SAFETY DATA SHEET

Revision date 13-Oct-2023



Revision Number 3

1. Identification				
Product identifier				
Product Name	TP9815EV, POE-BASED EV A/C DYE MINI-EZ CARTRIDGES			
Other means of identification				
Product Code(s)	TP9815EV			
Synonyms	TP9815EV-P3, TP9815EV-P12, TP9815EV-55G			
Recommended use of the chemic	al and restrictions on use			
Recommended use	Refrigerant leak detection			
Restrictions on use	No information available			
Details of the supplier of the safety data sheet				
<u>Manufacturer</u> Spectronics Corporation 265 Spagnoli Road Melville, NY 11747 USA				
E-mail address sds@spectroline.com				
Emergency telephone number				
Emergency Telephone	US & Canada: 800-424-9300 (24 HOURS CHEMTREC) Outside US & Canada: +1 703-741-5970 (24 HOURS CHEMTREC)			
2. Hazard(s) identification	۱			
<u>Classification</u>				

Skin sensitization Category 1 Germ cell mutagenicity Category 2

Hazards not otherwise classified (HNOC) Not applicable

Label elements

Warning

Hazard statements_____ May cause an allergic skin reaction Suspected of causing genetic defects

TP9815EV - TP9815EV, POE-BASED EV A/C DYE MINI-EZ CARTRIDGES



Physical state Liquid

Odor Slight

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 Avoid breathing dust/fume/gas/mist/vapors/spray Contaminated work clothing must not be allowed out of the workplace

Precautionary Statements - Response

IF exposed or concerned: Get medical advice/attention IF ON SKIN: Wash with plenty of water and soap If skin irritation or rash occurs: Get medical advice/attention Wash contaminated clothing before reuse

Precautionary Statements - Storage

Store locked up

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Other information

May be harmful in contact with skin. Harmful to aquatic life with long lasting effects. Harmful to aquatic life.

3. Composition/information on ingredients

Substance

Not applicable.

<u>Mixture</u>

Chemical name	CAS No	Weight-%	Trade secret
POE Oil for EV Applications	Trade secret	90 - 100%	*
Oil Additive	Trade secret	0 - 10%	*

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

4. First-aid measures

Description of first aid measures

General advice	Show this safety data sheet to the doctor in attendance.	
Inhalation	Remove to fresh air.	
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. May cause an allergic skin reaction. In the case of skin irritation or allergic reactions see a physician.	

Ingestion	Rinse mouth.			
Most important symptoms and effects, both acute and delayed				
Symptoms	Itching. Rashes. Hives.			
Indication of any immediate medica	I attention and special treatment needed			
Note to physicians	May cause sensitization in susceptible persons. Treat symptomatically.			
5. Fire-fighting measures				
Suitable Extinguishing Media	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.			
Large Fire	CAUTION: Use of water spray when fighting fire may be inefficient.			
Unsuitable extinguishing media	Do not scatter spilled material with high pressure water streams.			
Specific hazards arising from the chemical	Product is or contains a sensitizer. May cause sensitization by skin contact.			
Explosion data Sensitivity to mechanical impact	t None.			

Sensitivity to static discharge None.

Special protective equipment and	Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear.
precautions for fire-fighters	Use personal protection equipment.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal precautions Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Use personal protective equipment as required. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.

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	Pick up and transfer to properly labeled containers.

7. Handling and storage

Precautions for safe handling

Advice on safe handling

Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. In case of insufficient ventilation, wear suitable respiratory equipment. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash before reuse. Remove contaminated clothing and shoes.

Conditions for safe storage, including any incompatibilities

Storage Conditions	Keep containers tightly closed in a dry, cool and well-ventilated place. Store locked up.	
8. Exposure controls/pers	onal protection	
Control parameters		
Exposure Limits	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, su	ch as personal protective equipment	
Eye/face protection	Wear safety glasses with side shields (or goggles).	
Hand protection	Wear suitable gloves.	
Skin and body protection	Wear suitable protective clothing.	
Respiratory protection	No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.	
General hygiene considerations	Do not eat, drink or smoke when using this product. Wash hands before breaks and immediately after handling the product.	

9. Physical and chemical properties

Information on basic physical and o	chemical properties	
Physical state	Liquid	
Appearance	Liquid	
Color	amber	
Odor	Slight	
Odor threshold	No information available	
Property	Values	Remarks • Method
рН	No data available	None known
Melting point / freezing point	No data available	None known
Initial boiling point and boiling rang		None known
Flash point	210 °C / 410 °F	None known
Evaporation rate	No data available	None known
Flammability	No data available	None known
Flammability Limit in Air		None known
Upper flammability or explosive	No data available	
limits		
Lower flammability or explosive	No data available	
limits		
Vapor pressure	No data available	None known
Relative vapor density	No data available	None known
Relative density	0.96	None known
Water solubility	Insoluble in water	None known
Solubility(ies)	No data available	None known
Partition coefficient	No data available	None known

Autoignition temperature	No data available	None known
Decomposition temperature Kinematic viscosity	86 mm²/s	None known @ 40 °C
Dynamic viscosity	No data available	None known
Other information		
Explosive properties	No information available	
Oxidizing properties	No information available	
Softening point	No information available	
Molecular weight	No information available	
VOC content	No information available	
Liquid Density	No information available	
Bulk density	No information available	
10. Stability and reactivit	У	

Reactivity	No information available.
Chemical stability	Stable under normal conditions.
Possibility of hazardous reactions	None under normal processing.
Conditions to avoid	None known based on information supplied.
Incompatible materials	None known based on information supplied.

