

# HYDROCHLORIC ACID 2M (2N) STANDARDIZED SOLUTION MSDS

CAS No: MSDS

## MATERIAL SAFETY DATA SHEET (MSDS)

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

#### 1.1. Product identifier

Product form : Mixture  
:  
Product code : R140F

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

##### 1.2.1. Relevant identified uses

Use of the substance/mixture : Laboratory chemicals, Manufacture of substances

##### 1.2.2. Uses advised against

No additional information available

#### 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](mailto:info@lobachemie.com) - [www.lobachemie.com](http://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 Directive 67/548/EEC or 1999/45/EC

Xi; R37

Full text of R-phrases: see section 16

##### Adverse physicochemical, human health and environmental effects

No additional information available

#### 2.2. Label elements

##### Labelling according to Directive 67/548/EEC or 1999/45/EC

Hazard symbols :



Xi - Irritant

# HYDROCHLORIC ACID 2M (2N) STANDARDIZED SOLUTION

## Safety Data Sheet

R-phrases	: R37 - Irritating to respiratory system
S-phrases	: S35 - This material and its container must be disposed of in a safe way S51 - Use only in well-ventilated areas S59 - Refer to manufacturer/supplier for information on recovery/recycling

### 2.3. Other hazards

No additional information available

## SECTION 3: Composition/information on ingredients

### 3.1. Substance

Not applicable

### 3.2. Mixture

Name	Product identifier	%	Classification according to Directive 67/548/EEC	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Water	(CAS No) 7732-18-5 (EC no) 231-791-2	75 - 99	Not classified	Not classified
Hydrochloric acid	(CAS No) 7647-01-0 (EC no) 231-595-7 (EC index no) 017-002-01-X	5 - 10	C; R34 Xi; R37	Skin Corr. 1B, H314 STOT SE 3, H335

Full text of R- and H-phrases: see section 16

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing. Give oxygen or artificial respiration if necessary. If you feel unwell, seek medical advice.
First-aid measures after skin contact	: Wash skin with plenty of water. If skin irritation or rash occurs: Get medical advice/attention.
First-aid measures after eye contact	: Remove contact lenses, if present and easy to do. Continue rinsing. Rinse cautiously with water for several minutes. If eye irritation persists: Get medical advice/attention.
First-aid measures after ingestion	: Rinse mouth out with water. If you feel unwell, seek medical advice.

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

Symptoms/injuries after inhalation	: May cause respiratory irritation.
Symptoms/injuries after skin contact	: Causes skin irritation.
Symptoms/injuries after eye contact	: Causes serious eye irritation.

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

Treat symptomatically.

# HYDROCHLORIC ACID 2M (2N) STANDARDIZED SOLUTION

## Safety Data Sheet

### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

Suitable extinguishing media : dry chemical powder, alcohol-resistant foam, carbon dioxide (CO<sub>2</sub>).  
Unsuitable extinguishing media : Do not use a heavy water stream.

#### 5.2. Special hazards arising from the substance or mixture

No additional information available

#### 5.3. Advice for firefighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment.

### SECTION 6: Accidental release measures

#### 6.1. Personal precautions, protective equipment and emergency procedures

##### 6.1.1. For non-emergency personnel

Emergency procedures : Evacuate unnecessary personnel.

##### 6.1.2. For emergency responders

Protective equipment : Use personal protective equipment as required.

#### 6.2. Environmental precautions

Avoid release to the environment.

#### 6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Collect spillage. On land, sweep or shovel into suitable containers. Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible.

#### 6.4. Reference to other sections

No additional information available

### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

Precautions for safe handling : Avoid contact with skin and eyes.  
Hygiene measures : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

#### 7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in original container. Keep container tightly closed. Store in a dry place.

#### 7.3. Specific end use(s)

No additional information available

### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

No additional information available

# HYDROCHLORIC ACID 2M (2N) STANDARDIZED SOLUTION

## Safety Data Sheet

### 8.2. Exposure controls

Hand protection	: protective gloves
Eye protection	: Chemical goggles or safety glasses
Skin and body protection	: Wear suitable protective clothing
Respiratory protection	: Wear respiratory protection

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Colour	: Clear Colorless.
Odour	: No data available
Odour threshold	: No data available
pH	: No data available
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: No data available
Freezing point	: No data available
Boiling point	: No data available
Flash point	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: No data available
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Solubility	: No data available
Log Pow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: No data available

### 9.2. Other information

No additional information available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

No additional information available

# HYDROCHLORIC ACID 2M (2N) STANDARDIZED SOLUTION

## Safety Data Sheet

### 10.2. Chemical stability

Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

No additional information available

### 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

No additional information available

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity	: Not classified
Irritation	: Irritating to respiratory system.
Corrosivity	: Not classified
Sensitisation	: Not classified
Repeated dose toxicity	: Not classified
Carcinogenicity	: Not classified
Mutagenicity	: Not classified
Toxicity for reproduction	: Not classified

