

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 Issue date: 26-07-2022 Version: 1.0

SECTION 1: Identification of the substance/mixture and of the company/undertaking		
1.1. Product identifier		
Product form Trade name CAS-No. Product code Type of product	 Mixture PHOSPHORUS TRIBROMIDE 1.0 M SOLUTION IN DICHLOROMETHANE NA 5261H Solution 	
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 da	ata 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 <u>info@lobachemie.com</u> - <u>www.lobachemie.com</u>		
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]		

Skin corrosion/irritation, Category 1, Sub-Category 1B	H314
Carcinogenicity, Category 2	H351
Specific target organ toxicity — Single exposure, Category 3, Narcosis	H336
Specific target organ toxicity — Single exposure, Category 3, Respiratory	H335
tract irritation	
Specific target organ toxicity — Repeated exposure, Category 2	H373
Full text of H-statements: see section 16	

Adverse physicochemical, human health and environmental effects

Suspected of causing cancer. May cause damage to organs through prolonged or repeated exposure. May cause drowsiness or dizziness. May cause respiratory irritation. Causes severe skin burns and eye damage.

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP] Hazard pictograms (CLP) : Signal word (CLP) : Contains : PHOSPHORUS TRIBROMIDE; DICHLOROMETHANE

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Hazard statements (CLP)	 H314 - Causes severe skin burns and eye damage. H335 - May cause respiratory irritation. H336 - May cause drowsiness or dizziness. H351 - Suspected of causing cancer.
	H373 - May cause damage to organs through prolonged or repeated exposure.
Precautionary statements (CLP)	: P201 - Obtain special instructions before use.
	P202 - Do not handle until all safety precautions have been read and understood.
	P280 - Wear protective gloves, protective clothing, eye protection, face protection.
	P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing.
	Rinse skin with 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.
	P310 - Immediately call a POISON CENTER or doctor.

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
DICHLOROMETHANE	CAS-No.: 75-09-2 EC-No.: 200-838-9 EC Index-No.: 602-004-00-3	≈ 90	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Carc. 2, H351 STOT SE 3, H336 STOT SE 3, H335 STOT RE 2, H373
PHOSPHORUS TRIBROMIDE	CAS-No.: 7789-60-8 EC-No.: 232-178-2 EC Index-No.: 015-103-00-6	≈ 10	Skin Corr. 1B, H314 STOT SE 3, H335

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

SECTION 4: First aid measures		
4.1. Description of first aid measures		
First-aid measures general First-aid measures after inhalation	 Call a physician immediately. Remove person to fresh air and keep comfortable for breathing. Call a poison center or a doctor if you feel unwell. 	
First-aid measures after skin contact	: Rinse skin with water/shower. Take off immediately all contaminated clothing. Call a physician immediately.	
First-aid measures after eye contact	: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician immediately.	
First-aid measures after ingestion	: Rinse mouth. Do not induce vomiting. Call a physician immediately.	
4.2. Most important symptoms and effects, both acute and delayed		
Symptoms/effects Symptoms/effects after inhalation Symptoms/effects after skin contact	 May cause drowsiness or dizziness. May cause respiratory irritation. Burns. 	

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Symptoms/effects after eye contact	: Serious damage to eyes.
Symptoms/effects after ingestion	: Burns.

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	: Water spray. Dry powder. Foam. Carbon dioxide.	
5.2. Special hazards arising from the subs	tance or mixture	
Hazardous decomposition products in case of fire	: Toxic fumes may be released.	
5.3. Advice for firefighters		
Protection during firefighting	: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.	

SECTION 6: Accidental release measures		
6.1. Personal precautions, protective equip	ment and emergency procedures	
6.1.1. For non-emergency personnel		
Emergency procedures	: Ventilate spillage area. Do not breathe dust, fume, gas, mist, spray, vapours. Avoid contact with skin and eyes.	
6.1.2. For emergency responders		
Protective equipment	: Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".	
6.2. Environmental precautions		
Avoid release to the environment.		
6.3. Methods and material for containment a	and cleaning up	
Methods for cleaning up Other information	 Take up liquid spill into absorbent material. Notify authorities if product enters sewers or public waters. Dispose of materials or solid residues at an authorized site. 	
6.4. Reference to other sections		

For further information refer to section 13.

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. Wear personal protective equipment. Do not breathe dust, fume, gas mist, spray, vapours. Use only outdoors or in a well-ventilated area. Avoid contact with skin and eyes.	
Hygiene measures	: Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.	
7.2. Conditions for safe storage, including any incompatibilities		

26-07-2022 (Issue date)

: Store locked up. Store in a well-ventilated place. Keep container tightly closed. Keep cool.

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7.3. Specific end use(s)

No additional information available

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

Appropriate engineering controls:

Ensure good ventilation of the work station.

