

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: Eye Damage/Irritation [Category 1] WHMIS 2015: Corrosive to Metals [Category 1] Skin Corrosion/Irritation [Category 1C] Signal word: Danger! Hazard Statement(s): May be corrosive to metals Causes severe skin burns and eye damage Pictogram(s) or Symbol(s): Precautionary Statement(s): Keep only in original container. Do not breathe dusts or mists. Wash hands and face thoroughly after [Prevention] handling. Wear protective gloves, protective clothing, face protection. [Response] If swallowed: Rinse mouth. Do NOT induce vomiting. Immediately call a poison center or doctor. If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. Immediately call a poison center or doctor. Wash contaminated clothing before reuse. If inhaled: Remove person to fresh air and keep comfortable for breathing. Immediately call a poison center or doctor. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center or doctor. Absorb spillage to prevent material damage. [Storage] Store in corrosive resistant bottle or metal container with a resistant inner liner. Store locked up. [Disposal] Dispose of contents and container in accordance with local, regional, national regulations (e.g. US: 40 CFR Part 261, EU:91/156/EEC, JP: Waste Disposal and Cleaning Act, etc.).

Hazards not otherwise classified: [HNOC] None.

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4,4'-(Hexafluoroisopropylidene)diphthalic Anhydride (purified by sublimation) H1438

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

TCI AMERICA

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 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance/mixture:	Substance
Components:	4,4'-(Hexafluoroisopropylidene)diphthalic Anhydride (purified by sublimation)
Percent:	>99.0%(GC)
CAS RN:	1107-00-2
Molecular Weight:	444.24
Chemical Formula:	C19H6F6O6

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. Immediately call a POISON CENTER or doctor/physician.			
Skin contact:	Remove/Take off immediately all contaminated clothing. Gently wash with plenty of soap and water. Immediately call a POISON CENTER or doctor/physician.			
Eye contact:	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.Immediately call a POISON CENTER or doctor/physician.			
Ingestion:	Immediately call a POISON CENTER or doctor/physician. Rinse mouth. Do NOT induce vomiting.			
Symptoms/effects:				
Acute:	Pain. Redness.			
Delayed:	No data available			
Indication of any immediate medical a Not available. Notes to physician: No data available	itention:			

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: Other specific hazards:	These products include: Carbon oxides Halogenated compounds WARNING: Highly toxic HF gas is produced during combustion.
Advice for firefighters:	Wear self-contained breathing apparatus if possible.

6. ACCIDENTAL RELEASE MEASURES

Packaging material:

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 closed system if possible. Use a local exhaust if dust or aerosol will be generated.			
	Avoid contact with skin, eves and clothing.			
	Use corrosive resistant equipment.			
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 locked up.			
	Store away from incompatible materials such as oxidizing agents.			

Comply with laws. Keep only in original container.

Moisture-sensitive

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. Also install safety shower and eye bath.
Personal protective equipment	
Respiratory protection:	Dust respirator, self-contained breathing apparatus(SCBA), supplied air respirator, etc. Use respirators approved under appropriate government standards and follow local and national regulations.
Hand protection:	Impervious gloves.
Eye protection:	Safety goggles. A face-shield, if the situation requires.
Skin and body protection:	Impervious 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 - Almost white No data available No data available No data available			
Melting point/freezing point:	246°C (475°F)	pH:	No data available	
Boiling point/range:	No data available	Vapour pressure:	No data available.	
Decomposition temperature:	No data available	Vapour density:	No data available	
Relative density: Kinematic viscosity:	No data available No data available	Dynamic Viscosity:	No data available	
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:	No data available	
· · · · · · · · · · · · · · · · · · ·		Lower:	No data available	
		Upper:	No data available	
Solubility(ies):		2660.		
[Water] [Other solvents]	No data available			
Soluble:	Acetone, Dimethyl sulfoxide(DMSO)			

10. STABILITY AND REACTIVITY

Reactivity: Chemical stability: Possibility of hazardous reactions: Incompatible materials: Hazardous decomposition products:

No data available Stable under proper conditions. No special reactivity has been reported. Oxidizing agents, Bases Carbon dioxide, Carbon monoxide, Hydrogen fluoride 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	NTP:	No data available	OSHA:	No data available
Reproductive toxicity: No data available				
Target organ(s):	No data available			
12. ECOLOGICAL INFORMATION				
Ecotoxicity:				
Ecotoxicity: Fish:	No data available			
•	No data available No data available			
Fish:				
Fish: Crustacea: Algae:	No data available No data available			
Fish: Crustacea: Algae: Persistence / degradability: Bioaccumulative potential(BCF):	No data available			
Fish: Crustacea: Algae: Persistence / degradability:	No data available No data available No data available			
Fish: Crustacea: Algae: Persistence / degradability: Bioaccumulative potential(BCF): Mobility in soil	No data available No data available No data available No data available			
Fish: Crustacea: Algae: Persistence / degradability: Bioaccumulative potential(BCF): Mobility in soil Log Pow:	No data available No data available No data available No data available No data available			
Fish: Crustacea: Algae: Persistence / degradability: Bioaccumulative potential(BCF): Mobility in soil Log Pow: Soil adsorption (Koc):	No data available No data available No data available No data available No data available No data available			
Fish: Crustacea: Algae: Persistence / degradability: Bioaccumulative potential(BCF): Mobility in soil Log Pow: Soil adsorption (Koc): Henry's Law (PaM ³/mol):	No data available No data available No data available No data available No data available No data available			
Fish: Crustacea: Algae: Persistence / degradability: Bioaccumulative potential(BCF): Mobility in soil Log Pow: Soil adsorption (Koc):	No data available No data available	nical incinerator equipped with a e assistance but does not replac nsure regulatory compliance acc	lissolve or mix ma an afterburner and ce these laws, nor cording to the law listed in 40 CFR F	terial with a combustible solvent I scrubber system. This section is does compliance in accordance . US EPA guidelines for Parts 261. The product should not

14. TRANSPORT INFORMATION

DOT (US) UN number: UN3261	Proper Shipping Name: Corrosive solid, acidic, organic, n.o.s	Class or Division: 8 Corrosive material	Packing Group: III
IATA UN number: UN3261	Proper Shipping Name: Corrosive solid, acidic, organic, n.o.s	Class or Division: 8 Corrosive material	Packing Group: III
IMDG UN UN3261 numb er:	Proper Shipping Name: Corrosive solid, acidic, organic, n.o.s	Class or Division: 8 Corrosive material	Packing Group: III
EmS number:	F-A, S-B		

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 Hazardous substance and Reportable Quantity:					
SARA 313:		Not Listed			
SARA 302:		Not Listed			
State Regulations	<u>S</u>				
State Right-to-Kn	ow				
Massachuse	tts	Not Listed			
New Jersey		Not Listed			
Pennsylvania	a	Not Listed			
California Propos	sition 65:	Not Listed			
Other Information	<u>n</u>				
NFPA Rating:			HMIS Classification:		
Health:	2		Health:	2	
Flammability:	0		Flammability:	0	
Instability:	0		Physical:	0	
International Inve	entories				
Canada: NDSL		On NDSL			
EC-No:		214-170-0			

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.