

**1. PRODUCT AND COMPANY IDENTIFICATION**

<b>Product Name:</b> EF® Activator 59	<b>Product Type:</b> Activator
<b>Company :</b> Hernon Manufacturing, Inc. 121 Tech Drive Sanford, FL 32771	<b>Contact Information:</b> Telephone: 407-322-4000 Emergency Telephone: 800-255-3924 Web Site: www.hernon.com

**2. HAZARDS IDENTIFICATION**

**EMERGENCY OVERVIEW**

Physical state: Liquid  
Color: Amber-light yellow  
Odor: Aliphatic

**HMIS:**  
HEALTH: 2  
FLAMMABILITY: 3  
PHYSICAL HAZARD: 1  
Personal Protection: See Section 8

**WARNING:** FLAMMABLE LIQUID AND VAPOR  
CAUSES EYE AND SKIN IRRITATION.  
MAY CAUSE ALLERGIC SKIN REACTION.  
MAY CAUSE RESPIRATORY TRACT IRRITATION.  
MAY BE HARMFUL IF SWALLOWED.

**Primary Routes of Entry:** Skin, Inhalation, Eyes, Ingestion

**Signs and Symptoms of Exposure:**

**Inhalation:** May cause respiratory tract irritation. Headache, dizziness, nausea, and loss of coordination are indications of excessive exposure to vapors or spray mists.

**Skin contact:** Irritating to skin. Solvent action can dry and defat the skin, causing the skin to crack, leading to dermatitis.

**Eye contact:** Vapors may irritate eyes. Contact with eyes will cause irritation.

**Ingestion:** Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. Aspirated material can enter the lungs and result in pneumonitis.

**Existing Conditions Aggravated by Exposure:** Eye, skin, and respiratory disorders.

**3. COMPOSITION / INFORMATION ON INGREDIENTS**

<u>Ingredients</u>	<u>%</u>	<u>ACGIH TLV</u>	<u>OSHA PEL</u>	<u>OTHER</u>
n-Heptane	50-60	400 ppm TWA 500 ppm STEL	2000 mg/m³ TWA 500 ppm TWA	None
Aldehyde-amine condensation	30-40	None	None	None
Isopropyl Alcohol	10-20	200 ppm TWA 400 ppm STEL	400 ppm TWA 980 mg/m³ TWA	None

<b>4. FIRST AID MEASURES</b>	
<b>Ingestion:</b>	If ingested, induce vomiting. Keep individual calm. Obtain medical attention.
<b>Inhalation:</b>	Remove to fresh air. If symptoms develop and persist, get medical attention.
<b>Skin Contact:</b>	Wash with soap and water.
<b>Eye Contact:</b>	Flush with copious amounts of water, preferably, lukewarm water for at least 15 minutes, holding eyelids open all the time. Get medical attention.
<b>5. FIRE FIGHTING MEASURES</b>	
<b>Flash Point (TCC):</b>	-4°C (28°F)
<b>Recommended Extinguishing Agents:</b>	Carbon dioxide, foam, dry chemical
<b>Special Firefighting Procedures:</b>	Water should be used to cool closed containers to prevent pressure build-up and possible autoignition or explosion when exposed to extreme heat.
<b>Hazardous Combustion Products:</b>	Oxides of carbon. Oxides of nitrogen.
<b>Unusual Fire or Explosion Hazards:</b>	Vapors may accumulate in low or confined areas, travel considerable distance to source of ignition, and flash back.
<b>Flammable/Explosive Limits – lower %:</b>	Not available
<b>Flammable/Explosive Limits – upper %:</b>	Not available
<b>6. ACCIDENTAL RELEASE MEASURES</b>	
<b>Personal Precautions:</b>	Wear proper protective equipment
<b>Measures for Environmental Protection:</b>	Do not allow entry into drains or surface waters
<b>Clean-up Measures:</b>	Ensure adequate ventilation. Soak up with inert absorbent. Keep in suitable and closed containers for disposal.
<b>7. HANDLING AND STORAGE</b>	
<b>Handling:</b>	Avoid contact with eyes, skin and clothing. Avoid breathing vapor and mist. Wash thoroughly after handling. During use and until all vapors are gone: Keep area ventilated - do not smoke; extinguish all flames, pilot lights, and heaters; turn off stoves, electrical tools and appliances, and any other sources of ignition.
<b>Storage:</b>	Store away from heat, sparks, flames, or other sources of ignition. Store between 46° and 82°F unless otherwise labeled to preserve shelf life.
<b>8. EXPOSURE CONTROLS, PERSONAL PROTECTION</b>	
<b>Eye/Face Protection:</b>	Safety glasses or goggles with side shields
<b>Skin Protection:</b>	Use rubber or plastic gloves, and protective clothing as necessary
<b>Respiratory Protection:</b>	Use NIOSH approved respirator if there is a potential to exceed exposure limits
<b>Engineering Controls:</b>	Forced ventilation may be required if concentrations exceed exposure limits