8.2.2. Personal protection equipment

Personal protective equipment symbol(s):



8.2.2.1. Eye and face protection

Eye protection: 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

Environmental exposure controls:

Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

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Appearance	: Clear liquid.
Colour	: Colourless to yellow.
Odour	· No data available
Odour threshold	· No data available
pH	: No data available
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: Not applicable
Freezing point	97 °C
Boiling point	: ≈ 40 °C at 1.013 hPa
Flash point	: No data available
Auto-ignition temperature	: 662 °C
Decomposition temperature	: No data available
Flammability (solid, gas)	: Not applicable
Vapour pressure	· 470 776 hPa at 20°C
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Density	: 1.488 g/cm ³ at 25°C
Solubility	: Water: Reacts violently with water
Partition coefficient n-octanol/water (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
Lower explosive limit (LEL)	: 12 vol %
Upper explosive limit (UEL)	: 19 vol %

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information		
11.1. Information on toxicologic	cal effects	
Acute toxicity (oral)	: Not classified	
Acute toxicity (dermal)	: Not classified	
Acute toxicity (inhalation)	: Not classified	

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Skin corrosion/irritation Serious eye damage/irritation Respiratory or skin sensitisation Germ cell mutagenicity Carcinogenicity Reproductive toxicity STOT-single exposure	 Causes severe skin burns. Assumed to cause serious eye damage Not classified Not classified Suspected of causing cancer. Not classified May cause drowsiness or dizziness. May cause respiratory irritation.
PHOSPHORUS TRIBROMIDE (7789-60-8)	
STOT-single exposure	May cause respiratory irritation.
DICHLOROMETHANE (75-09-2)	
STOT-single exposure	May cause drowsiness or dizziness. May cause respiratory irritation.
STOT-repeated exposure	: May cause damage to organs through prolonged or repeated exposure.
DICHLOROMETHANE (75-09-2)	
STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.
Aspiration hazard	Not classified

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general Hazardous to the aquatic environment, short-term	Before neutralisation, the product may represent a danger to aquatic organisms.Not classified
(acute)	
Hazardous to the aquatic environment, long-term (chronic)	: Not classified

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential	
PHOSPHORUS TRIBROMIDE (7789-60-8)	
Partition coefficient n-octanol/water (Log Pow) 2.28	
DICHLOROMETHANE (75-09-2)	
Partition coefficient n-octanol/water (Log Pow) 1.25	

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	
Waste treatment methods	: Dispose of contents/container in accordance with licensed collector's sorting instructions.

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SECTION 14: Transport information

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

14.1. UN number	
UN-No. (ADR) UN-No. (IMDG) UN-No. (IATA) UN-No. (ADN) UN-No. (RID)	 : UN 3264
14.2. UN proper shipping name	
Proper Shipping Name (ADR) Proper Shipping Name (IMDG) Proper Shipping Name (IATA) Proper Shipping Name (ADN) Proper Shipping Name (RID) Transport document description (ADR) Transport document description (IMDG) Transport document description (IATA) Transport document description (ADN) Transport document description (RID)	 CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. UN 3264 CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (PHOSPHORUS TRIBROMIDE 1.0 M SOLUTION IN DICHLOROMETHANE), 8, II, (E) UN 3264 CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (PHOSPHORUS TRIBROMIDE 1.0 M SOLUTION IN DICHLOROMETHANE), 8, II UN 3264 CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (PHOSPHORUS TRIBROMIDE 1.0 M SOLUTION IN DICHLOROMETHANE), 8, II UN 3264 CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (PHOSPHORUS TRIBROMIDE 1.0 M SOLUTION IN DICHLOROMETHANE), 8, II UN 3264 CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (PHOSPHORUS TRIBROMIDE 1.0 M SOLUTION IN DICHLOROMETHANE), 8, II UN 3264 CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (PHOSPHORUS TRIBROMIDE 1.0 M SOLUTION IN DICHLOROMETHANE), 8, II UN 3264 CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (PHOSPHORUS TRIBROMIDE 1.0 M SOLUTION IN DICHLOROMETHANE), 8, II UN 3264 CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (PHOSPHORUS TRIBROMIDE 1.0 M SOLUTION IN DICHLOROMETHANE), 8, II
14.3. Transport hazard class(es)	

