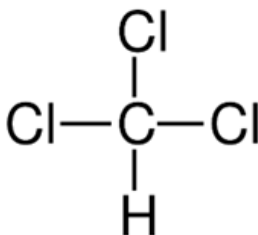


### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1. Product identifier

Product form	: Substance
Trade name	: CHLOROFORM FOR HPLC
IUPAC name	: Trichloromethane
EC Index-No.	: 602-006-00-4
EC-No.	: 200-663-8
CAS-No.	: 67-66-3
Product code	: 00077
Type of product	: Solvents
Formula	: CHCl <sub>3</sub>
Chemical structure	:



Synonyms : Methane trichloride, Methyl trichloride, Methenyl trichloride, Methenyl chloride

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

##### 1.2.1. Relevant identified uses

Industrial/Professional use spec	: Industrial For professional use only
Use of the substance/mixture	: Laboratory chemicals Solvents 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 Regulation (EC) No. 1272/2008 [CLP]

Acute toxicity (oral), Category 4	H302
Acute toxicity (inhal.), Category 3	H331
Skin corrosion/irritation, Category 2	H315
Serious eye damage/eye irritation, Category 2	H319
Carcinogenicity, Category 2	H351
Reproductive toxicity, Category 2	H361d
Specific target organ toxicity – Repeated exposure, Category 1	H372

# CHLOROFORM FOR HPLC

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

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

### Adverse physicochemical, human health and environmental effects

No additional information available

## 2.2. Label elements

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

Hazard pictograms (CLP)



GHS06

GHS08

Signal word (CLP)

: Danger

Hazard statements (CLP)

: H302 - Harmful if swallowed.  
H315 - Causes skin irritation.  
H319 - Causes serious eye irritation.  
H331 - Toxic if inhaled.  
H351 - Suspected of causing cancer.  
H361d - Suspected of damaging the unborn child.  
H372 - Causes damage to organs through prolonged or repeated exposure.  
Precautionary statements (CLP) : P260 - Do not breathe dust, fume, gas, mist, spray, vapours.  
P264 - Wash hands, forearms and face thoroughly after handling.  
P280 - Wear protective clothing, eye protection, face protection, protective gloves.  
P301+P312 - IF SWALLOWED: Call a POISON CENTRE or doctor if you feel unwell.  
P302+P352 - IF ON SKIN: Wash with plenty of soap and water.  
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.

## 2.3. Other hazards

Contains no PBT/vPvB substances  $\geq 0.1\%$  assessed in accordance with REACH Annex XIII

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

Substance type : Mono-constituent  
Name : CHLOROFORM  
CAS-No. : 67-66-3  
EC-No. : 200-663-8  
EC Index-No. : 602-006-00-4

### 3.2. Mixtures

Not applicable

## 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 : Gently wash with plenty of soap and water. If skin irritation 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/effects after skin contact : Causes skin irritation.

# CHLOROFORM FOR HPLC

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Symptoms/effects after ingestion : Harmful if swallowed.

### 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 : Clean up immediately by sweeping or vacuum.

### 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 : Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Avoid breathing dust, fume, gas, mist, spray, vapours.  
Hygiene measures : Do not eat, drink or smoke when using this product. Wash hands, forearms and face thoroughly after handling.

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

Storage conditions : Store in original container. Store in a well-ventilated place. Keep container tightly closed.

### 7.3. Specific end use(s)

No additional information available

# CHLOROFORM FOR HPLC

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

##### 8.1.1 National occupational exposure and biological limit values

No additional information available

##### 8.1.2. Recommended monitoring procedures

No additional information available

##### 8.1.3. Air contaminants formed

No additional information available

##### 8.1.4. DNEL and PNEC

No additional information available

##### 8.1.5. Control banding

No additional information available

#### 8.2. Exposure controls

##### 8.2.1. Appropriate engineering controls

No additional information available

##### 8.2.2. Personal protection equipment

Personal protective equipment symbol(s):



