

Revision number: 2 Revision date: 11/10/2015

IDENTIFICATION 1.

Product name: Product code:

4-Cyano-4"-pentyl-p-terphenyl C2910

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:

Acute Toxicity - Oral [Category 4] Acute Toxicity - Dermal [Category 4] Acute Toxicity - Inhalation [Category 4] Skin Corrosion/Irritation [Category 2] Eye Damage/Irritation [Category 2A]

Signal word:

Hazard Statement(s):

Pictogram(s) or Symbol(s):



Precautionary Statement(s): [Prevention]

[Response]

[Storage] [Disposal] Do not eat, drink or smoke when using this product. Wash hands and face thoroughly after handling. Wear protective gloves and protective clothing. Avoid breathing dusts or mists. Use only outdoors or in a wellventilated area. Wear protective gloves. Wear eye and face protection.

If swallowed: Immediately call a poison center or doctor. Rinse mouth. If on skin: Wash with plenty of water. Call a poison center or doctor if you feel unwell. Take off contaminated clothing and wash it before reuse. If inhaled: Remove person to fresh air and keep comfortable for breathing. If skin irritation or rash occurs: Get medical advice/attention. 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.

None

Dispose of contents and container in accordance with US EPA guidelines for the classification and determination of hazardous waste listed in 40 CFR 261.3. (See Section 13)

For laboratory research purposes. Not for drug or household use.

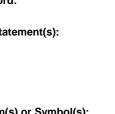
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SAFETY DATA SHEET

Emergency telephone number: 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

Causes serious eye irritation Causes skin irritation Harmful if swallowed Harmful in contact with skin Harmful if inhaled

Warning!



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3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance/Mixture:SubstanceComponents:4-Cyano-4"-pentyl-p-tu	
Percent:	>98.0%(GC)
CAS Number:	54211-46-0
Molecular Weight:	325.46
Chemical Formula:	C ₂₄ H ₂₃ N

4. FIRST-AID MEASURES

Inhalation:	Call a poison center or doctor if you feel unwell. Move victim to fresh air. Give artificial respiration if victim is not breathing. Administer oxygen if breathing is difficult. Keep victim warm and quiet. Treat				
Skin contact:	Remove and isolate contaminated clothing and shoes. In case of contact with substance, immediately flush skin with running water for at least 20 minutes. Treat symptomatically and supportively. Ensure that				
Eye contact:	medical personnel are aware of the material(s) involved and take precautions to protect themselves. IMMEDIATELY flush eyes with running water for at least 15 minutes, keeping eyelids open. Contact with material may irritate or burn eyes. Call emergency medical service. Move victim to fresh air. Check for and remove any contact lenses. Keep victim warm and quiet. Treat symptomatically and supportively. Effects of exposure to substance may be delayed. Ensure that medical personnel are aware of the material(s)				
Ingestion:	involved and take precautions to protect themselves. Harmful if swallowed. Do not induce vomiting with out medical advice. Call a physician or Poison Control Center immediately. Do not use mouth-to-mouth method if victim ingested the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Loosen tight clothing such as a collar, tie, belt or waistband. If a person vomits place them in the recovery position so that vomit will not reenter the mouth and throat. Rinse mouth. Keep victim warm and quiet. Treat symptomatically and supportively. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.				
Symptoms/effects:					
Acute: Delayed:	No data available No data available				
Immediate medical attention:	WARNING: It might be hazardous to the person providing aid to give mouth-to-mouth respiration, because the inhaled material is harmful. If breathing has stopped, perform artificial respiration. Use first aid treatment according to the nature of the injury. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.				
5. FIRE-FIGHTING MEASURES					
Suitable extinguishing media:	Dry chemical, CO_2 , sand, earth, water spray or regular foam Consult with local fire authorities before attempting large scale fire fighting operations.				
Specific hazards arising from the che					
Hazardous combustion products: Other specific hazards:	None Closed containers may explode from heat of a fire.				
Special precautions for fire-fighters: Use water spray or fog; do not use straig heated. Move containers from fire area it Special protective equipment for fire-f					
Wear positive pressure self-contained br	eathing apparatus (SCBA). Structural fire fighters' protective clothing provides limited protection in fire situations ations. Wear chemical protective clothing which is specifically recommended by the manufacturer. It may				
6. ACCIDENTAL RELEASE MEAS	URES				

Personal precautions:	Avoid contact with skin, eyes, and clothing. Keep people away from and upwind of spill/leak. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing (Section 8). Warn unnecessary personnel to move away. Stop leak if you can do it without risk. Ensure adequate ventilation. Isolate the hazard area and deny entry to unnecessary and unprotected personnel.
Personal protective equipment:	Wear eye protection (splash goggles) and face protection (full length face shield). Lab coat. Dust respirator. Be sure to use a MSHA/NIOSH approved respirator or equivalent. Wear protective gloves (nitrile).

6. ACCIDENTAL RELEASE MEASURES Emergency procedures: Provide Action Proceedings

Prevent dust cloud. In case of a spill and/or a leak, always shut off any sources of ignition, ventilate the area, and excercise caution. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Warn personnel to move away. Prevent entry into sewers, basements or confined areas; dike if needed.