ADR

Transport hazard class(es) (ADR): 8Danger labels (ADR): 8



IMDG

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

ΙΑΤΑ

Transport hazard class(es) (IATA) Danger labels (IATA) : 8

: 8

: 8 : 8



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ADN Transport hazard class(es) (ADN) Danger labels (ADN)	: 8 : 8
	B
RID Transport hazard class(es) (RID) Danger labels (RID)	: 8 : 8
14.4. Packing group	
Packing group (ADR) Packing group (IMDG) Packing group (IATA) Packing group (ADN) Packing group (RID)	: II : II : II : II
14.5. Environmental hazards	
Dangerous for the environment Marine pollutant Other information	 No No No supplementary information available
14.6. Special precautions for user	
Overland transport Classification code (ADR) Special provisions (ADR) Limited quantities (ADR) Excepted quantities (ADR) Packing instructions (ADR) Mixed packing provisions (ADR) Portable tank and bulk container instructions (ADR) Portable tank and bulk container special provisions (ADR) Tank code (ADR) Tank special provisions (ADR) Vehicle for tank carriage Transport category (ADR)	 C1 274 11 E2 P001, IBC02 MP15 T11 TP2, TP27 L4BN TU42 AT 2
Hazard identification number (Kemler No.) Orange plates	80 80 3264
Tunnel restriction code (ADR) EAC code	: E : 2X
	. 20
Transport by sea Special provisions (IMDG) Limited quantities (IMDG) Excepted quantities (IMDG)	: 274 : 1 L : E2

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: IBC02 : T11 : TP2, TP27 : F-A
: TP2, TP27
: F-A
: S-B
: B
: SW2
: SGG1, SG36, SG49
: Causes burns to skin, eyes and mucous membranes.
: E2
: Y840
: 0.5L
: 851
: 1L
: 855
: 30L
: A3, A803
: 8L
: C1
: 274
: 1L
: E2
: : PP, EP
: 0
: C1
: 274
: 1L
: E2
: P001, IBC02
: MP15
: T11
: TP2, TP27
: L4BN
: TU42
: 2
: CE6
: 80

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable

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SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

EU restriction list (REACH Annex XVII)	
;	
_	

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

Contains no substance 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.

Contains no substance subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

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	
Employment restrictions	: Observe restrictions according Act on the Protection of Working Mothers (MuSchG) Observe restrictions according Act on the Protection of Young People in Employment (JArbSchG)
Water hazard class (WGK)	 Not classified according to Regulation Governing Systems for Handling Substances Hazardous to Waters (AwSV)
Hazardous Incident Ordinance (12. BImSchV)	: Is not subject of the Hazardous Incident Ordinance (12. BImSchV)
Netherlands	
SZW-lijst van kankerverwekkende stoffen	: PHOSPHORUS TRIBROMIDE is listed
SZW-lijst van mutagene stoffen	: PHOSPHORUS TRIBROMIDE is listed
NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Borstvoeding	: None of the components are listed
NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Vruchtbaarheid	: None of the components are listed
NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Ontwikkeling	: None of the components are 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
45.2 Chamical asfaty assassment	

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

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SECTION 16: Other information

	SECTION 16: Other Information	
Abbreviations and ac	ronyms	
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways	
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road	
ATE	Acute Toxicity Estimate	
BCF	Bioconcentration factor	
BLV	Biological limit value	
BOD	Biochemical oxygen demand (BOD)	
COD	Chemical oxygen demand (COD)	
DMEL	Derived Minimal Effect level	
DNEL	Derived-No Effect Level	
EC-No.	European Community number	
EC50	Median effective concentration	
EN	European Standard	
IARC	International Agency for Research on Cancer	
ΙΑΤΑ	International Air Transport Association	
IMDG	International Maritime Dangerous Goods	
LC50	Median lethal concentration	
LD50	Median lethal dose	
LOAEL	Lowest Observed Adverse Effect Level	
NOAEC	No-Observed Adverse Effect Concentration	
NOAEL	No-Observed Adverse Effect Level	
NOEC	No-Observed Effect Concentration	
OECD	Organisation for Economic Co-operation and Development	
OEL	Occupational Exposure Limit	
РВТ	Persistent Bioaccumulative Toxic	
PNEC	Predicted No-Effect Concentration	
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail	
SDS	Safety Data Sheet	
STP	Sewage treatment plant	
ThOD	Theoretical oxygen demand (ThOD)	
TLM	Median Tolerance Limit	
VOC	Volatile Organic Compounds	
CAS-No.	Chemical Abstract Service number	
N.O.S.	Not Otherwise Specified	
vPvB	Very Persistent and Very Bioaccumulative	
ED	Endocrine disrupting properties	

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Full text of H- and EUH-statements	
Carc. 2	Carcinogenicity, Category 2
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Skin Corr. 1B	Skin corrosion/irritation, Category 1, Sub-Category 1B
Skin Irrit. 2	Skin corrosion/irritation, Category 2
STOT RE 2	Specific target organ toxicity — Repeated exposure, Category 2
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Narcosis
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H351	Suspected of causing cancer.
H373	May cause damage to organs through prolonged or repeated exposure.

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.