

Issue Date 23-May-2023

Revision Date 26-Jun-2024

Version 4

**1. IDENTIFICATION****Product identifier****Product Name** HPS Activator 4322**Other means of identification****Product Code** MS-4322**UN/ID no.** UN 3234**Synonyms** None**Recommended use of the chemical and restrictions on use****Recommended Use** Initiator.**Uses advised against** None known**Details of the supplier of the safety data sheet****Manufacturer Address**Hernon Manufacturing Inc.  
121 Tech Drive  
Sanford, FL 32771  
800-527-0004**Emergency telephone number****Company Phone Number** 407-322-4000**Emergency Telephone** Chemtel 800-255-3924**2. HAZARDS IDENTIFICATION****Classification****OSHA Regulatory Status**

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Acute toxicity - Oral

Category 4

**Label elements****Emergency Overview****Warning****Hazard statements**

Harmful if swallowed

**Appearance** No Information Available**Physical state** Solid**Odor** None

**Precautionary Statements - Prevention**

Wash face, hands and any exposed skin thoroughly after handling  
Do not eat, drink or smoke when using this product

**Precautionary Statements - Response**

IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell  
Rinse mouth

**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

**Hazards not otherwise classified (HNOC)**

Not Applicable

**Other Information**

Harmful to aquatic life with long lasting effects

**3. COMPOSITION/INFORMATION ON INGREDIENTS****Substance**

Chemical Name	CAS No.	Weight-%	Trade Secret
2,2'-Azodi (Isobutyronitrile)	78-67-1	30 - 60	*
2,2'-Azobis(2,4-Dimethylvaleronitrile)	4419-11-8	30 - 60	*

\*The exact percentage (concentration) of composition has been withheld as a trade secret.

**4. FIRST AID MEASURES****Description of first aid measures**

<b>Eye contact</b>	Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.
<b>Skin contact</b>	Wash with soap and water. Flush skin with water for several minutes. Remove contaminated clothing and shoes. If irritation develops, seek medical attention. Wash clothing before reuse.
<b>Inhalation</b>	Remove to fresh air. If breathing is difficult, give oxygen. If breathing has stopped, give artificial respiration. Get medical attention immediately.
<b>Ingestion</b>	Drink 1 or 2 glasses of water. Induce vomiting, but only if victim is fully conscious. Never give anything by mouth to an unconscious person.

**Most important symptoms and effects, both acute and delayed**

**Symptoms** None known.

**Indication of any immediate medical attention and special treatment needed**

**Note to physicians** Treat symptomatically.

**5. FIRE-FIGHTING MEASURES****Suitable extinguishing media**

Water spray (fog). Dry chemical. Carbon dioxide (CO2).

**Unsuitable extinguishing media** CAUTION: Use of water spray when fighting fire may be inefficient.

**Specific hazards arising from the chemical**

Dusts or fumes may form explosive mixtures in air. Sealed containers may rupture when heated.

**Hazardous combustion products** Trace amounts of toxic fumes may be released on incineration.

**Explosion data**

**Sensitivity to Mechanical Impact** None.

**Sensitivity to Static Discharge** None.

**Protective equipment and precautions for firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

## 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions, protective equipment and emergency procedures**

**Personal precautions** Use personal protective equipment as required. Ensure adequate ventilation, especially in confined areas. Remove all sources of ignition.

**For emergency responders** Use personal protection recommended in Section 8.

**Environmental precautions**

**Environmental precautions** Prevent product from entering drains. See section 12 for additional ecological information.

**Methods and material for containment and cleaning up**

**Methods for containment** Prevent further leakage or spillage if safe to do so.

**Methods for cleaning up** Use only non-sparking tools. Sweep up and shovel into suitable containers for disposal. Avoid creating dust. After cleaning, flush away traces with water.

## 7. HANDLING AND STORAGE

**Precautions for safe handling**

**Advice on safe handling** Avoid contact with skin, eyes or clothing. Avoid creating dust. Avoid breathing vapors or mists. Ensure adequate ventilation, especially in confined areas. Do not smoke. Wash thoroughly after handling.

**Conditions for safe storage, including any incompatibilities**

**Storage Conditions** Keep at a temperature below 10 °C.

**Incompatible materials** Strong oxidizing agents. Reducing agent.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Control parameters**

**Exposure Guidelines** This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

**Appropriate engineering controls**

**Engineering Controls** Showers  
Eyewash stations

Ventilation systems.

#### **Individual protection measures, such as personal protective equipment**

<b>Eye/face protection</b>	Wear safety glasses with side shields (or goggles).
<b>Skin and body protection</b>	Wear protective gloves and protective clothing.
<b>Respiratory protection</b>	If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

**General Hygiene Considerations** Handle in accordance with good industrial hygiene and safety practice.

### **9. PHYSICAL AND CHEMICAL PROPERTIES**

#### **Information on basic physical and chemical properties**

<b>Physical state</b>	Solid	<b>Odor</b>	None
<b>Appearance</b>	No Information Available	<b>Odor threshold</b>	Not Applicable
<b>Color</b>	White		

<b><u>Property</u></b>	<b><u>Values</u></b>	<b><u>Remarks • Method</u></b>
pH	Does not apply	
Melting point / freezing point	No Information Available	
Boiling point / boiling range	No Information Available	
Flash point	No Information Available	
Evaporation rate	No Information Available	
Flammability (solid, gas)	No Information Available	
Flammability Limit in Air		
Upper flammability limit:	No Information Available	
Lower flammability limit:	No Information Available	
Vapor pressure	No Information Available	
Vapor density	No Information Available	
Relative density	No Information Available	
Water solubility	< 10 g/L	
Solubility in other solvents	No Information Available	
Partition coefficient	No Information Available	
Autoignition temperature	No Information Available	
Decomposition temperature	No Information Available	
Kinematic viscosity	No Information Available	
Dynamic viscosity	No Information Available	
Explosive properties	None known	
Oxidizing properties	Not Applicable	

#### **Other Information**

<b>Softening point</b>	No Information Available
<b>Molecular weight</b>	No Information Available
<b>VOC Content (%)</b>	Not Applicable
<b>Density</b>	No Information Available
<b>Bulk density</b>	No Information Available

### **10. STABILITY AND REACTIVITY**

**Reactivity**  
Not Applicable

**Chemical stability**

Stable under recommended storage conditions.