##### 8.2.2.1. Eye and face protection

**Eye protection:**

Chemical goggles or safety glasses

##### 8.2.2.2. Skin protection

**Hand protection:**

Protective gloves

##### 8.2.2.3. Respiratory protection

**Respiratory protection:**

Wear appropriate mask

##### 8.2.2.4. Thermal hazards

No additional information available

##### 8.2.3. Environmental exposure controls

No additional information available

### SECTION 9: Physical and chemical properties

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

Physical state	: Liquid
Appearance	: Clear liquid.
Molecular mass	: 119.38 g/mol
Colour	: Colourless.
Odour	: sweet pleasant.
Odour threshold	: 133 – 276 ppm 648 – 1344 mg/m <sup>3</sup>
pH	: No data available
Relative evaporation rate (butylacetate=1)	: 11.6

# CHLOROFORM FOR HPLC

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Melting point	: No data available
Freezing point	: -63.5 °C
Boiling point	: 61 – 62 °C
Flash point	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: 290 °C
Flammability (solid, gas)	: No data available
Vapour pressure	: 213.3 hPa at 20°C
Relative vapour density at 20 °C	: 4.12 (Air = 1.0)
Relative density	: No data available
Density	: 1.48 g/cm <sup>3</sup> at 20°C
Solubility	: Water: Slightly miscible
Partition coefficient n-octanol/water (Log Pow)	: 1.97
Viscosity, kinematic	: 0.392 mm <sup>2</sup> /s
Viscosity, dynamic	: 0.58 cP at 20°C
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

### 10.2. Chemical stability

Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

No additional information available

### 10.4. Conditions to avoid

Air contact. Direct sunlight. Overheating.

### 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 (oral)	: Harmful if swallowed.
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Toxic if inhaled.
Skin corrosion/irritation	: Causes skin irritation.
Serious eye damage/irritation	: Causes serious eye irritation.
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Suspected of causing cancer.
Reproductive toxicity	: Suspected of damaging the unborn child.
STOT-single exposure	: Not classified
STOT-repeated exposure	: Causes damage to organs through prolonged or repeated exposure.

# CHLOROFORM FOR HPLC

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Aspiration hazard : Not classified

### CHLOROFORM FOR HPLC (67-66-3)

Viscosity, kinematic	0.392 mm <sup>2</sup> /s
----------------------	--------------------------

Potential adverse human health effects and symptoms : Harmful if swallowed.

## SECTION 12: Ecological information

### 12.1. Toxicity

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

No additional information available

### 12.3. Bioaccumulative potential

#### CHLOROFORM FOR HPLC (67-66-3)

Partition coefficient n-octanol/water (Log Pow)	1.97
---	------

### 12.4. Mobility in soil

No additional information available

### 12.5. Results of PBT and vPvB assessment

No additional information available

### 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 hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

## SECTION 14: Transport information

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

### 14.1 UN number

UN-No. (ADR) : UN 1888

UN-No. (IMDG) : UN 1888

UN-No. (IATA) : UN 1888

UN-No. (ADN) : UN 1888

UN-No. (RID) : UN 1888

### 14.2. UN proper shipping name

Proper Shipping Name (ADR) : CHLOROFORM

Proper Shipping Name (IMDG) : CHLOROFORM

Proper Shipping Name (IATA) : Chloroform

Proper Shipping Name (ADN) : CHLOROFORM

Proper Shipping Name (RID) : CHLOROFORM

# CHLOROFORM FOR HPLC

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Transport document description (ADR)	: UN 1888 CHLOROFORM, 6.1, III, (E)
Transport document description (IMDG)	: UN 1888 CHLOROFORM, 6.1, III
Transport document description (IATA)	: UN 1888 Chloroform, 6.1, III
Transport document description (ADN)	: UN 1888 CHLOROFORM, 6.1, III
Transport document description (RID)	: UN 1888 CHLOROFORM, 6.1, III

