1. IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND OF THE COMPANY / UNDERTAKING

Product identifier:

Product name: Hydrochloric Acid 32%

EU REACH registration number: 01-2119484862-27-XXXX

Relevant identified uses of the substance or mixture and uses advised against:

Identified uses: Solvent for Industrial Use.

Uses advised against: NOT REGISTERED FOR USE AS A BIOCIDE.

Company name: Nexchem Ltd
Unit 3 Barshaw Park
Leycroft Road
Leicester
LE4 1ET
Tel: 0116 2311130
24/7 Emergency Tel: 0800 246 1274
Email: sales@nexchem.co.uk

2. HAZARDS IDENTIFICATION

Classification of the substance or mixture:

Classification (SI 2019 No. 720):

Physical hazards: Met. Corr. 1 - H290

Health hazards: Skin Corr. 1B - H314 Eye Dam. 1 - H318 STOT SE 3 - H335

Environmental hazards: Not Classified.

Label elements:

Hazard pictograms:

Signal word: Danger.

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

[cont…]

Precautionary statements: P260 Do not breathe vapour/ spray.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
P304+P340 IF INHALED: Remove person to fresh air and keep 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.
P308+P313 IF exposed or concerned: Get medical advice/ attention.

Contains: Hydrochloric acid ... %

Other hazards:

3. COMPOSITION / INFORMATION ON INGREDIENTS

Mixtures: Hydrochloric acid ... % 30-60%
CAS number: 7647-01-0
EC number: 231-595-7

Classification: Met. Corr. 1 - H290
Skin Corr. 1B - H314
STOT SE 3 - H335

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

4. FIRST AID MEASURES

Description of first aid measures:

General information: Get medical attention immediately. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing.

Inhalation: Remove affected person from source of contamination. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Maintain an open airway. Loosen tight clothing such as collar, tie or belt. When breathing is difficult, properly trained personnel may assist affected person by administering oxygen.

Ingestion: Do not induce vomiting. Rinse mouth thoroughly with water. Give plenty of water to drink. Get medical attention immediately. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs.

Skin contact: Remove contaminated clothing and rinse skin thoroughly with water. Get medical attention if any discomfort continues.

Eye contact: Rinse immediately with plenty of water. Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes. Get medical attention immediately.

[cont…]

Most important symptoms and effects, both acute and delayed:

Inhalation: Vapours irritate the respiratory system. Shortness of breath. Burning sensation in the throat.

Ingestion: May cause chemical burns in mouth, oesophagus and stomach.

Skin contact: Causes severe skin burns and eye damage. Blistering may occur.

Eye contact: Causes severe skin burns and eye damage. Corneal damage.

Indication of any immediate medical attention and special treatment needed:

Specific treatments: Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Extinguishing media:

Suitable extinguishing media: Use fire-extinguishing media suitable for the surrounding fire.

Unsuitable extinguishing media: Do not use water jet as an extinguisher, as this will spread the fire.

Special hazards arising from the substance or mixture:

Specific hazards: Thermal decomposition or combustion products may include the following substances: Toxic and corrosive gases or vapours. Can react with most common metals to produce hydrogen.

Advice for firefighters:

Protective actions during firefighting: Avoid breathing fire gases or vapours. Keep up-wind to avoid fumes. Fight fire from safe distance or protected location.

Special protective equipment for firefighters:

Wear chemical protective suit. Use air-supplied respirator, gloves and protective goggles.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:

Personal precautions: Wear protective clothing as described in Section 8 of this safety data sheet. Avoid contact with skin and eyes. Avoid inhalation of vapours and contact with skin and eyes.

Environmental precautions: Avoid discharge into drains. Avoid release to the environment. Avoid or minimise the creation of any environmental contamination.

Methods and material for containment and cleaning up:

Methods for cleaning up: Wear suitable protective equipment, including gloves, goggles/face shield, respirator, boots, clothing or apron, as appropriate. Wash thoroughly after dealing with a spillage. Do not touch or walk into spilled material. Contain and absorb spillage with sand, earth or other non-combustible material. Collect and place in suitable waste disposal containers and seal securely. Flush contaminated area with plenty of water.

Reference to other sections: For personal protection, see Section 8.For waste disposal, see Section 13.

[cont…]

7. HANDLING AND STORAGE

Precautions for safe handling:

Usage precautions: Avoid inhalation of vapours/spray and contact with skin and eyes. Provide adequate ventilation. Wash hands and any other contaminated areas of the body with soap and water before leaving the work site.

Conditions for safe storage, including any incompatibilities:

Storage precautions: Store in tightly-closed, original container in a dry, cool and well-ventilated place. Keep away from food, drink and animal feeding stuffs.

Storage class: Corrosive storage.

Specific end use(s):

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters:

Occupational exposure limits: Hydrochloric acid ... %

Long-term exposure limit (8-hour TWA): WEL 1 ppm 2 mg/m³ gas and aerosol mists

Short-term exposure limit (15-minute): WEL 5 ppm 8 mg/m³ gas and aerosol mists

WEL = Workplace Exposure Limit.

Exposure controls:

Protective equipment:

Appropriate engineering controls: Provide adequate general and local exhaust ventilation.

Eye/face protection: Wear chemical splash goggles. Personal protective equipment that provides appropriate eye and face protection should be worn.

