TETRACHLOROETHYLENE AR MSDS

CAS-No.: 127-18-4 MSDS



MATERIAL SAFETY DATA SHEET (MSDS)

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

1.1. Product identifier

Product form : Substance

:

EC Index-No. : 602-028-00-4 EC-No. : 204-825-9 CAS-No. : 127-18-4 Product code : B-01961 Formula : C2CI4

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

Bio-Chem Chemicals

5455, Nicholson Road Science Market, Ambala Cantt. 133001 Haryana (India)

+91-82952 41953

info@biofinechemical.com - www.biofinechemical.com

1.4. Emergency telephone number

Emergency number +91 99921 51495 (10.00am - 06.30pm) (Office Hours)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Skin corrosion/irritation, H315

Category 2

Carcinogenicity, Category H351

2

Hazardous to the aquatic H411

environment — Chronic Hazard, Category 2

Full text of hazard classes and H-statements : see section 16

Safety Data Sheet

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

Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]

Carc.Cat.3; R40 N; R51/53

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 Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :

<u>:</u>><





GHS07

8 GHS

Signal word (CLP) : Warning

Hazard statements (CLP) : H315 - Causes skin irritation.

H351 - Suspected of causing cancer.

H411 - Toxic to aquatic life with long lasting effects.

Precautionary statements (CLP) : P273 - Avoid release to the environment.

P280 - Wear protective gloves, protective clothing, face protection, eye protection.

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substances

Name : TETRACHLOROETHYLENE AR

CAS-No. : 127-18-4 EC-No. : 204-825-9 EC Index-No. : 602-028-00-4

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

3.2. Mixtures

Not applicable

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : Suspected of causing cancer.

First-aid measures after inhalation : Assure fresh air breathing. If breathing is difficult, remove victim to fresh air and keep

at rest in a position comfortable for breathing.

Safety Data Sheet

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

First-aid measures after skin contact : Wash with plenty of water/.... Get immediate medical advice/attention.

First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present

and easy to do. Continue rinsing. Get medical advice/attention.

First-aid measures after ingestion : Rinse mouth. Do not induce vomiting. Get medical advice/attention.

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

Symptoms/effects after skin contact : Causes skin irritation.

Chronic symptoms : Suspected carcinogen.

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

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Carbon dioxide. Dry powder. Foam. Water spray.
Unsuitable extinguishing media : Do not use extinguishing media containing water.

5.2. Special hazards arising from the substance or mixture

No additional information available

5.3. Advice for firefighters

Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory

protection.

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 : On land, sweep or shovel into suitable containers. Collect spillage.

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 contact with skin and eyes. Do not breathe

vapours.

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 a well-ventilated place. Keep container tightly closed.

7.3. Specific end use(s)

No additional information available

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

No additional information available

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 : [In case of inadequate ventilation] 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 : ethereal odor.

Odour threshold : No data available

pH : No data available

Relative evaporation rate (butylacetate=1) : 0.33

Melting point : -22 °C

Freezing point : No data available

Boiling point : 121 °C

Flash point : No data available

Auto-ignition temperature : No data available

Decomposition temperature : No data available

Flammability (solid, gas) : No data available

Vapour pressure : 17.3 hPa at 20°C

Relative vapour density at 20 °C : 5.7

Relative density : No data available

Density : 1.623 g/cm³

Solubility : Water: 0.015 g/100ml

Log Pow : 3.4

Viscosity, kinematic : No data available

Viscosity, dynamic : No data available

4/11

Safety Data Sheet

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

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

Direct sunlight.

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

Skin corrosion/irritation : Causes skin irritation.

Serious eye damage/irritation : Not classified
Respiratory or skin sensitisation : Not classified
Germ cell mutagenicity : Not classified

Carcinogenicity : Suspected of causing cancer.

Reproductive toxicity : Not classified STOT-single exposure : Not classified

STOT-repeated exposure : Not classified

Aspiration hazard : Not classified

Safety Data Sheet

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

SECTION 12: Ecological information

12,1, **Toxicity**

Ecology - water : Toxic to aquatic life with long lasting effects.

12.2. Persistence and degradability

TETRACHLOROETHYLENE AR (127-18-4)	
Persistence and degradability	May cause long-term adverse effects in the environment.

12.3. Bioaccumulative potential

TETRACHLOROETHYLENE AR (127-18-4)	
Log Pow	3.4

12.4. Mobility in soil

No additional information available

Results of PBT and vPvB assessment 12.5.