### 14.3. Transport hazard class(es)

#### ADR

Transport hazard class(es) (ADR)	: 6.1
Danger labels (ADR)	: 6.1



#### IMDG

Transport hazard class(es) (IMDG)	: 6.1
Danger labels (IMDG)	: 6.1



#### IATA

Transport hazard class(es) (IATA)	: 6.1
Danger labels (IATA)	: 6.1



#### ADN

Transport hazard class(es) (ADN)	: 6.1
Danger labels (ADN)	: 6.1



#### RID

Transport hazard class(es) (RID)	: 6.1
Danger labels (RID)	: 6.1



### 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

# CHLOROFORM FOR HPLC

## Safety Data Sheet

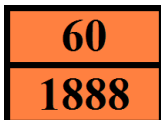
according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Other information : No supplementary information available

### 14.6. Special precautions for user

#### Overland transport

Classification code (ADR) : T1  
Limited quantities (ADR) : 5I  
Excepted quantities (ADR) : E1  
Packing instructions (ADR) : P001, IBC03, LP01, R001  
Mixed packing provisions (ADR) : MP19  
Portable tank and bulk container instructions (ADR) : T7  
Portable tank and bulk container special provisions (ADR) : TP2  
Tank code (ADR) : L4BH  
Tank special provisions (ADR) : TU15, TE19  
Vehicle for tank carriage : AT  
Transport category (ADR) : 2  
Special provisions for carriage - Packages (ADR) : V12  
Special provisions for carriage - Loading, unloading and handling (ADR) : CV13, CV28  
Special provisions for carriage - Operation (ADR) : S9  
Hazard identification number (Kemler No.) : 60  
Orange plates :



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

#### Transport by sea

Limited quantities (IMDG) : 5 L  
Excepted quantities (IMDG) : E1  
Packing instructions (IMDG) : P001, LP01  
IBC packing instructions (IMDG) : IBC03  
Tank instructions (IMDG) : T7  
Tank special provisions (IMDG) : TP2  
EmS-No. (Fire) : F-A  
EmS-No. (Spillage) : S-A  
Stowage category (IMDG) : A  
Stowage and handling (IMDG) : SW2  
Segregation (IMDG) : SGG10  
Properties and observations (IMDG) : Colourless, volatile liquid. Boiling point: 61°C. Non-flammable. When involved in a fire, evolves extremely toxic fumes (phosgene). Toxic if swallowed, by skin contact or by inhalation. Anaesthetic.  
MFAG-No : 151

#### Air transport

PCA Excepted quantities (IATA) : E1  
PCA Limited quantities (IATA) : Y680  
PCA limited quantity max net quantity (IATA) : 2L  
PCA packing instructions (IATA) : 680  
PCA max net quantity (IATA) : 60L  
CAO packing instructions (IATA) : 680  
CAO max net quantity (IATA) : 220L  
ERG code (IATA) : 6A

#### Inland waterway transport

Classification code (ADN) : T1  
Special provisions (ADN) : 802  
Limited quantities (ADN) : 5 L  
Excepted quantities (ADN) : E1  
Carriage permitted (ADN) : T



# CHLOROFORM FOR HPLC

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Equipment required (ADN) : PP, EP, TOX, A  
Ventilation (ADN) : VE02  
Number of blue cones/lights (ADN) : 0

### Rail transport

Classification code (RID) : T1  
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) : T7  
Portable tank and bulk container special provisions (RID) : TP2  
Tank codes for RID tanks (RID) : L4BH  
Special provisions for RID tanks (RID) : TU15  
Transport category (RID) : 2  
Special provisions for carriage – Packages (RID) : W12  
Special provisions for carriage - Loading, unloading and handling (RID) : CW13, CW28, CW31  
Colis express (express parcels) (RID) : CE8  
Hazard identification number (RID) : 60

### 14.7. Transport in bulk according to Annex II of Marpol 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

##### REACH Annex XVII (Restriction List)

EU restriction list (REACH Annex XVII)	
Reference code	Applicable on
3(b)	CHLOROFORM FOR HPLC
32.	CHLOROFORM FOR HPLC

##### REACH Annex XIV (Authorisation List)

CHLOROFORM FOR HPLC is not on the REACH Annex XIV List

##### REACH Candidate List (SVHC)

CHLOROFORM FOR HPLC is not on the REACH Candidate List

##### PIC Regulation (Prior Informed Consent)

Chloroform is subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of hazardous chemicals.

