing media : Do not use extinguishing media containing water.

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products in case of fire : Toxic fumes may be released.

5.3. Advice for firefighters

Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.
Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Emergency procedures : Ventilate spillage area. Evacuate unnecessary personnel. Avoid contact with skin and eyes.
Do not breathe dust/fume/gas/mist/vapours/spray.

For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. Use personal protective equipment as required. For further information refer to section 8: "Exposure controls/personal protection".
Emergency procedures : Stop release.

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Take up liquid spill into absorbent material. On land, sweep or shovel into suitable containers. Collect spillage.
Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Avoid contact with skin and eyes. Do not breathe vapours. Use only outdoors or in a well-ventilated area. Do not breathe dust/fume/gas/mist/vapours/spray. Wear personal protective equipment.
Hygiene measures : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep container tightly closed. Store in a well-ventilated place. Store locked up. Keep cool.

7.3. Specific end use(s)

No additional information available

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SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available

8.2. Exposure controls

Appropriate engineering controls

Appropriate engineering controls:

Ensure good ventilation of the work station.

Personal protection equipment

Personal protective equipment symbol(s):



Eye and face protection

Eye protection:

Face shield. Safety glasses

Skin protection

Skin and body protection:

Wear a mask

Hand protection:

Protective gloves

Other skin protection

Materials for protective clothing:

Wear protective clothing

Respiratory protection

Respiratory protection:

Wear appropriate mask

Environmental exposure controls

Environmental exposure controls:

Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Colour	: Colourless.
Appearance	: Clear liquid.
Molecular mass	: 36.46 g/mol
Odour	: pungent odor.
Odour threshold	: Not available
Melting point	: Not applicable
Freezing point	: -30 °C
Boiling point	: 110 °C
Flammability	: Not applicable
Lower explosion limit	: Not available
Upper explosion limit	: Not available
Flash point	: Not available
Auto-ignition temperature	: Not available
Decomposition temperature	: Not available
pH	: < 1 at 20°C

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Viscosity, kinematic	: 1.944 mm ² /s
Viscosity, dynamic	: 2.3 mPa·s at 15 °C
Solubility	: Water: Miscible in water
Partition coefficient n-octanol/water (Log Kow)	: Not available
Vapour pressure	: 225 hPa at 20°C
Vapour pressure at 50°C	: Not available
Density	: 1.183 g/cm ³
Relative density	: Not available
Relative vapour density at 20°C	: 1.2
Particle characteristics	: Not applicable

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

Direct sunlight. Overheating. Open flame. Heat. Sparks.

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Thermal decomposition generates : Corrosive vapours.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity (oral)	: Not classified
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified
Skin corrosion/irritation	: Causes severe skin burns. pH: < 1 at 20°C

HYDROCHLORIC ACID (7647-01-0)

pH	< 1
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Serious eye damage/irritation	: Assumed to cause serious eye damage pH: < 1 at 20°C
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HYDROCHLORIC ACID (7647-01-0)

pH	< 1
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Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
STOT-single exposure	: May cause respiratory irritation.

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STOT-single exposure	May cause respiratory irritation.
STOT-repeated exposure	: Not classified
Aspiration hazard	: Not classified

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Viscosity, kinematic	1.944 mm ² /s
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11.2. Information on other hazards

No additional information available

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general	: Before neutralisation, the product may represent a danger to aquatic organisms.
Hazardous to the aquatic environment, short-term (acute)	: Not classified
Hazardous to the aquatic environment, long-term (chronic)	: Not classified

12.2. Persistence and degradability

HYDROCHLORIC ACID 37% AR (7647-01-0)

Persistence and degradability	Rapidly degradable
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Water (7732-18-5)

Persistence and degradability	Rapidly degradable
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HYDROCHLORIC ACID (7647-01-0)

Persistence and degradability	Rapidly degradable
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12.3. Bioaccumulative potential

No additional information available

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Endocrine disrupting properties

No additional information available

12.7. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods	: Dispose of contents/container in accordance with licensed collector's sorting instructions.
Product/Packaging disposal recommendations	: Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

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SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN / RID

14.1. UN number or ID number

UN-No. (ADR)	: UN 1789
UN-No. (IMDG)	: UN 1789
UN-No. (IATA)	: UN 1789
UN-No. (ADN)	: UN 1789
UN-No. (RID)	: UN 1789

14.2. UN proper shipping name

Proper Shipping Name (ADR)	: HYDROCHLORIC ACID
Proper Shipping Name (IMDG)	: HYDROCHLORIC ACID
Proper Shipping Name (IATA)	: Hydrochloric acid
Proper Shipping Name (ADN)	: HYDROCHLORIC ACID
Proper Shipping Name (RID)	: HYDROCHLORIC ACID
Transport document description (ADR) (ADR)	: UN 1789 HYDROCHLORIC ACID, 8, II, (E)
Transport document description (IMDG)	: UN 1789 HYDROCHLORIC ACID, 8, II
Transport document description (IATA)	: UN 1789 Hydrochloric acid, 8, II
Transport document description (ADN)	: UN 1789 HYDROCHLORIC ACID, 8, II
Transport document description (RID)	: UN 1789 HYDROCHLORIC ACID, 8, II