**9. PHYSICAL AND CHEMICAL PROPERTIES**

<b>Physical State:</b>	Liquid
<b>Color:</b>	Amber-light yellow
<b>Odor:</b>	Aliphatic
<b>Vapor Pressure:</b>	35 mm Hg at 68°F
<b>Vapor Density:</b>	Heavier than air
<b>Solubility in Water:</b>	Immiscible
<b>Specific Gravity:</b>	0.78
<b>Boiling Point:</b>	Approximately 176°F
<b>Volatile Organic Compound Content</b>	83.8%; 654 grams/liter
<b>Evaporation Rate (Ether = 1)</b>	Not available
<b>pH:</b>	Does not apply

**10. STABILITY AND REACTIVITY**

<b>Stability:</b>	Stable
<b>Hazardous Polymerization:</b>	Will not occur
<b>Hazardous Decomposition Products:</b>	No data available
<b>Incompatibility:</b>	Acids, oxidizing agents.

**11. TOXICOLOGICAL INFORMATION**

<b>Ingredients:</b>	Literature Referenced Target Organ and Other Health Effects	Carcinogen Status		
		NTP	IARC	OSHA
<b>n-Heptane</b>	CNS IRR	NO	NO	NO
<b>Aldehyde-amine condensation</b>	No data	NO	NO	NO
<b>Isopropyl Alcohol</b>	ALG BLO CNS IRR KID LIV BRA SPL	NO	NO	NO

**Abbreviations:**

<b>ALG</b> Allergen	<b>BLO</b> Blood	<b>BRA</b> Brain	<b>CNS</b> Central Nervous System
<b>IRR</b> Irritant	<b>KID</b> Kidney	<b>LIV</b> Liver	<b>SPL</b> Spleen

**12. ECOLOGICAL INFORMATION**

<b>Ecological Information:</b>	Not available
--------------------------------	---------------

**13. DISPOSAL CONSIDERATIONS**

<b>Recommended methods of disposal:</b>	Dispose of according to Federal, State and Local regulations.
<b>EPA Hazardous Waste Number:</b>	D001: Ignitable.

**14. TRANSPORTATION INFORMATION**

**U.S. Dept. of Transportation Ground (49 CFR):**

**Proper Shipping Name** Flammable liquid, n.o.s. ( Heptanes , Isopropanol )  
**Hazard Class or Division:** 3  
**Identification Number** UN 1993  
**Packing group:** II  
**Exceptions:** Consumer Commodity ORM-D (Not more than 1 Liter)

**International Air Transportation (ICAO/IATA):**

**Proper Shipping Name:** Flammable liquid, n.o.s. ( Heptanes , Isopropanol )  
**Hazard Class or Division:** 3  
**Identification Number** UN 1993  
**Packing group:** II  
**Exceptions:** May Qualify as Consumer Commodity ID8000 (Not more than 500 ml)

**Water Transportation (IMO/IMDG):**

**Proper Shipping Name:** Flammable liquid, n.o.s. ( Heptanes , Isopropanol )  
**Hazard Class or Division:** 3  
**Identification Number** UN 1993  
**Packing group:** II  
**Marine pollutant:** None

**15. REGULATORY INFORMATION**

**United States Regulatory Information**

**TSCA 8 (b) Inventory Status:** All components are listed or are exempt from listing on the Toxic Substances Control Act Inventory  
**CERCLA/SARA 313:** This product contains the following toxic chemicals subject to the reporting requirements of section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 (40 CFR 372): None

**16. OTHER INFORMATION**

**Prepared By:** Jerry Litteral  
**Title:** Director - Quality & Development

**DISCLAIMER:** Some of the information presented is from sources other than direct test data on the product itself. The information in this MSDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness. The conditions or methods of handling, storage, use and disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. This MSDS was prepared and is to be used only for this product. If the product is used as a component in another product, this MSDS information may not be applicable.