##### POP Regulation (Persistent Organic Pollutants)

CHLOROFORM FOR HPLC is not subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

##### Ozone Regulation (1005/2009)

CHLOROFORM is not subject to REGULATION (EU) No 1005/2009 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 September 2009 on substances that deplete the ozone layer.

##### Explosives Precursors Regulation (2019/1148)

Contains no substance subject to Regulation (EU) 2019/1148 of the European Parliament and of the Council of 20 June 2019 on the marketing and use of explosives precursors.

##### Drug Precursors Regulation (273/2004)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on drug precursors)

# CHLOROFORM FOR HPLC

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

### 15.1.2. National regulations

#### France

Occupational diseases	
Code	Description
RG 12	Occupational diseases caused by the halogenated aliphatic hydrocarbons listed below: dichloromethane; trichloromethane; tribromomethane; triiodomethane; tetrabromomethane; chloroethane; 1,1-dichloroethane; 1,2-dichloroethane; 1,2-dibromoethane; 1,1,1-trichloroethane; 2-bromopropane; 1,2-dichloropropane; trichlorethylene; tetrachlorethylene; dichloroacetylene; trichlorofluoromethane; 1,1,2,2-tetrachloro-1,2-difluoroethane; 1,1,1-trichloro-2,2,2-trifluoroethane; 1,1-dichloro-2,2,2-trifluoroethane; 1,2-dichloro-1,1-difluoroethane; 1,1-dichloro-1-fluoroethane

#### Germany

- Water hazard class (WGK) : WGK 3, Highly hazardous to water (Classification according to AwSV; ID No. 54).  
Chemicals Prohibition Ordinance (ChemVerbotsV) : This product is subject to ChemVerbotsV Annex 2 Entry 1. The following requirements must be observed: authorization requirement (according to § 6 paragraph 1 sentence 1), basic requirements for carrying out the delivery (according to § 8 paragraph 1, 3 and 4), identification and documentation (according to § 9 paragraph 1 to 3) and exclusion of the shipping route (according to § 10).  
Hazardous Incident Ordinance (12. BImSchV) : Is not subject of the Hazardous Incident Ordinance (12. BImSchV)

#### Netherlands

- SZW-lijst van kankerverwekkende stoffen : The substance is not listed  
SZW-lijst van mutagene stoffen : The substance is not listed  
SZW-lijst van reprotoxische stoffen – Borstvoeding : The substance is not listed  
SZW-lijst van reprotoxische stoffen – Vruchtbaarheid : The substance is not listed  
SZW-lijst van reprotoxische stoffen – Ontwikkeling : CHLOROFORM is listed

#### Denmark

- Danish National Regulations : Young people below the age of 18 years are not allowed to use the product  
Pregnant/breastfeeding women working with the product must not be in direct contact with the product

#### Switzerland

- Storage class (LK) : LK 6.1 - Toxic materials

### 15.2. Chemical safety assessment

No additional information available

## SECTION 16: Other information

Full text of H- and EUH-statements:	
Acute Tox. 3 (Inhalation)	Acute toxicity (inhal.), Category 3
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Carc. 2	Carcinogenicity, Category 2
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
H302	Harmful if swallowed.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H331	Toxic if inhaled.
H351	Suspected of causing cancer.
H361d	Suspected of damaging the unborn child.
H372	Causes damage to organs through prolonged or repeated exposure.

# CHLOROFORM FOR HPLC

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

### Full text of H- and EUH-statements:

Repr. 2	Reproductive toxicity, Category 2
Skin Irrit. 2	Skin corrosion/irritation, Category 2
STOT RE 1	Specific target organ toxicity – Repeated exposure, Category 1

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.