Hand protection: It is recommended that chemical-resistant, impervious gloves are worn. To protect hands from chemicals, wear gloves that are proven to be impervious to the chemical and resist degradation. It is recommended that gloves are made of the following material: Polyvinyl chloride (PVC). Butyl rubber. Nitrile rubber. It should be noted that liquid may penetrate the gloves. Frequent changes are recommended.

Other skin and body protection: Wear suitable protective clothing as protection against splashing or contamination.

Hygiene measures: Provide eyewash station. Wash promptly if skin becomes contaminated. Wash at the end of each work shift and before eating, smoking and using the toilet. When using do not eat, drink or smoke.

Respiratory protection: Wear a full facepiece, supplied-air respirator.

[cont…]

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties:

Appearance:	Liquid.
Colour:	Colourless.
Odour:	Odourless.
Initial boiling point and range:	97.7°C
Vapour pressure:	11 @ 20°C
Relative density:	1.14 @ 20°C
Solubility(ies):	Soluble in water.
Specific Gravity:	
Other information:	

10. STABILITY AND REACTIVITY

Reactivity: Reacts violently with strong oxidising substances.

Chemical stability:

Stability: No particular stability concerns.

Possibility of hazardous reactions: Under normal conditions of storage and use, no hazardous reactions will occur. Gives off hydrogen by reaction with metals. Can react violently with oxidising agents liberating chlorine. Exothermic reaction with alkalis.

Conditions to avoid: Contact with some metals may result in the release of hydrogen gas. Alkalis.

Incompatible materials:

Materials to avoid: Metals. Alkalis.

Hazardous decomposition products: Thermal decomposition or combustion products may include the following substances: Chlorine. Hydrogen.

11. TOXICOLOGICAL INFORMATION

Information on toxicological effects:

General information:	Exposure may cause coughing and wheezing. Nausea and stomach pain may occur.
Inhalation:	Vapours irritate the respiratory system. Shortness of breath. Burning sensation in the throat.
Ingestion:	May cause chemical burns in mouth, oesophagus and stomach.
Skin contact:	Causes severe burns.
Eye contact:	Risk of serious damage to eyes.

[cont…]

12. ECOLOGICAL INFORMATION

Toxicity:

Acute aquatic toxicity:

Acute toxicity – fish: LC_{50}, 96 hour: 20.5 mg/l, Freshwater fish

Acute toxicity – aquatic invertebrates: EC_{50}, 48 hour: 0.45 mg/l, Daphnia magna

Persistence and degradability: Will disperse as ions.

Bioaccumulative potential: Bioaccumulation is unlikely.

Mobility in soil:

Mobility: The product is soluble in water.

Results of PBT and vPvB assessment: This substance is not classified as PBT or vPvB according to current UK criteria.

Other adverse effects: None known.

13. DISPOSAL CONSIDERATIONS

Waste treatment methods:

General information: Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority. Confirm disposal procedures with environmental engineer and local regulations.

Disposal methods: Do not allow runoff to sewer, waterway or ground.

14. TRANSPORT INFORMATION

UN number:

UN No. (ADR/RID): 1789

UN No. (IMDG): 1789

UN No. (ICAO): 1789

UN No. (ADN): 1789

UN proper shipping name:

Proper shipping name (ADR/RID): HYDROCHLORIC ACID

Proper shipping name (IMDG): HYDROCHLORIC ACID

Proper shipping name (ICAO): HYDROCHLORIC ACID

Proper shipping name (ADN): HYDROCHLORIC ACID

[cont…]

Transport hazard class(es):

ADR/RID class: 8

ADR/RID classification code: C1

ADR/RID label: 8

IMDG class: 8

ICAO class/division: 8

ADN class: 8

Transport labels:

Packing group:

ADR/RID packing group: II

IMDG packing group: II

ICAO packing group: II

ADN packing group: II

Environmental hazards:

Environmentally hazardous substance/marine pollutant: No.

Special precautions for user:

EmS: F-A, S-B

ADR transport category: 2

Emergency Action Code: 2R

Hazard Identification Number (ADR/RID): 80

Tunnel restriction code: (E)

Transport in bulk according to Annex II of MARPOL and the IBC Code:

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code: Not applicable.

15. REGULATORY INFORMATION

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

EU legislation: Regulation (EC) No 1272/2008 CLP.
Regulation (EC) No 1907/2006 REACH.

Additional information: Hydrochloric Acid at concentrations above 10% w/w are subject to The Control of Explosives Precursors and Poisons Regulations 2023. Details on meeting the requirements of the legislation can be obtained from the Home Office.

Chemical safety assessment: No chemical safety assessment has been carried out.

Note: The regulatory information given above only indicates the principal regulations specifically Applicable to the product described in the safety data sheet. The user's attention is drawn to the possible existence of additional provisions which complete these regulations. Refer to all applicable national, international and local regulations or provisions. [cont…]

16. OTHER INFORMATION

Hazard statements in full:

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

Legal disclaimer:

The information contained in this SDS does not constitute a risk assessment, and should not replace the user's own assessment of risks as required by other health and safety legislation. This advice is given by Nexchem Ltd who accept no legal liability for it except otherwise provided by law. The information contained herein is based on the present state of our knowledge and is intended to describe our products from the point of view of safety requirements. It should not therefore be construed as guaranteeing specific properties.