

Issue Date 20-Nov-2015

Revision Date 04-Mar-2016

Version 1

1. IDENTIFICATION

Product identifier

Product Name EF Activator 59

Other means of identification

Product Code MS-059
UN/ID no. UN 1993
Synonyms None

Recommended use of the chemical and restrictions on use

Recommended Use Activator.
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

Acute toxicity - Oral	Category 4
Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2
Specific target organ toxicity (single exposure)	Category 3
Aspiration toxicity	Category 1
Flammable liquids	Category 2

Label elements

Emergency Overview

Danger

Hazard statements

Harmful if swallowed
May be fatal if swallowed and enters airways
Causes skin irritation
Causes serious eye irritation
Very toxic to aquatic life with long lasting effects
May cause respiratory irritation. May cause drowsiness or dizziness
Highly flammable liquid and vapor

**Appearance** No information available**Physical state** liquid**Odor** Aliphatic**Precautionary Statements - Prevention**

Obtain special instructions before use
 Do not handle until all safety precautions have been read and understood
 Wear protective gloves/protective clothing/eye protection/face protection
 Wash face, hands and any exposed skin thoroughly after handling
 Avoid breathing dust/fume/gas/mist/vapors/spray
 Use only outdoors or in a well-ventilated area
 Keep away from heat/sparks/open flames/hot surfaces. - No smoking
 Keep container tightly closed
 Ground/bond container and receiving equipment
 Use explosion-proof electrical/ ventilating / lighting/ .? / equipment
 Use only non-sparking tools
 Take precautionary measures against static discharge
 Keep cool

Precautionary Statements - Response

IF exposed or concerned: Get medical advice/attention
 Specific treatment (see .? on this label)
 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
 If eye irritation persists: Get medical advice/attention
 If skin irritation occurs: Get medical advice/attention
 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower
 Wash contaminated clothing before reuse
 IF INHALED: Remove person to fresh air and keep comfortable for breathing
 IF SWALLOWED: Immediately call a POISON CENTER or doctor
 Do NOT induce vomiting
 In case of fire: Use CO₂, dry chemical, or foam to extinguish

Precautionary Statements - Storage

Store locked up
 Store in a well-ventilated place. Keep container tightly closed

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Not applicable

Other Information

Not applicable

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

Chemical Name	CAS No.	Weight-%	Trade Secret
Heptane	142-82-5	50-60	*
Aldehyde-amine condensate	34562-31-7	30-40	*
Isopropyl alcohol	67-63-0	10-20	*

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

4. FIRST AID MEASURES

Description of first aid measures

Eye contact	Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.
Skin contact	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.
Inhalation	Remove to fresh air. If breathing is difficult, give oxygen. If breathing has stopped, give artificial respiration. Get medical attention immediately.
Ingestion	Induce vomiting, but only if victim is fully conscious. Call a POISON CENTER or doctor/physician if you feel unwell.

Most important symptoms and effects, both acute and delayed

Symptoms No information available.

Indication of any immediate medical attention and special treatment needed

Note to physicians Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Use CO2, dry chemical, or foam.

Unsuitable extinguishing media No information available.

Specific hazards arising from the chemical

Vapors may accumulate in confined areas (basement, tanks, hopper/tank cars, etc.). Vapors may travel to source of ignition and flash back.

Hazardous combustion products Carbon oxides. Nitrogen oxides (NOx).

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.

For emergency responders Use personal protection recommended in Section 8.

Environmental precautions

Environmental precautions Do not allow into any sewer, on the ground or into any body of water. 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 Soak up with inert absorbent material. Store in a closed container until ready for disposal.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling Avoid contact with skin, eyes or clothing. Avoid breathing vapors or mists. Wash thoroughly after handling. Ensure adequate ventilation, especially in confined areas. Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity).

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep at temperatures between 7 and 29 °C. Keep container tightly closed in a dry and well-ventilated place.

Incompatible materials Oxidizing agents. Acids.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Heptane 142-82-5	STEL: 500 ppm TWA: 400 ppm	TWA: 500 ppm TWA: 2000 mg/m ³ (vacated) TWA: 400 ppm (vacated) TWA: 1600 mg/m ³ (vacated) STEL: 500 ppm (vacated) STEL: 2000 mg/m ³	IDLH: 750 ppm Ceiling: 440 ppm 15 min Ceiling: 1800 mg/m ³ 15 min TWA: 85 ppm TWA: 350 mg/m ³
Isopropyl alcohol 67-63-0	STEL: 400 ppm TWA: 200 ppm	TWA: 400 ppm TWA: 980 mg/m ³ (vacated) TWA: 400 ppm (vacated) TWA: 980 mg/m ³ (vacated) STEL: 500 ppm (vacated) STEL: 1225 mg/m ³	IDLH: 2000 ppm TWA: 400 ppm TWA: 980 mg/m ³ STEL: 500 ppm STEL: 1225 mg/m ³

Appropriate engineering controls

Engineering Controls Ensure adequate ventilation, especially in confined areas.

Individual protection measures, such as personal protective equipment

Eye/face protection Wear safety glasses with side shields (or goggles).

Skin and body protection Wear protective gloves and protective clothing. Use rubber or plastic gloves.