Hazardous decomposition products None known based on information supplied.

11. Toxicological information			
Information on likely routes	s of exposure		
Product Information			
Inhalation	Specific test data for the substance or mixture is not available.		
Eye contact	Specific test data for the substance or mixture is not available.		
Skin contact	May cause sensitization by skin contact. Specific test data for the substance or mixture is not available. Repeated or prolonged skin contact may cause allergic reactions with susceptible persons. (based on components). May be harmful in contact with skin.		
Ingestion	Specific test data for the substance or mixture is not available.		
Symptoms related to the physical, chemical and toxicological characteristics			
Symptoms	Itching. Rashes. Hives.		

Acute toxicity

Numerical measures of toxicity

The following values are calculated based on chapter 3.1 of the GHS documentATEmix (oral)12,000.00mg/kgATEmix (dermal)4,800.00mg/kgATEmix (inhalation-gas)99,999.00ppmATEmix (inhalation-dust/mist)99,999.00mg/lATEmix (inhalation-vapor)99,999.00mg/l

Component Information Chemical name	Oral LD50	Dermal LD50	Inhalation LC50	
Oil Additive	> 10 g/kg (Rat)	> 4000 mg/kg (Rat)	> 240 mg/m ³ (Rat) 4 h	
Delayed and immediate effects a	s well as chronic effects from	n short and long-term exposur	e	
Skin corrosion/irritation	No information available.			
Serious eye damage/eye irritatio	n No information available.	No information available.		
Respiratory or skin sensitization	May cause an allergic skir	May cause an allergic skin reaction.		
Germ cell mutagenicity		Contains a known or suspected mutagen. Classification based on data available for ingredients. Suspected of causing genetic defects.		
Carcinogenicity	No information available.	No information available.		
Reproductive toxicity	No information available.	No information available.		
STOT - single exposure	No information available.	No information available.		
STOT - repeated exposure	No information available.			
Aspiration hazard	No information available.			
Other adverse effects	No information available.	No information available.		
nteractive effects	No information available.			

12. Ecological information

Ecotoxicity

Harmful to aquatic life with long lasting effects.

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Oil Additive	EC50: =3.5mg/L (96h, Pseudokirchneriella subcapitata)	LC50: =5mg/L (96h, Oncorhynchus mykiss)	-	EC50: =4.8mg/L (48h, Daphnia magna)

Persistence and degradability No information available.

Bioaccumulation

Component Information

Chemical name	Partition coefficient		
Oil Additive	4.4		

13. Disposal considerations

Waste from residues/unused products	Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.
Contaminated packaging	Do not reuse empty containers.

14. Transport information

DOT	Not regulated		
ΙΑΤΑ	Not regulated		
IMDG	Not regulated		
<u>RID</u>	Not regulated		
ADR	Not regulated		

15. Regulatory information

International Inventories	
TSCA	Complies.
DSL/NDSL	Complies.
EINECS/ELINCS	Complies.
ENCS	Complies.
IECSC	Does not comply.
KECL	Complies.
PICCS	Does not comply.
AIIC	Complies.
NZIOC	Complies.

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

AIIC - Australian Inventory of Industrial Chemicals

NZIOC - New Zealand Inventory of Chemicals

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

Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications.

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

This product does not contain any substances regulated under applicable state right-to-know regulations

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

16. Other information						
NFPA HMIS Chronic Hazard St	Health hazards 2 Health hazards 2 * ar Legend *= Chronic	Flammability 1 Flammability 1 Health Hazard	Instability 0 Physical hazards 0	Special hazards - Personal protection X		
	Key or legend to abbreviations and acronyms used in the safety data sheet Legend Section 8: Exposure controls/personal protection					
TWA	TWA (time-weighted average)	STEL		m Exposure Limit)		
Ceiling	Maximum limit value	*	Skin designation			
Agency for Toxic U.S. Environmen European Food S EPA (Environmen Acute Exposure U.S. Environmen Food Research & Hazardous Subs International Unit National Institute Australia National NIOSH (National National Library National Library National Toxicolo New Zealand's C Organization for	tance Database form Chemical Information Databa of Technology and Evaluation (N al Industrial Chemicals Notification I Institute for Occupational Safety of Medicine's ChemID Plus (NLM of Medicine's PubMed database (pgy Program (NTP) Chemical Classification and Inform Economic Co-operation and Deve Economic Co-operation and Deve	ry (ATSDR) Database secticide, Fungicide, and Ru action Volume Chemicals ase (IUCLID) IITE) n and Assessment Scheme and Health) CIP) (NLM PUBMED) nation Database (CCID) elopment Environment, Hea elopment High Production V	odenticide Act e (NICNAS) alth, and Safety Publicatio Volume Chemicals Progra			

Revision date Revision Note <u>Disclaimer</u> 13-Oct-2023 No information available.

The information provided in this 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