No additional information available

12.6. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

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 / RID / IMDG / IATA / ADN

14.1. **UN** number

UN-No. (ADR) : 1897 : 1897 UN-No. (IMDG) UN-No. (IATA) : 1897 UN-No. (ADN) : 1897 UN-No. (RID) : 1897

14.2. UN proper shipping name

Proper Shipping Name (ADR) : TETRACHLOROETHYLENE Proper Shipping Name (IMDG) : TETRACHLOROETHYLENE

Proper Shipping Name (IATA) : Tetrachloroethylene

Proper Shipping Name (ADN) : TETRACHLOROETHYLENE Proper Shipping Name (RID) : TETRACHLOROETHYLENE

Transport document description (ADR) : UN 1897 TETRACHLOROETHYLENE, 6.1, III, (E), ENVIRONMENTALLY

HAZARDOUS

Safety Data Sheet

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

Transport document description (IMDG) : UN 1897 TETRACHLOROETHYLENE, 6.1, III, MARINE

POLLUTANT/ENVIRONMENTALLY HAZARDOUS

Transport document description (IATA) : UN 1897 Tetrachloroethylene, 6.1, III, ENVIRONMENTALLY HAZARDOUS

Transport document description (ADN) : UN 1897 TETRACHLOROETHYLENE, 6.1, III, ENVIRONMENTALLY HAZARDOUS

Transport document description (RID) : UN 1897 TETRACHLOROETHYLENE, 6.1, III, ENVIRONMENTALLY HAZARDOUS

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 Hazard 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



Safety Data Sheet

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

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 : Yes

Marine pollutant : Yes

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 : T4

instructions (ADR)

Portable tank and bulk container special : TP1

provisions (ADR)

Tank code (ADR) : L4BH

Tank special provisions (ADR) : TU15, TE19

Vehicle for tank carriage : AT
Transport category (ADR) : 2
Special provisions for carriage - Packages : V12

(ADR)

Special provisions for carriage - Loading,

unloading and handling (ADR)

: CV13, CV28

Special provisions for carriage - Operation : S9

(ADR)

Hazard identification number (Kemler No.) : 60

Orange plates

60 1897

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

- Transport by sea

: P001, LP01 Packing instructions (IMDG) IBC packing instructions (IMDG) : IBC03 Tank instructions (IMDG) : T4 Tank special provisions (IMDG) : TP1 EmS-No. (Fire) : F-A EmS-No. (Spillage) : S-A : A Stowage category (IMDG) Stowage and handling (IMDG) : SW2

Properties and observations (IMDG) : Colourless liquid with an ethereal odour. When involved in a fire, evolves extremely

toxic fumes (phosgene). Toxic if swallowed, by skin contact or by inhalation.

MFAG-No : 160

8/11

Safety Data Sheet

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

- Air transport

PCA Excepted quantities (IATA) : E1
PCA Limited quantities (IATA) : Y642
PCA limited quantity max net quantity : 2L

(IATA)

PCA packing instructions (IATA) : 655
PCA max net quantity (IATA) : 60L
CAO packing instructions (IATA) : 663
CAO max net quantity (IATA) : 220L
ERG code (IATA) : 6L

- Inland waterway transport

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

Equipment required (ADN) : PP, EP, TOX, A

Ventilation (ADN) : VE02 Number of blue cones/lights (ADN) : 0

- Rail transport

Classification code (RID) : T1
Excepted quantities (RID) : E1

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

Mixed packing provisions (RID) : MP19
Portable tank and bulk container : T4

instructions (RID)

Portable tank and bulk container special

provisions (RID)

Tank codes for RID tanks (RID) : L4BH
Special provisions for RID tanks (RID) : TU15
Transport category (RID) : 2

Special provisions for carriage - Packages : W12

(RID)

Special provisions for carriage - Loading,

unloading and handling (RID)

Colis express (express parcels) (RID) : CE8
Hazard identification number (RID) : 60

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

: TP1

Not applicable

SECTION 15: Regulatory information

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

: CW13, CW28, CW31

15.1.1. EU-Regulations

No REACH Annex XVII restrictions

TETRACHLOROETHYLENE AR is not on the REACH Candidate List TETRACHLOROETHYLENE AR is not on the REACH Annex XIV List

Safety Data Sheet

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

15.1.2. National regulations

Germany

12th Ordinance Implementing the Federal : Is not subject of the 12. BlmSchV (Hazardous Incident Ordinance)

Immission Control Act - 12 BlmSchV

Netherlands

SZW-lijst van kankerverwekkende stoffen : The substance is not listed SZW-lijst van mutagene stoffen : The substance is not listed NIET-limitatieve liist van voor de : The substance is not listed

voortplanting giftige stoffen - Borstvoeding

NIET-limitatieve lijst van voor de voortplanting giftige stoffen -

Vruchtbaarheid

: The substance is not listed

NIET-limitatieve lijst van voor de

voortplanting giftige stoffen - Ontwikkeling

: TETRACHLOROETHYLENE AR is listed

Denmark

Recommendations Danish Regulation : 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

The requirements from the Danish Working Environment Authorities regarding work

with carcinogens must be followed during use and disposal

Chemical safety assessment 15.2.

No additional information available

SECTION 16: Other information

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

	an text of the interest of the contention.	
Aquatic Chronic 2	Hazardous to the aquatic environment — Chronic Hazard, Category 2	
Carc. 2	Carcinogenicity, Category 2	
Skin Irrit. 2	Skin corrosion/irritation, Category 2	
H315	Causes skin irritation.	
H351	Suspected of causing cancer.	
H411	Toxic to aquatic life with long lasting effects.	
R40	Limited evidence of a carcinogenic effect	
R51/53	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment	
N	Dangerous for the environment	

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

Safety Data Sheet

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