Respiratory protection 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

Physical state	Liquid	Odor	Aliphatic
Appearance	No information available	Odor threshold	No information available
Color	Light yellow		

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	Does not apply	
Melting point / freezing point	No information available	
Boiling point / boiling range	>= 80 °C / 176 °F	
Flash point	-4 °C / 28 °F	
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	35 mmHg at 68°F	
Vapor density	Heavier than air	
Relative density	0.78	
Water solubility	Immiscible in water	
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	No information available	
Oxidizing properties	No information available	

Other Information

Softening point	No information available
Molecular weight	No information available
VOC Content (%)	83.8%; 654 g/L
Density	No information available
Bulk density	No information available

10. STABILITY AND REACTIVITY

Reactivity

No data available

Chemical stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

None under normal processing.

Conditions to avoid

Heat, flames and sparks. Extremes of temperature and direct sunlight.

Incompatible materials

Oxidizing agents. Acids.

Hazardous Decomposition Products

Carbon oxides. Nitrogen oxides (NOx). Irritating organic vapors.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Inhalation	Harmful by inhalation. May cause irritation of respiratory tract.
Eye contact	Irritating to eyes.
Skin contact	May cause skin irritation and/or dermatitis.
Ingestion	May be harmful if swallowed.

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Heptane 142-82-5	-	= 3000 mg/kg (Rabbit)	= 103 g/m ³ (Rat) 4 h
Isopropyl alcohol 67-63-0	= 1870 mg/kg (Rat)	= 4059 mg/kg (Rabbit)	= 72600 mg/m ³ (Rat) 4 h

Information on toxicological effects

Symptoms No information available.

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

Sensitization No information available.

Germ cell mutagenicity No information available.

Carcinogenicity No information available.

Chemical Name	ACGIH	IARC	NTP	OSHA
Isopropyl alcohol 67-63-0	-	Group 3	-	X

Reproductive toxicity No information available.

STOT - single exposure No information available.

STOT - repeated exposure No information available.

Aspiration hazard No information available.

Numerical measures of toxicity - Product Information

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

ATEmix (oral) 8,181.00 mg/kg

ATEmix (dermal) 3,191.00 mg/kg

ATEmix (inhalation-dust/mist) 22.70 mg/l

12. ECOLOGICAL INFORMATION**Ecotoxicity**

Very toxic to aquatic life with long lasting effects

Chemical Name	Algae/aquatic plants	Fish	Crustacea
Heptane 142-82-5	-	375.0: 96 h Cichlid fish mg/L LC50	10: 24 h Daphnia magna mg/L EC50
Isopropyl alcohol 67-63-0	1000: 96 h Desmodesmus subspicatus mg/L EC50 1000: 72 h Desmodesmus subspicatus mg/L EC50	11130: 96 h Pimephales promelas mg/L LC50 static 9640: 96 h Pimephales promelas mg/L LC50 flow-through 1400000: 96 h Lepomis macrochirus µg/L LC50	13299: 48 h Daphnia magna mg/L EC50

Persistence and degradability

No information available.

Bioaccumulation

No information available.

Chemical Name	Partition coefficient
Heptane	4.66

142-82-5	
Isopropyl alcohol 67-63-0	0.05

Other adverse effects No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal of wastes Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated packaging Do not reuse container.

US EPA Waste Number D001

Chemical Name	California Hazardous Waste Status
Heptane 142-82-5	Toxic Ignitable
Isopropyl alcohol 67-63-0	Toxic Ignitable

14. TRANSPORT INFORMATION

DOT

UN/ID no. UN 1993
Proper shipping name Flammable liquid, n.o.s. (Heptanes , Isopropanol)
Hazard Class 3
Packing Group II
Special Provisions Consumer Commodity ORM-D (Not more than 1 Liter)

IATA

UN/ID no. UN 1993
Proper shipping name Flammable Liquid, n.o.s. (heptanes, isopropanol)
Hazard Class 3
Packing Group II
Special Provisions May Qualify as Consumer Commodity ID8000 (Not more than 500 ml)

IMDG

UN/ID no. UN 1993
Proper shipping name Flammable Liquid, n.o.s. (heptanes, isopropanol)
Hazard Class 3
Packing Group II

RID

UN/ID no. UN 1993
Proper shipping name Flammable Liquid, n.o.s. (heptanes, isopropanol)
Hazard Class 3
Packing Group II
Special Provisions Consumer Commodity ORM-D (Not more than 1 Liter)

ADR

UN/ID no. UN 1993
Proper shipping name Flammable liquid, n.o.s. (Heptanes , Isopropanol)
Hazard Class 3
Packing Group II
Special Provisions Consumer Commodity ORM-D (Not more than 1 Liter)

15. REGULATORY INFORMATION

International Inventories

TSCA	Complies
DSL/NDSL	Complies
EINECS/ELINCS	Complies
ENCS	Complies
IECSC	Complies
KECL	Complies
PICCS	Complies
AICS	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/NDSL - 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 contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Chemical Name	SARA 313 - Threshold Values %
Isopropyl alcohol - 67-63-0	1.0

SARA 311/312 Hazard Categories

Acute health hazard	Yes
Chronic Health Hazard	No
Fire hazard	Yes
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
Heptane 142-82-5	X	X	X
Isopropyl alcohol 67-63-0	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 0	Flammability 0	Instability 0	Physical and Chemical Properties -
<u>HMIS</u>	Health hazards 2	Flammability 3	Physical hazards 1	Personal protection X

Prepared By SDS coordinator

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Revision Note

No information available

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