14.3. Transport hazard class(es)

ADR

Transport hazard class(es) (ADR)	: 8
Danger labels (ADR)	: 8



IMDG

Transport hazard class(es) (IMDG)	: 8
Danger labels (IMDG)	: 8



IATA

Transport hazard class(es) (IATA)	: 8
Danger labels (IATA)	: 8



ADN

Transport hazard class(es) (ADN)	: 8
Danger labels (ADN)	: 8



RID

Transport hazard class(es) (RID)	: 8
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Danger labels (RID) : 8



14.4. Packing group

Packing group (ADR) : II
Packing group (IMDG) : II
Packing group (IATA) : II
Packing group (ADN) : II
Packing group (RID) : II

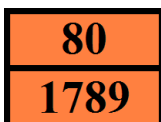
14.5. Environmental hazards

Dangerous for the environment : No
Marine pollutant : No
EmS-No. (Fire) : F-A
EmS-No. (Spillage) : S-B
Other information : No supplementary information available

14.6. Special precautions for user

Overland transport

Classification code (ADR) : C1
Special provisions (ADR) : 520
Limited quantities (ADR) : 1I
Excepted quantities (ADR) : E2
Packing instructions (ADR) : P001, IBC02
Mixed packing provisions (ADR) : MP15
Portable tank and bulk container instructions (ADR) : T8
Portable tank and bulk container special provisions (ADR) : TP2
Tank code (ADR) : L4BN
Tank special provisions (ADR) : TU42
Vehicle for tank carriage : AT
Transport category (ADR) : 2
Hazard identification number (Kemler No.) : 80
Orange plates :



Tunnel restriction code (ADR) : E
EAC code : 2R

Transport by sea

Limited quantities (IMDG) : 1 L
Excepted quantities (IMDG) : E2
Packing instructions (IMDG) : P001
IBC packing instructions (IMDG) : IBC02
IBC special provisions (IMDG) : B20
Tank instructions (IMDG) : T8
Tank special provisions (IMDG) : TP2
Stowage category (IMDG) : C
Segregation (IMDG) : SGG1A, SG36, SG49
Properties and observations (IMDG) : Colourless liquid. An aqueous solution of the gas hydrogen chloride. Highly corrosive to most metals. Causes burns to skin, eyes and mucous membranes.
MFAG-No : 157

Air transport

PCA Excepted quantities (IATA) : E2
PCA Limited quantities (IATA) : Y840

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PCA limited quantity max net quantity (IATA)	: 0.5L
PCA packing instructions (IATA)	: 851
PCA max net quantity (IATA)	: 1L
CAO packing instructions (IATA)	: 855
CAO max net quantity (IATA)	: 30L
Special provisions (IATA)	: A3, A803
ERG code (IATA)	: 8L

Inland waterway transport

Classification code (ADN)	: C1
Special provisions (ADN)	: 520
Limited quantities (ADN)	: 1 L
Excepted quantities (ADN)	: E2
Carriage permitted (ADN)	: T
Equipment required (ADN)	: PP, EP
Number of blue cones/lights (ADN)	: 0

Rail transport

Classification code (RID)	: C1
Special provisions (RID)	: 520
Limited quantities (RID)	: 1L
Excepted quantities (RID)	: E2
Packing instructions (RID)	: P001, IBC02
Mixed packing provisions (RID)	: MP15
Portable tank and bulk container instructions (RID)	: T8
Portable tank and bulk container special provisions (RID)	: TP2
Tank codes for RID tanks (RID)	: L4BN
Special provisions for RID tanks (RID)	: TU42
Transport category (RID)	: 2
Colis express (express parcels) (RID)	: CE6
Hazard identification number (RID)	: 80

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

SECTION 15: Regulatory information

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

EU-Regulations

REACH Annex XVII (Restriction List)

Contains no substance(s) listed on REACH Annex XVII (Restriction Conditions)

REACH Annex XIV (Authorisation List)

Contains no substance(s) listed on REACH Annex XIV (Authorisation List)

REACH Candidate List (SVHC)

Contains no substance(s) listed on the REACH Candidate List

PIC Regulation (Prior Informed Consent)

Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals)

POP Regulation (Persistent Organic Pollutants)

Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)

Ozone Regulation (2024/590)

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 2024/590 on substances that deplete the ozone layer)

Council Regulation (EC) for the control of dual-use items

Contains no substance subject to the COUNCIL REGULATION (EC) for the control of dual-use items

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Explosives Precursors Regulation (2019/1148)

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

Drug Precursors Regulation (273/2004)

Contains substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

Name	CN designation	CAS-No.	CN code	Category, Subcategory	Threshold	Annex
Hydrochloric acid	Hydrogen chloride	7647-01-0	2806 10 00	Category 3		Annex I

National regulations

France

Occupational diseases	
Code	Description
RG 66	Occupational rhinitis and asthma

Germany

VOC ordinance (ChemVOCFarbV)

:

Water hazard class (WGK)

: WGK 1, Slightly hazardous to water (Classification according to AwSV, Annex 1).

Major Accidents Ordinance (12. BImSchV)

: Is not subject to the Major Accidents Ordinance (12. BImSchV)

Netherlands

SZW-lijst van kankerverwekkende stoffen

: None of the components are listed

SZW-lijst van mutagene stoffen

: None of the components are listed

SZW-lijst van reprotoxische stoffen – Borstvoeding

: None of the components are listed

SZW-lijst van reprotoxische stoffen –

: None of the components are listed

Vruchtbaarheid

SZW-lijst van reprotoxische stoffen – Ontwikkeling

: None of the components are listed

Denmark

Danish National Regulations

: Young people below the age of 18 years are not allowed to use the product

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Poland

Polish National Regulations

: Act of 25 February 2011 on chemical substances and their mixtures (J. o L. No. 63, item 322 as amended; consolidated text J. o L. 2019, item 1225).
Act of 14 December 2012 on waste (J. o L. 2013, item 322 as amended; consolidated text J. o L. 2020, item 797).
The announcement of Marshal of the Sejm of the Republic of Poland dated 19 October 2016 concerning the consolidated text announcement of the decree on the management of packaging and packaging waste (J. o L. 2016, item 1863 as amended).
Decree of the Minister of Environment of 14 December 2014 on the catalogue of waste (J. o L. 2014, item 1923).
Act of 19 August 2011 on the Carriage of Dangerous Goods (J. o L. 2011 No. 227, item 1367 as amended; consolidated text J. o L. 2020, item 154).
Regulation of the Minister of Family, Labour and Social Policy of 12 June 2018 on the highest permissible concentration and intensity of noxious agents for health at work environment (J. o L. item 1286 as amended).
The announcement of Minister of Health dated 9 September 2016 concerning the consolidated text announcement of the decree of the Minister of Health of 30 December 2004 on health and safety at work related to exposure to chemical agents at work (J. o L. of 16 September 2016, item 1488).
Regulation of the Minister of Health of 2 February 2011 on tests and measurements of the noxious agents for health at work environment (J. o L. No. 33, item 166 as amended).
Regulation of the Minister of Environment of 9 December 2003 on particularly hazardous substances to the environment (J. o L. No. 217, item 2141).
ADR Agreement: Government Statement of 13 March 2023 on the entry into force of amendments to Annexes A and B to the Agreement concerning the International Carriage of Dangerous Goods by Road (ADR), signed in Geneva on 30 September 1957 (J. o. L. 2023, item 891)

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Abbreviations and acronyms:	
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	Acute Toxicity Estimate
BCF	Bioconcentration factor
BLV	Biological limit value
BOD	Biochemical oxygen demand (BOD)
COD	Chemical oxygen demand (COD)
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
EC-No.	European Community number
EC50	Median effective concentration
EN	European Standard
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration

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Abbreviations and acronyms:	
LD50	Median lethal dose
LOAEL	Lowest Observed Adverse Effect Level
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration
OECD	Organisation for Economic Co-operation and Development
OEL	Occupational Exposure Limit
PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS	Safety Data Sheet
STP	Sewage treatment plant
ThOD	Theoretical oxygen demand (ThOD)
TLM	Median Tolerance Limit
VOC	Volatile Organic Compounds
CAS-No.	Chemical Abstract Service number
N.O.S.	Not Otherwise Specified
vPvB	Very Persistent and Very Bioaccumulative
ED	Endocrine disruptor

Full text of H- and EUH-statements:	
Skin Corr. 1	Skin corrosion/irritation, Category 1
STOT SE 3	Specific target organ toxicity – Single exposure, Category 3, Respiratory tract irritation
H314	Causes severe skin burns and eye damage.
H335	May cause respiratory irritation.

Safety Data Sheet (SDS), EU

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.