#### **Possibility of Hazardous Reactions**

None under normal processing.

#### **Conditions to avoid**

Incompatible materials.

#### **Incompatible materials**

Strong oxidizing agents. Reducing agent.

#### **Hazardous Decomposition Products**

Hydrogen cyanide. Nitrogen oxides (NOx). Tetramethylsuccinonitrile.

## **11. TOXICOLOGICAL INFORMATION**

### **Information on likely routes of exposure**

#### **Product Information**

<b>Inhalation</b>	No known effect based on information supplied.
<b>Eye contact</b>	No known effect based on information supplied.
<b>Skin contact</b>	No known effect based on information supplied.
<b>Ingestion</b>	No known effect based on information supplied.

<b>Chemical Name</b>	<b>Oral LD50</b>	<b>Dermal LD50</b>	<b>Inhalation LC50</b>
2,2'-Azodi (Isobutyronitrile) 78-67-1	= 100 mg/kg ( Rat )	-	-

### **Information on toxicological effects**

**Symptoms** See Section 11: TOXICOLOGICAL INFORMATION.

### **Delayed and immediate effects as well as chronic effects from short and long-term exposure**

<b>Sensitization</b>	None known.
<b>Germ cell mutagenicity</b>	None known.
<b>Carcinogenicity</b>	.
<b>Reproductive toxicity</b>	None known.
<b>STOT - single exposure</b>	No known effects under normal use conditions.
<b>STOT - repeated exposure</b>	None under normal use conditions.
<b>Aspiration hazard</b>	Not Applicable.

### **Numerical measures of toxicity - Product Information**

The following values are calculated based on chapter 3.1 of the GHS document .

<b>ATEmix (oral)</b>	500.00 mg/kg
<b>ATEmix (inhalation-dust/mist)</b>	1.50 mg/l

## **12. ECOLOGICAL INFORMATION**

### **Ecotoxicity**

Harmful to aquatic life with long lasting effects

**Persistence and degradability**

None known.

**Bioaccumulation**

None known.

**Other adverse effects****13. DISPOSAL CONSIDERATIONS****Waste treatment methods**

<b>Disposal of wastes</b>	Disposal should be in accordance with applicable regional, national and local laws and regulations.
<b>Contaminated packaging</b>	Do not reuse container.

**14. TRANSPORT INFORMATION****DOT**

<b>UN/ID no.</b>	UN 3234
<b>Proper shipping name</b>	Self-reactive solid type C, temperature controlled
<b>Hazard Class</b>	4.1
<b>Packing Group</b>	II
<b>Special Provisions</b>	None

**IATA**

Forbidden

**IMDG**

<b>UN/ID no.</b>	UN 3234
<b>Proper shipping name</b>	Self-reactive solid type C, temperature controlled
<b>Hazard Class</b>	4.1
<b>Packing Group</b>	II
<b>Special Provisions</b>	None

**15. REGULATORY INFORMATION****International Inventories**

<b>TSCA</b>	Complies
<b>DSL/NDSL</b>	Complies
<b>EINECS/ELINCS</b>	Complies
<b>ENCS</b>	Complies
<b>IECSC</b>	Complies
<b>KECL</b>	Complies
<b>PICCS</b>	Complies
<b>AICS</b>	Complies

All ingredients are on the inventory or are exempt from listing.

**Legend:****TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory

**DSL/NDL** - Canadian Domestic Substances List/Non-Domestic Substances List  
**EINECS/ELINCS** - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances  
**ENCS** - Japan Existing and New Chemical Substances  
**IECSC** - China Inventory of Existing Chemical Substances  
**KECL** - Korean Existing and Evaluated Chemical Substances  
**PICCS** - Philippines Inventory of Chemicals and Chemical Substances  
**AICS** - Australian Inventory of Chemical Substances

### US Federal Regulations

#### SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

#### SARA 311/312 Hazard Categories

Acute health hazard	No
Chronic Health Hazard	No
Fire hazard	No
Sudden release of pressure hazard	No
Reactive Hazard	No

#### CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

#### CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

### US State Regulations

#### California Proposition 65

This product does not contain any Proposition 65 chemicals

#### U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
2,2'-Azodi (Isobutyronitrile) 78-67-1	X	X	X

#### U.S. EPA Label Information

EPA Pesticide Registration Number Not Applicable

### 16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION

<u>NFPA</u>	Health hazards 2	Flammability 2	Instability 2	Physical and Chemical Properties Not Applicable
<u>HMIS</u>	Health hazards 2	Flammability 2	Physical hazards 2	Personal protection B

Prepared By SDS coordinator  
 Issue Date 23-May-2023  
 Revision Date 26-Jun-2024

Revision Note

Not Applicable

#### Disclaimer

The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination

with any other materials or in any process, unless specified in the text.

**End of Safety Data Sheet**