Methods and materials for containment and cleaning up:

ELIMINATE all ignition sources (no smoking, flares, sparks, or flames in immediate area). Stop leak if without risk. Ventilate the area. Absorb with an inert material and put the spilled material in an appropriate waste disposal container. Use clean non-sparking tools to collect absorbed material. **Environmental precautions:**

Keep away from living quarters. Prevent further leakage or spillage if safe to do so. Water runoff can cause environmental damage. Prevent entry into sewers, basements or confined areas; dike if needed.

7. HANDLING AND STORAGE Precautions for safe handling: Avoid inhalation of vapor or mist. Do not ingest. Avoid contact with skin and eyes. Avoid contact with skin. Good general ventilation should be sufficient to control airborne levels. Keep container dry. Handle and open container with care. Wear suitable protective clothing, gloves and eye/face protection. When using do not eat, drink, or smoke. Keep away from sources of ignition. Conditions for safe storage: Keep only in the original container in a cool well-ventilated place. Keep away from incompatibles. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Avoid prolonged storage periods. Storage incompatibilities: Store away from oxidizing agents

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure limits: No data available

Appropriate engineering controls:

Good general ventilation should be sufficient to control airborne levels. Ventilation is normally required when handling or using this product. Eyewash fountains should be provided in areas where there is any possibility that workers could be exposed to the substance. Follow safe industrial engineering/laboratory practices when handling any chemical.

Personal protective equipment	
Respiratory protection:	Dust respirator. Be sure to use a MSHA/NIOSH approved respirator or equivalent.
Hand protection:	Nitrile gloves.
Eye protection:	Safety glasses.
Skin and body protection:	Lab coat.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state (20°C): Form: Color: Odor: Odor threshold:	Solid Crystal - Powder White - Almost white No data available No data available		
Melting point/freezing point: Boiling point/range: Decomposition temperature: Relative density: Kinematic Viscosity:	130°C (266°F) No data available No data available No data available No data available No data available	pH: Vapor pressure: Vapor density: Dynamic Viscosity:	No data available No data available No data available No data available
Partition coefficient: n-octanol/water (log Pow)	No data available	Evaporation rate: (Butyl Acetate = 1)	No data available
Flash point: Flammability (solid, gas):	No data available No data available	Autoignition temperature: Flammability or explosive limit Lower: No data a	
		Upper: No data a	vailable
Colubility/icolu			

Solubility(ies): Soluble: Hot toluene

10. STABILITY AND REACTIVITY

Reactivity: Chemical Stability: Not Available. Stable under recommended storage conditions. (See Section 7) 10. STABILITY AND REACTIVITY

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Possibility of Hazardous Reactions:	No hazardous reactivity has been reported.
Conditions to avoid: Incompatible materials:	Avoid excessive heat and light. Oxidizing agents
Hazardous Decomposition Products:	No data available
11. TOXICOLOGICAL INFORMATI	
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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	
Canaina namiaitur	
Carcinogenicity:	
No data available	
IARC: No data available	NTP: No data available OSHA: No data available
Reproductive toxicity: No data available	
Routes of Exposure:	Inhalation, Eye contact, Ingestion, Skin contact.
Symptoms related to exposure:	
	ss or death. Skin contact may result in inflammation; characterized by itching, scaling, reddening, or occasionally ness, pain or dry skin. Eye contact may result in redness or pain.
Potential Health Effects:	less, pair of dry skin. Lye contact may result in redness of pain.
Skin and eye contact may result in irritation	
Target organ(s):	No data available
12. ECOLOGICAL INFORMATION	
Ecotoxicity	
Fish: Crustacea:	No data available No data available
Algae:	No data available
-	
Persistence and degradability:	No data available
Bioaccumulative potential (BCF):	No data available
Mobillity in soil:	No data available No data available
Partition coefficient: n-octanol/water (log Pow)	
Soil adsorption (Koc):	No data available
Henry's Law:	No data available
constant (PaM³/mol)	
13. DISPOSAL CONSIDERATIONS	
Disposal of product:	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 CER Parts 261. The product should not be allowed to enter the environment drains

 Disposal of container:
 Dispose of as unused product. Do not re-use empty containers.

 Other considerations:
 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 ON the EPA Toxic Substances Control Act (TSCA) inventory.

US Federal Regulations

CERCLA Hazardo	us substance an	d Reportable Quantity:		
SARA 313:		Not Listed		
SARA 302:		Not Listed		
State Regulations	_			
State Right-to-Kno	w			
Massachus	setts	Not Listed		
New Jerse	v	Not Listed		
Pennsylva	•	Not Listed		
California Proposition 65:		Not Listed		
Other Information				
NFPA Rating:			HMIS Classification:	
Health:	0		Health:	0
Flammability:	0		Flammability:	0
Instability:	0		Physical:	0
International Inver	ntories			
EC-No:		259-028-9		

16. OTHER INFORMATION

Revision date: 11/10/2015

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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 gogles, protective clothing, breathing equipment, face mask, fume hood). For proper handling and disposal, always comply with federal, state and local regulations.