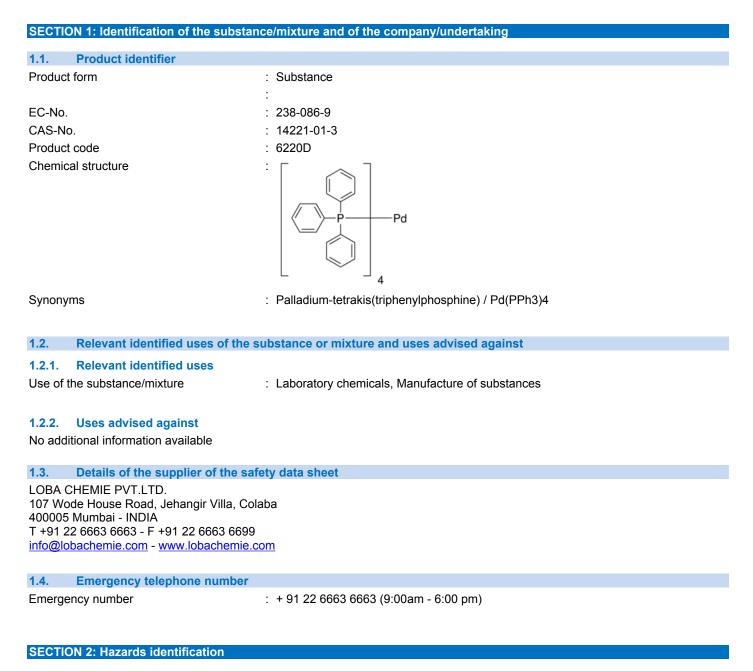
TETRAKIS (TRIPHENYLPHOSPHINE) PALLADIUM(0) FOR SYNTHESIS MSDS



CAS-No.: 14221-01-3 MSDS

MATERIAL SAFETY DATA SHEET (MSDS)



Classification of the substance or mixture 2.1.

Classification according to Regulation (EC) No. 1272/2008 [CLP] Not classified

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] Not classified

Adverse physicochemical, human health and environmental effects No additional information available

2.2. Label elements

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

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substances

Name	Product identifier	%
TETRAKIS (TRIPHENYLPHOSPHINE)	(CAS-No.) 14221-01-3	100
PALLADIUM(0) For Synthesis	(EC-No.) 238-086-9	

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 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 No additional information available

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

Treat symptomatically.

Safety Data Sheet

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

according to Regulation (EC) No. 1907/2006 (REACH) w	in its amendment Regulation (EO) 2015/630	
SECTION 5: Firefighting measures		
5.1. Extinguishing media		
Suitable extinguishing media	: dry chemical powder, alcohol-resistant foam, carbon dioxide (CO2).	
Unsuitable extinguishing media	: Do not use a heavy water stream.	
5.2. Special hazards arising from the	e 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 measure	es	
6.1. Personal precautions, protectiv	e equipment and emergency procedures	
	e equipment and emergency procedures	
6.1.1. For non-emergency personnel		
Emergency procedures	: Do not get in eyes, on skin, or on clothing.	
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 conta	inment and cleaning up	
Methods for cleaning up	: Clear up rapidly by scoop 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	: Do not get in eyes, on skin, or on clothing.	
Hygiene measures	: Wash hands and other exposed areas with mild soap and water before eating,	
Tygiene measures	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.	
	Protect from moisture.	
7.3. Specific end use(s)		
No additional information available		
SECTION 8: Exposure controls/persona	protection	

8.1. Control parameters

No additional information available

Safety Data Sheet

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

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 appropriate mask

SECTION 9: Physical and chemical properties

9.1. Information on basic physical a	and chemical properties
Physical state	: Solid
Colour	: Yellow crystalline powder.
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

		22/10/2018	4/0
No ad	ditional information available		
10.1.	Reactivity		
SECT	ION 10: Stability and reactivity		
	ditional information available		
9.2.	Other information		

Safety Data Sheet

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

10.2. Chemical stability	
Stable under normal conditions.	
10.3. Possibility of hazardous re	actions
No additional information available	
10.4. Conditions to avoid	
Direct sunlight. Heat. Air contact. Mois	eturo
Direct sumight. Heat. All contact. Mols	suie.
10.5. Incompatible materials	
No additional information available	
10.6. Hazardous decomposition	products
No additional information available	
SECTION 11: Toxicological informa	tion
	1.000.00
11.1. Information on toxicologica	
Acute toxicity	: Not classified
Skin corrosion/irritation	: Not classified
Serious eye damage/irritation	: Not classified
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified
	. Hot oldoomed
STOT-repeated exposure	: Not classified
Aspiration hazard	: Not classified
	. Hot oldoomed

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

Safety Data Sheet

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

12.4. Mobility in soil	
No additional information available	
12.5. Results of PBT and vPvB as	esement
No additional information available	
12.6. Other adverse effects	
No additional information available	
SECTION 13: Disposal consideration	
13.1. Waste treatment methods	
No additional information available	
SECTION 14: Transport information	
In accordance with ADR / RID / IMDG /	
In accordance with ADR / RID / IMDG /	
14.1. UN number	
UN-No. (ADR)	: Not applicable
UN-No. (IMDG)	: Not applicable
UN-No. (IATA)	: Not applicable
UN-No. (ADN)	: Not applicable
UN-No. (RID)	: Not applicable
14.2. UN proper shipping name	
Proper Shipping Name (ADR)	: Not applicable
Proper Shipping Name (IMDG)	: Not applicable
Proper Shipping Name (IATA)	: Not applicable
Proper Shipping Name (ADN)	: Not applicable
Proper Shipping Name (RID)	: Not applicable
14.3. Transport hazard class(es)	
ADR	
Transport hazard class(es) (ADR)	: Not applicable
IMDG	
Transport hazard class(es) (IMDG)	: Not applicable
ΙΑΤΑ	
Transport hazard class(es) (IATA)	: Not applicable
ADN	
Transport hazard class(es) (ADN)	: Not applicable
RID	
Transport hazard class(es) (RID)	: Not applicable
14.4. Packing group	
14.4.Packing groupPacking group (ADR)	: Not applicable
Packing group (IMDG)	: Not applicable

Safety Data Sheet

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

Packing group (IATA)	: Not applicable
Packing group (ADN)	: Not applicable
Packing group (RID)	: Not applicable
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

Not applicable

- Transport by sea Not applicable

- Air transport

Not applicable

- Inland waterway transport

Not applicable

- Rail transport

Not applicable

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

No REACH Annex XVII restrictions

TETRAKIS (TRIPHENYLPHOSPHINE) PALLADIUM(0) For Synthesis is not on the REACH Candidate List TETRAKIS (TRIPHENYLPHOSPHINE) PALLADIUM(0) For Synthesis is not on the REACH Annex XIV List

15.1.2. National regulations

Germany

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

Netherlands

SZW-lijst van kankerverwekkende stoffen	: The substance is not listed
SZW-lijst van mutagene stoffen	: The substance is not listed
NIET-limitatieve lijst van voor de	: The substance is not listed
voortplanting giftige stoffen – Borstvoeding	

Safety Data Sheet

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

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	: The substance is not listed

15.2. Chemical safety assessment

No additional information available

SECTION 16: Other information

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