



# Safety Data Sheet

## Product Identifier

### SECTION 1. IDENTIFICATION

<b>Product Identifier</b>	BondLynx CAS# 2409741-22-4
<b>Other Means of Identification</b>	2,2-Bis[4-[3-(trifluoromethyl)-3 <i>H</i> -diazirin-3-yl]phenyl]hexafluoropropane
<b>Recommended Use</b>	Laboratory chemical, polymer crosslinker, adhesive
<b>Restrictions on Use</b>	Not for human or animal use
<b>Initial Supplier Identifier</b>	XlynX Materials Inc. 10217 Surfside Place Sidney, B.C V8L 3R6 Canada
<b>Emergency Telephone Number</b>	250-727-1257

### SECTION 2. HAZARD IDENTIFICATION

<b>Classification</b>	Not a hazardous substance or mixture.
<b>Label Elements</b>	Not a hazardous substance or mixture.
<b>Other Hazards</b>	Unknown

### SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No.	Concentration	Common name / Synonyms	Other identifiers
2,2-Bis[4-[3-(trifluoromethyl)-3 <i>H</i> -diazirin-3-yl]phenyl]hexafluoropropane	2409741-22-4	Pure solid	Formula: C <sub>19</sub> H <sub>8</sub> F <sub>12</sub> N <sub>4</sub> Molecular Weight: 520.27	BondLynx  3,3'-((perfluoropropane-2,2-diyl)bis(4,1-phenylene))bis(3-(trifluoromethyl)-3 <i>H</i> -diazirine)

#### Notes

### SECTION 4. FIRST-AID MEASURES

<b>Inhalation</b>	If breathed in, move person into fresh air. If not breathing, give artificial respiration.
<b>Skin Contact</b>	Wash with soap and plenty of water. Remove contaminated clothing.
<b>Eye Contact</b>	Flush eyes with plenty of water as a precaution.
<b>Ingestion</b>	After swallowing, immediately make victim drink water (two glasses at most). Consult a

physician. Never give anything by mouth to an unconscious person. Rinse mouth with water.

**Most Important Symptoms and Effects, Acute and Delayed**

No data available (see Section 2)

**Immediate Medical Attention and Special Treatment**

No data available (see Section 2)

## SECTION 5. FIRE-FIGHTING MEASURES

**Extinguishing Media**

**Suitable**

Use water spray, alcohol-resistant foam, dry chemical, or carbon dioxide.

**Extinguishing Media**

**Unsuitable**

**Extinguishing Media**

**Specific Hazards**

Development of hazardous combustion gases or vapors possible in the event of fire.

**Arising from the Product**

Fire may cause evolution of Carbon oxides, Nitrogen oxides (NO<sub>x</sub>), Hydrogen fluoride

**Special Protective Equipment and**

Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.

**Precautions for Fire-Fighters**

## SECTION 6. ACCIDENTAL RELEASE MEASURES

**Personal Precautions, Protective Equipment, and Emergency Procedures**

Avoid breathing vapours, mist, or gas. Avoid substance contact. Ensure adequate ventilation. Evacuate the danger area, observe emergency procedures, consult an expert.

**Methods for Containment and Cleaning Up**

Keep in suitable, closed containers for disposal. Do not let product enter drains.

## SECTION 7. HANDLING AND STORAGE

**Precautions for Safe Handling**

Not a hazardous substance or mixture.

**Conditions for Safe Storage**

Keep container tightly closed in a dry and well-ventilated place.

Handle and store away from light and heat. Store at +2°C to +8°C (+36°F to +46°F).

## SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Control Parameters**

Chemical Name	ACGIH® TLV®		OSHA PEL	
	TWA	STEL	TWA	STEL
2,2-Bis[4-[3-(trifluoromethyl)-3H-diazirin-3-yl]phenyl]hexafluoropropane				

**Notes**

Not a hazardous substance or mixture

<b>Appropriate Engineering Controls</b>	General industrial hygiene practice.
<b>Individual Protection Measures</b>	General industrial hygiene practice.
<b>Eye/Face Protection</b>	Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).
<b>Skin Protection</b>	Handle with gloves. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.
<b>Respiratory Protection</b>	Respiratory protection required only when dusts are generated.

