

Revision number: 1 Revision date: 07/06/2018

1. IDENTIFICATION

Product name: Product code:

Product use: Restrictions on use:

Company: TCI America 9211 N. Harborgate Street Portland, OR 97203 U.S.A. Telephone: +1-800-423-8616 / +1-503-283-1681 Fax: +1-888-520-1075 / +1-503-283-1987 e-mail: sales-US@TCIchemicals.com www.TCIchemicals.com

2. HAZARD(S) IDENTIFICATION

OSHA Haz Com: CFR 1910.1200:	
WHMIS 2015:	

Signal word:

Hazard Statement(s):

Eye Damage/Irritation [Category 2A] Warning!

Skin Corrosion/Irritation [Category 2]

For laboratory research purposes.

Not for drug or household use.

Causes skin irritation Causes serious eye irritation

D3389

Pictogram(s) or Symbol(s):



Precautionary Statement(s): [Prevention] [Response]

Wash hands and face thoroughly after handling. Wear protective gloves, eye protection. If on skin: Wash with plenty of soap and water. If skin irritation occurs: Get medical advice or attention. Take off contaminated clothing and wash it before reuse. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice or attention.

Hazards not otherwise classified: [HNOC]

3. COMPOSITION/INFORMATION ON INGREDIENTS

None.

Substance/mixture: Components: Percent: CAS RN: Molecular Weight: Chemical Formula: Synonyms: Substance 2-(Dicyclohexylphosphino)-2'-(dimethylamino)biphenyl >98.0%(GC)(T) 213697-53-1 393.55 C2eH3sNP DavePhos

Page 1 of 5

SAFETY DATA SHEET

2-(Dicyclohexylphosphino)-2'-(dimethylamino)biphenyl

TCI AMERICA

Chemical Emergencies: TCI America (8:00am - 5:00pm) PST +1-503-286-7624 Transportation Emergencies: Chemtrec 24-Hour +1-800-424-9300 (U.S.A.) +1-703-527-3887 (International) **Responsible department:** TCI America Environmental Health Safety and Security +1-503-286-7624

Emergency telephone number:

skin irritation or rash occurs: Get medical advice/attention. Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Ingestion: Get medical advice/attention. Symptoms/effects: Redness. Acute: Redness. Delayed: No data available Notes to physician: No data available S. FIRE-FIGHTING MEASURES Dry chemical, foam, water spray, carbon dioxide.	phenyl	
Inhalation: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical advice/attention if you feel unwell. Skin contact: Remove/Take off immediately all contaminated clothing. Gently wash with plenty of soap and water skin irritation or rash occurs: Get medical advice/attention. Eye contact: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. Ingestion: Get medical advice/attention Symptoms/effects: Redness. Acute: Redness. Delayed: No data available Indication of any immediate medical attention: No data available Notes to physician: No data available Suitable extinguishing media: Dry chemical, foam, water spray, carbon dioxide. Specific hazards arising from the chemical: Take care as it may decompose upon combustion or in high temperatures to generate poisonous further specific hazards: Advice for firefighters: Wear self-contained breathing apparatus if possible. 6. ACCIDENTAL RELEASE MEASURES Personal precautions, protective	4. FIRST-AID MEASURES	
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	6. ACCIDENTAL RELEASE MEASU	RES
Environmental precautions: Prevent product from entering drains.	equipment and emergency procedures: Environmental precautions: Methods and materials for containment	non-involved personnel should be controlled around the leakage area by roping off, etc. Prevent product from entering drains. Sweep dust to collect it into an airtight container, taking care not to disperse it. Adhered or collected

7. HANDLING AND STORAGE

Precautions for safe handling:	Handling is performed in a well ventilated place. Wear suitable protective equipment. Prevent dispersion of dust. Wash hands and face thoroughly after handling. Use a local exhaust if dust or aerosol will be generated. Avoid contact with skin, eyes and clothing.			
Conditions for safe storage, including any incompatibilities				
Storage conditions:	Keep container tightly closed. Store in a cool and dark place.			
-	Store under inert gas. Protect from moisture.			
	Store away from incompatible materials such as oxidizing agents.			
	Moisture-sensitive			
Packaging material:	Comply with laws.			

