



Material Safety Data Sheet

Section 1: Product and Company Information

Product Name	Bis(pentafluorophenyl)zinc
Product Number	Zn1
Company	Innovative Science, Inc.
Street Address	3154 State St.
Street Address	Suite 2300
City, State, Zip	Blacksburg, VA 24060
Technical Phone	540-394-5143
Emergency Phone	540-394-5143
Fax	540-961-6392

Section 2: Ingredient Composition Information

Substance Name	Bis(pentafluorophenyl)zinc
CAS Number	[1799-90-2]
Molecular Formula	C ₁₂ F ₁₀ Zn
SARA 313	NO

Section 3: Hazards Identification

HMIS Rating	NFPA Rating
Health: 0	Health: 0
Flammability: 0	Flammability: 0
Reactivity: 1	Reactivity: 1

Refer to Section 11 for additional information on toxicity.

Section 4: First Aid Measures

Oral Exposure

If ingested orally was out mouth with copious amounts of water if the individual is conscious and immediately consult a physician.

Inhalation Exposure

If inhaled remove the individual to an area with fresh air and consult a physician.

Dermal Exposure

If substance comes in contact with skin wash the affected area with copious amounts of soap and water. If skin irritation or rash develops seek the aid of a physician.

Eye Exposure

In the event of eye contact immediately flush the affected area with copious amounts of water for at least 15 minutes and contact a physician.

Section 5: Fire Fighting Measures

Flash point	N/A
Auto-ignition temperature	N/A
Flammability	N/A

Extinguishing Media

Water spray, carbon dioxide, dry chemical powder, or appropriate foam.

Firefighting

Protective equipment including self-contained breathing apparatus and protective clothing to prevent contact of fumes with eyes and skin as material emits toxic fumes under fire conditions.

Section 6: Accidental Release Measures

Personal Precaution Procedures

Take appropriate actions to avoid inhalation of dust and/or contact with skin and eyes.

Cleanup Procedures

Carefully sweep up any loose material in such a manner as to minimize the raising of dust. Wipe/wash and ventilate spill site after removal is complete.

Section 7: Handling and Storage

Handling

Material should be handled under an appropriate inert atmosphere (oxygen and moisture free) such as nitrogen or argon preferably inside a glove box or glove bag. Appropriate precautions such as protective clothing including rubber gloves, chemical safety goggles, and organic chemical rated dust masks should be used to prevent inhalation and eye or skin contact.

Storage

Material should be stored in a cool environment free of moisture and oxygen such as a nitrogen or argon filled glove box.

Special Requirements

Material should be handled in an air and moisture free environment.

Section 8: Exposure Controls and Protective Equipment

Engineering Controls

Safety shower and eye wash stations. Mechanical exhaust system required.

Personal Protective Equipment

Respiratory: Dust mask rated for solid organic chemicals

Hand: Protective gloves

Eye: Chemical safety goggles

General Hygiene Procedures

User should wash thoroughly after handling material.

Section 9: Physical/Chemical Properties

Appearance	White solid
Molecular weight	399.5 g/mol
Melting point	100-105°C

Section 10: Stability and Reactivity

Stability

Material is stable in the absence of air and moisture. Avoid contacting the material with strong oxidizing agents.

Hazardous Decomposition Products

Depending on the mode of decomposition the following hazardous materials may be liberated: carbon monoxide, carbon dioxide, hydrogen fluoride, zinc oxides, pentafluorobenzene.

Hazardous Polymerization

No hazard reported; however, proceed with caution when combining this material with materials known to readily undergo polymerization.

Section 11: Toxicological Information

Mode of Exposure

Skin contact	May cause irritation
Skin absorption	May be harmful if absorbed through skin
Eye contact	May cause irritation or damage to eyes
Inhalation	May cause irritation or damage to respiratory tract
Ingestion	May be harmful if swallowed

Sign/Symptoms of Exposure

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

Section 12: Ecological Information

No information available.

Section 13: Disposal Considerations

Material can be dissolved in toluene or dichloromethane and decomposed by careful and slow addition of isopropanol to the resultant solution under a blanket of inert gas such as nitrogen or argon. A licensed professional waste disposal service should be contacted for disposal of this material. Observe all federal, state, and local environmental regulations.

Section 14: Transport Information

DOT

Proper shipping name: None
Non-hazardous for transport: Yes

IATA

Non-hazardous for air transport: Yes

Section 15: Regulatory Information

United States Regulatory Information

SARA listed: NO

Canada Regulatory Information

WHMIS classification: This product has been classified in accordance with the hazard criteria of the CPR and the NSDS contains all of the information required by the CPR.

DSL: NO
NDSL: NO

Section 16: Additional Information

Disclaimer and Warranty

This material is for R&D purposes only and is not for drug, household or other uses. The toxicological effects of this chemical have not been fully investigated. In all cases of exposure seek medical attention. Stewart's Technologies, LLC shall not be held liable for any damage resulting from handling or from contact with this product. The above information is believed to be correct but does not purport to be all-inclusive and should only be used as a guide.
