

Safety Data Sheet per OSHA HazCom 2012

1	Identification
	Product identifier
	Product name: <u>Dichloro[bis(1,3-diphenylphosphino)propane]palladium(II)</u> Stock number: H26897
	CAS Number:
	59831-02-6 Relevant identified uses of the substance or mixture and uses advised against. Identified use: SU24 Scientific research and development
	Details of the supplier of the safety data sheet
	Manufacturer/Supplier: Alfa Aesar
	Thermo Fisher Scientific Chemicals, Inc. 30 Bond Street
	Ward Hill, MA 01835-8099 Tel: 800-343-0660
	Fax: 800-322-4757 Email: tech@alfa.com
	www.alfa.com Information Department: Health, Safety and Environmental Department
	Emergency telephone number:
	Call Carechem 24 at +44 (0) 1865 407333 During normal business hours (Monday-Friday, 8am-7pm EST), call (800) 343-0660. After normal business hours, call Carechem 24 at (866) 928-0789.
2	Hazard(s) identification
	Classification of the substance or mixture in accordance with 29 CFR 1910 (OSHA HCS)
	CHS07
	Skin Irrit. 2 H315 Causes skin irritation.
	Eye Irrit. 2A H319 Causes serious eye irritation.
	STOT SE 3 H335 May cause respiratory irritation. Hazards not otherwise classified No information known.
	Label elements GHS label elements The product is classified and labeled in accordance with 29 CFR 1910 (OSHA HCS)
	Hazard pictograms
	GHS07
	Signal word Warning
	Hazard statements H315 Causes skin irritation.
	H319 Causes serious eye irritation. H335 May cause respiratory irritation.
	Precautionary statements P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
	P280 Wear protective gloves/protective clothing/eye protection/face protection. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
	P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing. P405 Store locked up.
	WHMIS classification
	D2B - Toxic material causing other toxic effects
	Classification system HMIS ratings (scale 0-4)
	(Hazardouš Materials Identification System)
	HEALTH I Health (acute effects) = 1 FRE I Flammability = 1
	REACTIVITY Physical Házard = 1 Other hazards
	Results of PBT and vPvB assessment PBT: Not applicable.
	vPvB: Not applicable.
3	Composition/information on ingredients
	Chemical characterization: Substances CAS# Description:
	59831-02-6 Dichloro[bis(1,3-diphenylphosphino)propane]palladium(II)
4	First-aid measures
	Description of first aid measures After inhalation
	Supply fresh air. If required, provide artificial respiration. Keep patient warm. Seek immediate medical advice.
	After skin contact
	Immediately wash with water and soap and rinse thoroughly. Seek immediate medical advice.
	After eye contact Rinse opened eye for several minutes under running water. Then consult a doctor. After swallowing Seek medical treatment.
	(Contd. on page 2)

Product name: Dichloro[bis(1,3-diphenylphosphino)propane]palladium(II)

Information for doctor Most important symptoms and effects, both acute and delayed No further relevant information available. Indication of any immediate medical attention and special treatment needed No further relevant information available.

(Contd. of page 1)

5 Fire-fighting measures

5 Fire-fighting measures			
Extinguishing media Suitable extinguishing agents Carbon Special hazards arising from the subs If this product is involved in a fire, the fo Carbon monoxide and carbon dioxide Hydrogen chloride (HCl) Metal oxide fume Phosphorus oxides Advice for firefighters Protective equipment: Wear self-contained respirator. Wear fully protective impervious suit.	n dioxide, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam. stance or mixture Illowing can be released:		
6 Accidental release measures			
Personal precautions, protective equ Wear protective equipment. Keep unpro	ipment and emergency procedures		
Ensure adequate ventilation	llow material to be released to the environment without proper governmental permits.		
Methods and material for containment Prevention of secondary hazards: No	nt and cleaning up: Ensure adequate ventilation.		
Reference to other sections See Section 7 for information on safe ha			
See Section 7 for information on person See Section 13 for disposal information.	nal protection equipment.		
· · ·			
7 Handling and storage Handling			
Precautions for safe handling			
Handle under dry protective gas. Keep container tightly sealed. Store in cool, dry place in tightly closed	containers		
Ensure good ventilation at the workplace	e. • explosions and fires: No information known.		
Conditions for safe storage, including	•		
Storage Requirements to be met by storeroon	ms and receptacles: No special requirements.		
Information about storage in one con Store away from oxidizing agents. Store away from air.	nmon storage facility:		
Further information about storage co	nditions:		
Store under dry inert gas. This product is air sensitive			
Keep container tightly sealed. Store in cool, dry conditions in well seal	ed containers.		
Specific end use(s) No further relevant			
8 Exposure controls/personal prote Additional information about design			
Properly operating chemical fume hood	designed for hazardous chemicals and having an average face velocity of at least 100 feet per minute.		
	Control parameters Components with limit values that require monitoring at the workplace: Not required. Additional information: No data		
Exposure controls Personal protective equipment	Exposure controls Personal protective equipment General protective and hygienic measures The usual precautionary measures for handling chemicals should be followed.		
The usual precautionary measures for h			
Keep away from foodstuffs, beverages a Remove all soiled and contaminated clo	othing immediately.		
Wash hands before breaks and at the e Avoid contact with the eyes and skin.			
Maintain an ergonomically appropriate working environment. Breathing equipment: Use suitable respirator when high concentrations are present.			
preating equipment. Use suitable res	spirator when high concentrations are present.		
Protection of hands: Impervious gloves	, , ,		
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Product name: Dichloro[bis(1,3-diphenylphosphino)propane]palladium(II)