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Appropriate engineering controls:	Follow safe industrial engineering/laboratory practices when handling any chemical. Install a closed system or local exhaust as possible so that workers should not be exposed directly. Also install safety shower and eye bath.
Personal protective equipment	
Respiratory protection:	Dust respirator. Follow local and national regulations.
Hand protection:	Protective gloves.
Eye protection:	Safety glasses. A face-shield, if the situation requires.
Skin and body protection:	Protective clothing. Protective boots, if the situation requires.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state (20°C): Form: Colour: Odour: Odor threshold: Odour threshold:	Solid Crystal - Powder White - Yellow No data available No data available No data available			
Melting point/freezing point: Boiling point/range: Decomposition temperature: Relative density: Kinematic viscosity: Log Pow:	123°C (253°F) No data available No data available No data available No data available No data available	pH: Vapour pressure: Vapour density: Dynamic Viscosity: Evaporation rate(Butyl Acetate=1):	No data available No data available. No data available No data available No data available	
Flash point: Flammability(solid, gas):	No data available No data available	Autoignition temperature: Flammability or explosive limits: Lower: Upper:	No data available No data available No data available	
Solubility(ies): [Water] [Other solvents]	No data available No data available	оррен.		
10. STABILITY AND REACTI	VITY			
Reactivity: Chemical stability: Possibility of hazardous reaction	No data available Stable under proper con No special reactivity has			

Incompatible materials: Oxidizing agents Hazardous decomposition products: Carbon dioxide, Carbon monoxide, Nitrogen oxides (NOx), Phosphorus oxides

11. TOXICOLOGICAL INFORMATION

Acute Toxicity:	
No data available	

Skin corrosion/irritation: No data available

Serious eye damage/irritation: No data available

Respiratory or skin sensitization: No data available

Germ cell mutagenicity: No data available

Carcinogenicity: No data available

> IARC: No data available

Reproductive toxicity: No data available

Target organ(s):

No data available

NTP:

No data available

OSHA:

No data available

12. ECOLOGICAL INFORMATION

Ecotoxicity: Fish: Crustacea: Algae:	No data available No data available No data available
Persistence / degradability: Bioaccumulative potential(BCF): Mobility in soil	No data available No data available
Log Pow: Soil adsorption (Koc): Henry's Law (PaM³/mol):	No data available No data available No data available
13. DISPOSAL CONSIDERATIONS	
Disposal of container: Other considerations:	Recycle to process if possible. It is the generator's responsibility to comply with Federal, State and Local rules and regulations. You may be able to dissolve or mix material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber system. This section is intended to provide assistance but does not replace these laws, nor does compliance in accordance with this section ensure regulatory compliance according to the law. US EPA guidelines for Identification and Listing of Hazardous Waste are listed in 40 CFR Parts 261. The product should not be allowed to enter the environment, drains, water ways, or the soil. Dispose of as unused product. Do not re-use empty containers. Observe all federal, state and local regulations when disposing of the substance.
14. TRANSPORT INFORMATION	
DOT (US)	Non-hazardous for transportation.
IATA	Non-hazardous for transportation.
IMDG	Non-hazardous for transportation.

15. REGULATORY INFORMATION

Toxic Substance Control Act (TSCA 8b.):

This product is NOT on the EPA Toxic Substances Control Act (TSCA) inventory. The following notices are required by 40 CFR 720.36 (C) for those products not on the inventory list:

(i) These products are supplied solely for use in research and development by or under the supervision of a technically qualified individual as defined in 40 CFR 720.0 et sec.

(ii) The health risks of these products have not been fully determined. Any information that is or becomes available will be supplied on a SDS sheet.

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US Federal Regulations

CERCLA Hazardous substance and Reportable Quantity:

	Not Listed	
	Not Listed	
5		
ow		
ts	Not Listed	
	Not Listed	
1	Not Listed	
sition 65:	Not Listed	
<u>1</u>		
		HMIS Classification:
2		Health:
0		Flammability:
0		Physical:
	0	sition 65: Not Listed Not Listed Not Listed Not Listed Not Listed Not Listed Not Listed

International Inventories

16. OTHER INFORMATION

Revision date: 07/06/2018

Revision number: 1

TCI chemicals are for research purposes only and are NOT intended for use as drugs, food additives, households, or pesticides. The information herein is believed to be correct, but does not claim to be all inclusive and should be used only as a guide. Neither the above named supplier nor any of its affiliates or subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All chemical reagents must be handled with the recognition that their chemical, physiological, toxicological, and hazardous properties have not been fully investigated or determined. All chemical reagents should be handled only by individuals who are familiar with their potential hazards and who have been fully trained in proper safety, laboratory, and chemical handling procedures. Although certain hazards are described herein, we can not guarantee that these are the only hazards which exist. Our SDS are based only on data available at the time of shipping and are subject to change without notice as new information is obtained. Avoid long storage periods since the product is subject to degradation with age and may become more dangerous or hazardous. It is the responsibility of the user to request updated SDS for products that are stored for extended periods. Disposal of unused product must be undertaken by qualified personnel who are knowledgeable in all applicable regulations and follow all pertinent safety precautions including the use of appropriate protective equipment (e.g. protective goggles, protective clothing, breathing equipment, face mask, fume hood). For proper handling and disposal, always comply with federal, state and local regulations.