## SECTION 12: Ecological information

### 12.1. Toxicity

No additional information available

### 12.2. Persistence and degradability

No additional information available

### 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

# HYDROCHLORIC ACID 2M (2N) STANDARDIZED SOLUTION

## Safety Data Sheet

### 12.6. Other adverse effects

No additional information available

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

No additional information available

## SECTION 14: Transport information

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

### 14.1. UN number

UN-No. (ADR)	: 1789
UN-No. (IMDG)	: 1789
UN-No.(IATA)	: 1789
UN-No.(ADN)	: 1789
UN-No. (RID)	: 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)	: UN 1789 HYDROCHLORIC ACID, 8, III, (E)
Transport document description (IMDG)	: UN 1789 HYDROCHLORIC ACID, 8, III
Transport document description (IATA)	: UN 1789 HYDROCHLORIC ACID, 8, III
Transport document description (ADN)	: UN 1789 HYDROCHLORIC ACID, 8, III
Transport document description (RID)	: UN 1789 HYDROCHLORIC ACID, 8, III

### 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
Hazard labels (IATA)	: 8

# HYDROCHLORIC ACID 2M (2N) STANDARDIZED SOLUTION

## Safety Data Sheet



### ADN

Transport hazard class(es) (ADN) : 8

Danger labels (ADN) : 8



### RID

Transport hazard class(es) (RID) : 8

Danger labels (RID) : 8



### 14.4. Packing group

Packing group (ADR) : III

Packing group (IMDG) : III

Packing group (IATA) : III

Packing group (ADN) : III

Packing group (RID) : III

### 14.5. Environmental hazards

Dangerous for the environment : No

Marine pollutant : No

Other information : No supplementary information available

### 14.6. Special precautions for user

#### - Overland transport

Classification code (ADR) : C1

Special provision (ADR) : 520

Limited quantities (ADR) : 5L

Excepted quantities (ADR) : E1

Packing instructions (ADR) : P001, IBC03, LP01, R001

Mixed packing provisions (ADR) : MP19

Portable tank and bulk container instructions (ADR) : T4

Portable tank and bulk container special provisions (ADR) : TP1

Tank code (ADR) : L4BN

Vehicle for tank carriage : AT

Transport category (ADR) : 3

Special provisions for carriage - Packages (ADR) : V12

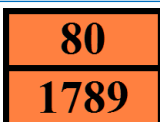
Hazard identification number (Kemler No.) : 80

# HYDROCHLORIC ACID 2M (2N) STANDARDIZED SOLUTION

## Safety Data Sheet

Orange plates

:



Tunnel restriction code (ADR)

: E

EAC code

: 2R

### - Transport by sea

Special provision (IMDG)

: 223

Limited quantities (IMDG)

: 5 L

Excepted quantities (IMDG)

: E1

Packing instructions (IMDG)

: P001, LP01

IBC packing instructions (IMDG)

: IBC03

Tank instructions (IMDG)

: T4

Tank special provisions (IMDG)

: TP1

EmS-No. (Fire)

: F-A

EmS-No. (Spillage)

: S-B

Stowage category (IMDG)

: C

MFAG-No

: 157

### - Air transport

PCA Excepted quantities (IATA)

: E1

PCA Limited quantities (IATA)

: Y841

PCA limited quantity max net quantity (IATA)

: 1L

PCA packing instructions (IATA)

: 852

PCA max net quantity (IATA)

: 5L

CAO packing instructions (IATA)

: 856

CAO max net quantity (IATA)

: 60L

Special provision (IATA)

: A3

ERG code (IATA)

: 8L

### - Inland waterway transport

Classification code (ADN)

: C1

Special provisions (ADN)

: 520

Limited quantities (ADN)

: 5 L

Excepted quantities (ADN)

: E1

Carriage permitted (ADN)

: T

Equipment required (ADN)

: PP, EP

Number of blue cones/lights (ADN)

: 0

### - Rail transport

Classification code (RID)

: C1

Special provision (RID)

: 520

Limited quantities (RID)

: 5L

Excepted quantities (RID)

: E1

Packing instructions (RID)

: P001, IBC03, LP01, R001

Mixed packing provisions (RID)

: MP19

Portable tank and bulk container instructions (RID)

: T4

Portable tank and bulk container special provisions (RID)

: TP1

Tank codes for RID tanks (RID)

: L4BN

Transport category (RID)

: 3

Special provisions for carriage – Packages (RID)

: W12



# HYDROCHLORIC ACID 2M (2N) STANDARDIZED SOLUTION

## Safety Data Sheet

Colis express (express parcels) (RID) : CE8  
Hazard identification number (RID) : 80

### 14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

## SECTION 15: Regulatory information

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

#### 15.1.1. EU-Regulations

Contains no substances with Annex XVII restrictions

Contains no REACH candidate substance

Contains no REACH Annex XIV substances.

#### 15.1.2. National regulations

##### Germany

AwSV/VwVwS Annex reference : Water hazard class (WGK) 3, strongly hazardous to water (Classification according to AwSV, Annex 1)

12th Ordinance Implementing the Federal Immission Control Act - 12.BImSchV : Is not subject of the 12. BImSchV (Hazardous Incident Ordinance)

##### Denmark

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

### 15.2. Chemical safety assessment

No additional information available

## SECTION 16: Other information

Full text of R-, H- and EUH-phrases:

Skin Corr. 1B	Skin corrosion/irritation, Category 1B
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
R34	Causes burns
R37	Irritating to respiratory system
C	Corrosive
Xi	Irritant

# HYDROCHLORIC ACID 2M (2N) STANDARDIZED SOLUTION

## Safety Data Sheet

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*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*