

### Revision number: 3 Revision date: 11/10/2015

### **IDENTIFICATION** 1.

5-[4'-(Bromomethyl)-1,1'-biphenyl-2-yl]-1-triphenylmethyl-1H-tetrazole
B4462

**TCI AMERICA** 

**SAFETY DATA SHEET** 

Product use: Restrictions on use:

Product name:

Product code:

For laboratory research purposes. Not for drug or household 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	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
2. HAZARD(S) IDENTIFICATION	
OSHA Haz Com: CFR 1910.1200:	Acute Toxicity - Oral [Category 3] Skin Corrosion/Irritation [Category 2]

Eye Damage/Irritation [Category 2A]

Signal word:

Danger!

Hazard Statement(s):

Causes serious eye irritation Causes skin irritation Toxic if swallowed

Pictogram(s) or Symbol(s):





Precautionary Statement(s): [Prevention]	Do not eat, drink or smoke when using this product. Wash hands and face thoroughly after handling. Wear
[i rotoniion]	protective gloves. Wear eye and face protection.
[Response]	If swallowed: Immediately call a poison center or doctor. Rinse mouth. If on skin: Wash with plenty of water. If skin irritation or rash occurs: Get medical advice/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.
[Storage]	Store locked up.
[Disposal]	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)
Supplementary Information:	While this material is not classified as hazardous under OSHA, this SDS contains valuable information

While this material is not classified as hazardous under OSHA, this SDS contains valuable information critical to safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.

# 3. COMPOSITION/INFORMATION ON INGREDIENTS

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3. COMPOSITION/INFORMATION	I ON INGREDIENTS
Substance/Mixture:	Substance
Components:	5-[4'-(Bromomethyl)-1,1'-biphenyl-2-yl]-1-triphenylmethyl-1H-tetrazole
Percent:	>98.0%(HPLC)(T)
CAS Number:	124750-51-2
Aolecular Weight:	557.50
Chemical Formula:	C <sub>33</sub> H <sub>25</sub> BrN <sub>4</sub>
Synonyms:	5-[4'-(Bromomethyl)-1,1'-biphenyl-2-yl]-1-trityl-1H-tetrazole
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4. FIRST-AID MEASURES	
Inhalation:	Immediately call a poison center or doctor. 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 symptomatically and supportively. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.
Skin contact:	Immediately call a poison center or doctor. Remove and wash contaminated clothing before re-use. In case of contact with substance, immediately flush skin with running water for at least 20 minutes. Treat symptomatically and supportively. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.
Eye contact:	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) involved and take precautions to protect themselves.
Ingestion:	Toxic if swallowed. Do not induce vomiting with out medical advice. If swallowed, seek medical advice immediately and show the container or label. 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 dangerous to the person providing aid to give mouth-to-mouth respiration, because the inhaled material is toxic. 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, $CO_2$ or water spray. Consult with local fire authorities before attempting large scale fire fighting operations.
Specific hazards arising from the che	emical
Hazardous combustion products:	None
Other specific hazards:	Closed containers may explode from heat of a fire.
neated. Move containers from fire area <b>Special protective equipment for fire</b> - Wear positive pressure self-contained b	
6. ACCIDENTAL RELEASE MEAS	SURES
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.

Personal protective equipment:

Avoid contact with skin, eyes, and clothing. Keep people away from and upwind of spinleak. Do not four 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. 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). **TCI AMERICA** 

## 6. ACCIDENTAL RELEASE MEASURES

**Emergency procedures:** 

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. 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: Store locked up. Keep containers tightly closed 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:	147°C (dec.) (297°F) 61°C (142°F)/1.6kPa 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 limits: Lower: No data ava	
		Upper: No data ava	ilable

Solubility(ies):

Soluble: Hot dimethylformamide(DMF)

# 10. STABILITY AND REACTIVITY

Reactivity: Chemical Stability: Not Available. Stable under recommended storage conditions. (See Section 7) 10. STABILITY AND REACTIVITY Possibility of Hazardous Reactions: Conditions to avoid: Incompatible materials: Hazardous Decomposition Products:

No hazardous reactivity has been reported. Avoid excessive heat and light. Oxidizing agents No data available

# 11. TOXICOLOGICAL INFORMATION

<b>Acute Toxicity:</b> No data available					
Skin corrosion/irritation: No data available					
Serious eye damage/irritation: No data available					
Respiratory or skin sensitization: No data available					
<b>Germ cell mutagenicity:</b> No data available					
Carcinogenicity:					
No data available					
IARC: No data available	NTP:	No data available	OSHA:	No data available	
<b>Reproductive toxicity:</b> No data available					
Routes of Exposure: Symptoms related to exposure: Overexposure may result in serious illne blistering. Skin contact may result in red Potential Health Effects: Skin and eye contact may result in irrita Target organ(s):	ess or death. Skin contac dness, pain or dry skin. E		n; characterized by itchir	ıg, scaling, reddening, or occa	sionally
12. ECOLOGICAL INFORMATION	/				
Ecotoxicity Fish: Crustacea: Algae:	No data available No data available No data available				
Persistence and degradability: Bioaccumulative potential (BCF): Mobillity in soil: Partition coefficient: n-octanol/water (log Pow) Soil adsorption (Koc):	No data available No data available No data available No data available No data available				
Henry's Law: constant (PaM <sup>3</sup> /mol)	No data available				
13. DISPOSAL CONSIDERATION					
Disposal of product:	rules and regulation chemical incineration	ons. You may be able to distor equipped with an afterbu	solve or mix material wit rner and scrubber syste	mply with Federal, State and L h a combustible solvent and b m. This section is intended to ccordance with this section en	urn in a provide

Disposal of container:water ways, or the soil.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.

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,

# 14. TRANSPORT INFORMATION

DOT (US) UN number: UN2811	<b>Proper Shipping Name:</b> Toxic solids, organic, n.o.s.	<b>Class or Division:</b> 6.1 Toxic material.	Packing Group: III
IATA UN number: UN2811	<b>Proper Shipping Name:</b> Toxic solid, oxidizing, n.o.s.	<b>Class or Division:</b> 6.1 Toxic material.	Packing Group: III
IMDG UN number: UN2811	<b>Proper Shipping Name:</b> Toxic solid, organic, n.o.s.	<b>Class or Division:</b> 6.1 Toxic material.	Packing Group: III
EmS number:	F-A, S-A		

# 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.

### **US Federal Regulations**

CERCLA Hazardous substance and Reportable Quantity:		
SARA 313:	Not Listed	
SARA 302:	Not Listed	

### State Regulations

State Right-to-Know

Massachusetts	Not Listed
New Jersey	Not Listed
Pennsylvania	Not Listed
California Proposition 65:	Not Listed

### Other Information

**NFPA Rating:** 

Health:	3	Health:	;
Flammability:	0	Flammability:	(
Instability:	0	Physical:	(

### International Inventories

# 16. OTHER INFORMATION

# Revision date: 11/10/2015

Revision number: 3

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.

**HMIS Classification:** 

ealth:	3
lammability:	0
hysical:	0