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance</b>	Colourless solid or liquid
<b>Odour</b>	None
<b>Odour Threshold</b>	No data available
<b>pH</b>	No data available
<b>Melting Point and Freezing Point</b>	+34 °C
<b>Initial Boiling Point and Boiling Range</b>	No data available
<b>Flash Point</b>	No data available
<b>Evaporation Rate</b>	No data available
<b>Flammability (solid, gas)</b>	
<b>Upper and Lower Flammability or Explosive Limit</b>	Values of Yoshida correlations for Shock Sensitivity (-0.16) and Explosive Propagation (-0.19) indicate neither is likely. Validated with mechanical testing.
<b>Vapour Pressure</b>	No data available
<b>Vapour Density (air = 1)</b>	No data available
<b>Relative Density (water = 1)</b>	No data available
<b>Solubility in Water</b>	Very low
<b>Solubility in Other Liquids</b>	Soluble in most non-aqueous solvents. Highly soluble in non-polar organics.
<b>Partition Coefficient, n-Octanol / Water (Log Kow)</b>	No data available
<b>Auto-ignition Temperature</b>	No data available
<b>Decomposition Temperature</b>	No data available
<b>Viscosity</b>	No data available

## SECTION 10. STABILITY AND REACTIVITY

<b>Reactivity</b>	The product reacts with light or heat to exothermically release nitrogen gas and produce reactive carbene motifs. Caution should be exercised when encouraging product activation.
<b>Chemical Stability</b>	The product is chemically stable under standard ambient conditions (room temperature)
<b>Possibility of Hazardous Reactions</b>	No data available

**Conditions to Avoid Incompatible Materials** No data available  
 No data available  
**Hazardous Decomposition Products** In the event of a fire, see Section 5.

## SECTION 11. TOXICOLOGICAL INFORMATION

### Likely Routes of Exposure

Inhalation  Skin contact  Eye contact  Ingestion

### Acute Toxicity

LC50

LD50 (oral)

LD50 (dermal)

Notes No data available

**Skin Corrosion / Irritation** Not corrosive to skin. Non-phototoxic.

**Serious Eye Damage / Irritation** Does not induce ocular irritation or changes to opacity or permeability of the cornea. No classification required for eye irritation or serious eye damage.

**STOT (Specific Target Organ Toxicity) - Single Exposure** No data available

**Aspiration Hazard**

No data available

**STOT (Specific Target Organ Toxicity) - Repeated Exposure** No data available

**Respiratory and/or Skin Sensitization**

No data available

### Carcinogenicity

Chemical Name	IARC	ACGIH®	OSHA
2,2-Bis[4-[3-(trifluoromethyl)-3H-diazirin-3-yl]phenyl]hexafluoropropane	Unknown	Unknown	Unknown

**Notes** The chemical, physical, and toxicological properties of this chemical have not been thoroughly investigated.

### Reproductive Toxicity

**Development of Offspring** No data available

**Sexual Function and Fertility** No data available

**Effects on or via Lactation** No data available

**Germ Cell Mutagenicity** Not mutagenic in the *Salmonella typhimurium* reverse mutation assay.

**Interactive Effects** No data available

## SECTION 12. ECOLOGICAL INFORMATION *(section heading must appear; all content is optional)*

**Ecotoxicity** No data available  
**Persistence and Degradability** No data available  
**Bioaccumulative Potential** No data available  
**Mobility in Soil** No data available  
**Other Adverse Effects** No data available

## SECTION 13. DISPOSAL CONSIDERATIONS *(section heading must appear; all content is optional)*

**Disposal Methods** It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable regulations. Disposal should be in accordance with applicable regional, national and local laws and regulations.

## SECTION 14. TRANSPORT INFORMATION *(section heading must appear; all content is optional)*

Regulation	UN No.	Proper Shipping Name	Technical Name (for N.O.S. entry)	Transport Hazard Class(es)	Packing Group

**Special Precautions** Not classified as dangerous in the meaning of transport regulations.  
**Environmental Hazards** No quantitative data available concerning the ecological effects of this product. Discharge into the environment must be avoided.  
**Transport in Bulk According to Annex II of MARPOL 73/78 and the IBC Code** Not classified as dangerous in the meaning of transport regulations.

## SECTION 15. REGULATORY INFORMATION *(section heading must appear; all content is optional)*

**Safety, Health and Environmental Regulations** Not controlled under WHIMS (Canada).  
This product has not been classified according to the hazard criteria of the CPR (USA)

## SECTION 16. OTHER INFORMATION

**Date of Latest Revision** August 25, 2020