

Revision number: 1 Revision date: 10/23/2019

# **1. IDENTIFICATION**

TCI	<b>AMERICA</b>	
SAFE	TY DATA SHEET	

Product name: Product code:	2,2',7,7'-Tetrakis(diphenylamino)-9,9'-spirobi[9H-flu T3634	)-9,9'-spirobi[9H-fluorene]		
Product use: Restrictions on use:	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: WHMIS 2015:	Not classifiable	
Signal word:	None	
Hazard Statement(s):	None	
Pictogram(s) or Symbol(s):	None	
Precautionary Statement(s):	None	
Hazards not otherwise classified: [HNOC]	None.	

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance/mixture: Components:	Substance 2,2',7,7'-Tetrakis(diphenylamino)-9,9'-spirobi[9H-fluorene]
Percent:	>98.0%(HPLC)
CAS RN:	189363-47-1
Molecular Weight:	985.25
Chemical Formula:	C73H52N4
Synonyms:	N²,N²,N2',N2',N7,N7',N7',N7'Octaphenyl-9,9'-spirobi[fluorene]-2,2',7,7'-tetramine , Spiro-TAD

4. FIRST-AID MEASURES	
Description of first aid measures	
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. Rinse skin with water/shower. If 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 if you feel unwell. Rinse mouth.
Symptoms/effects:	
Acute:	No data available
Delayed:	No data available
Indication of any immediate medical a Not available.	attention:
Notes to physician: No data available	
5. FIRE-FIGHTING MEASURES	
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 fume.

Hazardous combustion products:	These products include: Carbon oxides Nitrogen oxides
Other specific hazards:	Closed containers may explode from heat of a fire.

Advice for firefighters:	Wear self-contained breathing apparatus if possible.
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# 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures: Environmental precautions: Methods and materials for containment and cleaning up:	Use personal protective equipment. Keep people away from and upwind of spill/leak. Entry to 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 material should be promptly disposed of, in accordance with appropriate laws and regulations.
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 a	
Storage conditions:	Keep container tightly closed. Store in a cool and dark place.
	Store away from incompatible materials such as oxidizing agents.
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

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Physical state (20°C): Form: Colour: Odour: Odor threshold: Odour threshold:	Solid Crystal - Powder Very pale yellow - I No data available No data available No data available	Pale reddish yellow	
Melting point/freezing point: Boiling point/range: Decomposition temperature: Relative density: Kinematic viscosity: Log Pow:	277°C (531°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	C P P C C C C C C C C C C C C C C C C C	
10. STABILITY AND REACTIV	/ITY		
Reactivity: Chemical stability: Possibility of hazardous reaction Incompatible materials: Hazardous decomposition produ	Oxidizing agents Carbon monoxide, (	r conditions. y has been reported. Carbon dioxide, Nitrogen oxides (NOx)	
Acute Toxicity: No data available			
Skin corrosion/irritation: No data available			
<b>Serious eye damage/irritation:</b> No data available			
<b>Respiratory or skin sensitization</b> No data available	:		
Germ cell mutagenicity: No data available			
<b>Carcinogenicity:</b> No data available			
IARC: No data available	NTP:	No data available OSHA	No data available
<b>Reproductive toxicity:</b> No data available			
Target organ(s):	No data available		

12. ECOLOGICAL INFORMATION

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12. ECOLOGICAL INFORMATION	
Ecotoxicity:	
Fish:	No data available
Crustacea:	No data available
Algae:	No data available
Persistence / degradability:	No data available
Bioaccumulative potential(BCF): Mobility in soil	No data available
Log Pow:	No data available
Soil adsorption (Koc):	No data available
Henry's Law (PaM ³/mol):	No data available
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 CFR Parts 261. The product should not be allowed to enter the environment, drains, water ways, or the soil.
Disposal of container:	Dispose of as unused product.
Other considerations:	Observe all federal, state and local regulations when disposing of the substance.
14. TRANSPORT INFORMATION	
<u>DOT (US)</u>	Non-hazardous for transportation.
1474	New how we for the constant of
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:

Instability:	0		Physical:
Flammability:	0		Flammability:
Health:	0		Health:
NFPA Rating:			HMIS Classification:
Other Information	<u>n</u>		
California Proposition 65:		Not Listed	
Pennsylvania		Not Listed	
New Jersey		Not Listed	
Massachusetts		Not Listed	
State Right-to-Kn	ow		
State Regulations	<u>S</u>		
SARA 302:		Not Listed	
SARA 313:		Not Listed	
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#### International Inventories

### 16. OTHER INFORMATION

#### Revision date: 10/23/2019

#### 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.