

## 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 : 6189D

#### 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; R36/38

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

# SULPHURIC ACID 2.5MOL/L (5N) SOLUTION

## Safety Data Sheet

R-phrases	: R36/38 - Irritating to eyes and skin
S-phrases	: S24 - Avoid contact with skin S26 - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice S35 - This material and its container must be disposed of in a safe way S36/37 - Wear suitable protective clothing and gloves 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
Sulphuric acid	(CAS No) 7664-93-9 (EC no) 231-639-5 (EC index no) 016-020-00-8	10 - 15	C; R35	Skin Corr. 1A, H314 Eye Dam. 1, H318

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 victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/physician.
First-aid measures after skin contact	: Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Immediately call a POISON CENTER or doctor/physician.
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 or doctor/physician. If eye irritation persists: Get medical advice/attention.
First-aid measures after ingestion	: Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER or doctor/physician.

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

Symptoms/injuries after skin contact	: Causes skin irritation.
Symptoms/injuries after eye contact	: Causes serious eye irritation.

# SULPHURIC ACID 2.5MOL/L (5N) SOLUTION

## Safety Data Sheet

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

Treat symptomatically.

## 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.  
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 : 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 : Do not breathe dust/fume/gas/mist/vapours/spray. Avoid contact during pregnancy/while nursing.  
Hygiene measures : Wash ... thoroughly after handling.

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

Technical measures : Comply with applicable regulations.  
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

# SULPHURIC ACID 2.5MOL/L (5N) SOLUTION

## Safety Data Sheet

### 8.2. Exposure controls

Hand protection	: protective gloves
Eye protection	: Chemical goggles or face shield
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 colourless.
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

Thermal decomposition generates : Corrosive vapours.

# SULPHURIC ACID 2.5MOL/L (5N) 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.

### 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 toxicological effects

Acute toxicity	: Not classified
Irritation	: Irritating to eyes and skin.
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

# SULPHURIC ACID 2.5MOL/L (5N) SOLUTION

## Safety Data Sheet

### 12.6. Other adverse effects

No additional information available

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Product/Packaging disposal recommendations : Dispose of contents/container to ...

## SECTION 14: Transport information

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

### 14.1. UN number

UN-No. (ADR) : 2796  
UN-No. (IMDG) : 2796  
UN-No.(IATA) : 2796  
UN-No.(ADN) : 2796  
UN-No. (RID) : 2796

### 14.2. UN proper shipping name

Proper Shipping Name (ADR) : SULPHURIC ACID / BATTERY FLUID, ACID  
Proper Shipping Name (IMDG) : SULPHURIC ACID  
Proper Shipping Name (IATA) : BATTERY FLUID, ACID  
Proper Shipping Name (ADN) : SULPHURIC ACID  
Proper Shipping Name (RID) : SULPHURIC ACID  
Transport document description (ADR) : UN 2796 SULPHURIC ACID / BATTERY FLUID, ACID, 8, II, (E)  
Transport document description (IMDG) : UN 2796 SULPHURIC ACID, 8, II  
Transport document description (IATA) : UN 2796 BATTERY FLUID, ACID, 8, II  
Transport document description (ADN) : UN 2796 SULPHURIC ACID, 8, II  
Transport document description (RID) : UN 2796 SULPHURIC 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

# SULPHURIC ACID 2.5MOL/L (5N) SOLUTION

## Safety Data Sheet

Hazard labels (IATA) : 8



### 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) : 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

Other information : No supplementary information available

### 14.6. Special precautions for user

#### - Overland transport

Classification code (ADR) : C1

Limited quantities (ADR) : 1L

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

Vehicle for tank carriage : AT

Transport category (ADR) : 2

Hazard identification number (Kemler No.) : 80

# SULPHURIC ACID 2.5MOL/L (5N) SOLUTION

## Safety Data Sheet

Orange plates

: 

<b>80</b>
<b>2796</b>

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

EmS-No. (Fire)

: F-A

EmS-No. (Spillage)

: S-B

Stowage category (IMDG)

: B

MFAG-No

: 157

### - Air transport

PCA Excepted quantities (IATA)

: E2

PCA Limited quantities (IATA)

: Y840

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

ERG code (IATA)

: 8L

### - Inland waterway transport

Classification code (ADN)

: C1

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

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

Transport category (RID)

: 2

Colis express (express parcels) (RID)

: CE6

Hazard identification number (RID)

: 80

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

Not applicable

# SULPHURIC ACID 2.5MOL/L (5N) SOLUTION

## Safety Data Sheet

### 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)

#### 15.2. Chemical safety assessment

No additional information available

### SECTION 16: Other information

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

Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Skin Corr. 1A	Skin corrosion/irritation, Category 1A
H314	Causes severe skin burns and eye damage
H318	Causes serious eye damage
R35	Causes severe burns
R36/38	Irritating to eyes and skin
C	Corrosive
Xi	Irritant

*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*