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Sublimation temperature / start Not applicable Flash point Not applicable Promobility (coling persons) Not applicable Procemposition temperature: Not applicable Auto graining Not applicable Provide does not present an explosion hazard. Explosion linking Opposition linking Not applicable Versport Not applicable Stability on the charge control (not control News) Not applicable Otto applicable Not appl			(0			
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			(Contd. on page 4)			

Product name: Dichloro[bis(1,3-diphenylphosphino)propane]palladium(II)

	(Contd. of page 3	
UN-Number DOT, IMDG, IATA	None	
UN proper shipping name DOT, IMDG, IATA	None	
Transport hazard class(es)		
DOT, ADR, IMDG, IATA Class	None	
Packing group DOT, IMDG, IATA	None	
Environmental hazards:	Not applicable.	
Special precautions for user	Not applicable.	
Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code Not applicable.		
Transport/Additional information:	Not dangerous according to the above specifications.	
DOT Marine Pollutant (DOT):	No	

15 Regulatory information

Safety, health and environmental regulations/legislation specific for the substance or mixture GHS label elements The product is classified and labeled in accordance with 29 CFR 1910 (OSHA HCS) Hazard pictograms



Signal word Warning Hazard statements

H315 Causes skin irritation. H319 Causes serious eye irritation

H335 May cause respiratory irritation. Precautionary statements

- Precadional y statements P261 Avoid breathing dust/fume/gas/mist/vapours/spray. P280 Wear protective gloves/protective clothing/eye protection/face protection. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
- P405 P501

Store locked up. Dispose of contents/container in accordance with local/regional/national/international regulations.

National regulations This product is not listed in the U.S. Environmental Protection Agency Toxic Substances Control Act Chemical Substance Inventory. Use of this product is restricted to research and development only. This product must be used by or directly under the supervision of a technically qualified individual as defined by TSCA. This product must not be used for commercial purposes or in formulations for commercial purposes.

product must not be used for commercial purposes or in formulations for commercial purposes. SARA Section 313 (specific toxic chemical listings) Substance is not listed. California Proposition 65 Prop 65 - Chemicals known to cause cancer Substance is not listed. Prop 65 - Developmental toxicity Substance is not listed. Prop 65 - Developmental toxicity, female Substance is not listed. Prop 65 - Developmental toxicity, male Substance is not listed. Information about limitation of use: For use only by technically qualified individuals. Other regulations, limitations and prohibitive regulations Substance of Very High Concern (SVHC) according to the REACH Regulations (EC) No. 1907/2006. Substance is not listed. The conditions of restrictions according to Article 67 and Annex XVII of the Regulation (EC) No 1907/2006 (REACH) for the manufacturing, placing on the market and use must be observed. Substance is not listed.

Annex XIV of the REACH Regulations (requiring Authorisation for use) Substance is not listed. Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

Employers should use this information only as a supplement to other information gathered by them, and should make independent judgement of suitability of this information to ensure proper use and protect the health and safety of employees. This information is furnished without warranty, and any use of the product not in conformance with this Material Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user.

Department issuing SDS: Global Marketing Department Date of preparation / last revision 11/24/2015 / -Date of preparation / last revision 11/24/2015 / -Abbreviations and acronyms: IMDG: International Maritime Code for Dangerous Goods DOT: US Department of Transportation IATA: International Air Transport Association CAS: Chemical Abstracts Service (division of the American Chemical Society) HMIS: Hazardous Materials Identification System (USA) WHMIS: Workplace Hazardous Materials Information System (Canada) LC50: Lethal concentration, 50 percent LD50: Lethal dose, 50 percent LD50: Curpational Safety and Health Administration (USA) OSHA: Occupational Safety and Health Administration (USA) MTP: National Toxicology Program (USA) IARC: International Agency for Research on Cancer EPA: Environmental Protection Agency (USA)

USA