

MATERIAL SAFETY DATA SHEET
 Hydrochloric acid, 1N standard solution

Section 1 - Chemical Product and Company Identification

MSDS Name:	Hydrochloric acid, 1N standard solution
Catalog Numbers:	12421-0000, 12421-0010, 12421-0025
Synonyms:	
Company Identification:	Acros Organics BVBA Janssen Pharmaceuticaaan 3a 2440 Geel, Belgium
Company Identification: (USA)	Acros Organics One Reagent Lane Fair Lawn, NJ 07410
For information in the US, call:	800-ACROS-01
For information in Europe, call:	+32 14 57 52 11
Emergency Number, Europe:	+32 14 57 52 99
Emergency Number US:	201-796-7100
CHEMTREC Phone Number, US:	800-424-9300
CHEMTREC Phone Number, Europe:	703-527-3887

Section 2 - Composition, Information on Ingredients

CAS#	Chemical Name:	%	EINECS#	Hazard Symbols:	Risk Phrases:
7647-01-0	Hydrochloric acid	3.6%	231-595-7	C	34 37
7732-18-5	Water	96.4%	231-791-2		

Text for R-phrases: see Section 16

Hazard Symbols: None listed**Risk Phrases:** None listed
Section 3 - Hazards Identification
EMERGENCY OVERVIEW
Not available
Potential Health Effects

Eye:	May cause eye irritation.
Skin:	May cause skin irritation. May be harmful if absorbed through the skin.
Ingestion:	May cause irritation of the digestive tract. May be harmful if swallowed.
Inhalation:	May cause respiratory tract irritation. May be harmful if inhaled.
Chronic:	

Section 4 - First Aid Measures

Eyes:	Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.
Skin:	Get medical aid. Flush skin with plenty of water for at least 15 minutes while removing

contaminated clothing and shoes.

Ingestion:

Get medical aid. Wash mouth out with water.

Inhalation:

Remove from exposure and move to fresh air immediately.

Notes to Physician:

Treat symptomatically and supportively.

Section 5 - Fire Fighting Measures

General Information:

As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear.

Extinguishing Media:

Substance is noncombustible; use agent most appropriate to extinguish surrounding fire.

Section 6 - Accidental Release Measures

General Information:

Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks:

Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container.

Section 7 - Handling and Storage

Handling:

Avoid breathing dust, vapor, mist, or gas. Avoid contact with skin and eyes.

Storage:

Store in a cool, dry place. Store in a tightly closed container.

Section 8 - Exposure Controls, Personal Protection

Engineering Controls:

Use adequate ventilation to keep airborne concentrations low.

Exposure Limits

CAS# 7647-01-0:

United Kingdom, WEL - TWA: 1 ppm TWA (aerosol mist and gas); 2 mg/m³ TWA (aerosol mist and gas) United Kingdom, WEL - STEL: 5 ppm STEL (aerosol mist and gas); 8 mg/m³ STEL (aerosol mist and gas)

United States OSHA: ; 5 ppm Ceiling; 7 mg/m³ Ceiling

Belgium - TWA: 5 ppm VLE; 8 mg/m³ VLE Belgium - STEL: 10 ppm VLE; 15 mg/m³ VLE

France - VLE: 5 ppm VLE; 7.6 mg/m³ VLE

Germany: 8 mg/m³ TWA

Japan: 5 ppm Ceiling; 7.5 mg/m³ Ceiling

Malaysia: 5 ppm Ceiling; 7.5 mg/m³ Ceiling

Netherlands: 10 ppm STEL; 15 mg/m³ STEL Netherlands: 5 ppm MAC; 8 mg/m³ MAC

Spain: 5 ppm VLA-ED; 7.6 mg/m³ VLA-ED Spain: 10 ppm VLA-EC; 15 mg/m³ VLA-EC

CAS# 7732-18-5:

Personal Protective Equipment

Eyes:

Wear chemical splash goggles.

Skin:

Wear appropriate protective gloves to prevent skin exposure.

Clothing:

Wear appropriate protective clothing to prevent skin exposure.

Respirators:

Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Section 9 - Physical and Chemical Properties

Physical State: Clear liquid
Color: colorless
Odor: odorless
pH: Not available
Vapor Pressure: Not available
Viscosity: Not available
Boiling Point: 100 deg C @760mmHg (212.00°F)
Freezing/Melting Point: Not available
Autoignition Temperature: Not available
Flash Point: Not available
Explosion Limits: Lower: Not available
Explosion Limits: Upper: Not available
Decomposition Temperature: Not available
Solubility in water: miscible with water
Specific Gravity/Density: 1.020
Molecular Formula: ClH
Molecular Weight: 36.45

Section 10 - Stability and Reactivity

Chemical Stability: Stable under normal temperatures and pressures.
Conditions to Avoid: Incompatible materials.
Incompatibilities with Other Materials: Bases, alkali metals, aluminum, amines, copper, copper alloys, steel.
Hazardous Decomposition Products: Hydrogen chloride, chlorine, hydrogen gas.
Hazardous Polymerization: Will not occur.

Section 11 - Toxicological Information

RTECS#: CAS# 7647-01-0: MW4025000 MW4031000
CAS# 7732-18-5: ZC0110000

LD50/LC50: RTECS:
CAS# 7647-01-0: Inhalation, mouse: LC50 = 1108 ppm/1H;
Inhalation, mouse: LC50 = 20487 mg/m³/5M;
Inhalation, mouse: LC50 = 3940 mg/m³/30M;
Inhalation, mouse: LC50 = 8300 mg/m³/30M;
Inhalation, rat: LC50 = 3124 ppm/1H;
Inhalation, rat: LC50 = 60938 mg/m³/5M;
Inhalation, rat: LC50 = 7004 mg/m³/30M;
Inhalation, rat: LC50 = 45000 mg/m³/5M;
Inhalation, rat: LC50 = 8300 mg/m³/30M;
Oral, rabbit: LD50 = 900 mg/kg;

RTECS:
CAS# 7732-18-5: Oral, rat: LD50 = >90 mL/kg;

Other:

Carcinogenicity: Hydrochloric acid - IARC: Group 3 (not classifiable)
Water - Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65.

Other: See actual entry in RTECS for complete information.

Section 12 - Ecological Information

Section 13 - Disposal Considerations

Dispose of in a manner consistent with federal, state, and local regulations.

Section 14 - Transport Information

	IATA	IMO	RID/ADR
Shipping Name:	HYDROCHLORIC ACID	HYDROCHLORIC ACID	HYDROCHLORIC ACID
Hazard Class:	8	8	8
UN Number:	1789	1789	1789
Packing Group:	III	III	III

USA RQ: CAS# 7647-01-0: 5000 lb final RQ; 2270 kg final RQ

Section 15 - Regulatory Information

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols: Not available

Risk Phrases:

Safety Phrases:

S 24/25 Avoid contact with skin and eyes.

WGK (Water Danger/Protection)

CAS# 7647-01-0: 1

CAS# 7732-18-5: Not available

Canada

CAS# 7647-01-0 is listed on Canada's DSL List

CAS# 7732-18-5 is listed on Canada's DSL List

US Federal

TSCA

CAS# 7647-01-0 is listed on the TSCA Inventory.

CAS# 7732-18-5 is listed on the TSCA Inventory.

Section 16 - Other Information

Text for R-phrases from Section 2

R 34 Causes burns.

R 37 Irritating to respiratory system.

MSDS Creation Date: 1/25/2000

Revision #1 Date 9/14/2004

Revisions were made in Sections: General revision.

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