

1. Chemical Product and Company Identification

Product Name: Ultrinium™ 212 Life Extension Fluid

Other names: None

Intended Use: Additive for power cable

HMIS Codes Health: 2 Flammability: 2 Physical Hazard: 1

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2. Composition Information on Ingredients

Chemical Family: Organic

Ingredient Name	CAS No	Concentration
2-ethyl-1-hexanol	104-76-7	50% _w
propylene carbonate	108-32-7	30% _w
TINUVIN® 123	129757-67-1	2% _w
TINUVIN® 1130	104810-48-2	2% _w
geranylacetone	3796-70-1	10% _w
ferrocene	102-54-5	3% _w
IRGASTAB® CABLE KV10	110553-27-0	3% _w

3. Hazardous Identification

- May cause moderate irritation to skin. Prompt and thorough washing with soap and water will reduce or eliminate potential dermal effects.
- Irritating to respiratory tract. Inhalation may irritate the respiratory tract. Prolonged inhalation may cause drowsiness.
- Direct contact with eyes may cause moderate irritation.

4. First Aid Measures

Inhalation: Move exposed individual to fresh air. Administer Oxygen, if needed. Call physician.

Skin Contact: Flush with water, and then wash with soap and water.

Eye Contact: In case of contact, immediately flush eyes with flowing water for at least 15 minutes.

Ingestion: Get medical attention.

5. Fire Fighting Measures

Flash Point, TCC: >82°C (180°F)

Auto ignition: not determined

Do NOT use water jet; use dry chemicals

Suitable fire-extinguishing media: [OK] water fog, [OK] CO₂, [OK] foam, [OK] dry chemicals

Note: Avoid eye and skin contact. Do not breathe fumes or inhale vapors. Irritating fumes and organic acid vapors may be formed when material is exposed to elevated temperature or open fires.

Keep containers cool.

6. Accidental Release Measures

Avoid all sources of ignition (e.g. naked lights, unprotected light bulbs, electric hand tools).

Ventilate the area and avoid breathing vapors.

Recommended disposal: In a well ventilated area with adequate personal protection, hydrolyze material by mixing with cold water. Resulting waste is a viscous liquid containing methanol. Follow all chemical pollution control regulations for land fill.

Wear protective clothing when dealing with spillage or fire.

For confined areas use self contained breathing apparatus.

Dispose of wastes and empty containers in accordance with regulations made under the control of pollution acts and environmental protection acts.

Using adequate eye protection, collect spillage, where practicable, using absorbent material, and transfer to a suitable container for disposal.

Keep away from drains, surface and ground water, and soil.

Do not allow spills to enter drains or watercourses.

Refer to "Exposure controls--Personal protection" and "Disposal Considerations".

7. Handling and Storage

Handling:	<p>Keep away from heat, sparks, and flame. Keep container closed. The product may charge electrostatically. Operators should wear clothing which does not generate static (at least 60% natural fiber) and antistatic foot wear. Do not breathe (vapor, mist, gas). Use only with ventilation. Do not get in eyes, or skin, or on clothing. Avoid prolonged or repeated contact with skin. Wash thoroughly after handling. Protection as shown in "Exposure controls/ Personal protection".</p>
Storage:	<p>Store in sealed containers. Avoid prolonged or repeated contact with skin and inhalation. Keep away from heat, sparks, and flame. Store in a well-ventilated, dry place away from sources of heat and direct sunshine.</p>

8. Exposure Controls/Personal Protection

Engineering Measures: Prevent vapor build up by providing adequate ventilation during and after use.

An eye wash facility should be readily available.

Exposure Limit:

Ingredient	ACGH TLV (TWA)
ferrocene (CAS 102-54-5)	10 mg/m ³

Note: (TWA) = time weighted average

Personal protection:

Respiratory protection:	Wear NIOSH standard-approved appropriate equipment
Hand protection:	Wear impervious disposable gloves made from plastic or latex.
Eye protection:	Wear safety glasses with side shields or chemical splash goggles and face shield when eye and face contact is possible due to splashing or spraying of material. Do NOT wear contact lenses.

9. Physical and Chemical Properties

Physical State:	Liquid
Color:	Reddish orange
Odor:	Mild organic
pH:	Not applicable
Boiling point:	> 130°C
Flash point:	> 82°C (180°F)
Ignition temperature:	Not determined
Lower explosive limit:	Not determined
Vapor pressure:	<0.5 mm
Specific density:	1.1
Vapor density:	>1
Solubility in water:	Insoluble
Percentage volatile:	NA

10. Stability and Reactivity

Stability:	Stable under recommended storage and handling conditions (see "Storage and Handling")
Conditions to avoid:	Avoid contact with heat, sparks, or open flame. Avoid contact with oxidizing agents.

11. Toxicological Information

There are no data available on the product itself.

Toxicological information of ingredients:

Acute toxicity:

Ferrocene – oral LD₅₀ (mouse) = 832 mg/kg, oral LD₅₀ (rat) = 1320 mg/kg

Local effects:

Eye irritant: ferrocene

Chronically long term effect: No data

12. Ecological Information

Prevent spills from entering sewers, watercourses, or low areas to avoid pollution.

13. Disposal Considerations

The product should not be allowed to enter drains and watercourses.

All notification, clean-up, and disposal should be carried out in accordance with federal, state, and local regulations.

Preferred method of waste disposal is incineration, or biological treatment in federal/state approved facility.

Wastes and empty containers should be disposed of in accordance with regulations made under the control of pollution acts and the environmental protection acts.

14. Transport Information

DOT Shipping Name: Chemicals n.o.i (non-hazardous)
DOT Hazard Class: None
DOT Label: None
DOT ID No.: None
Storage: See section on Storage and Handling
Packaging: Non-bulk (Non-regulated)
IATA: Non-regulated for air transport

15. Regulatory Information

Contents of the MSDS comply with the OSHA Hazard Communication Standard 29 CFR 1910.1200.

TSCA Status: All chemical substances in this material are included on, or exempted from, listing on the TSCA Inventory of Chemical Substances.

EPA SARA Title III Chemical Listings

Section 302 Extremely Hazardous Substances: None

Section 304 CERCLA Hazardous Substances: None

Section 312 Hazard Class:

Acute: Yes
Chronic: Yes
Fire: Yes
Pressure: No
Reactive: No

Section 313 Toxic Chemicals:

None present, or none present in regulated quantities.

16. Supplemental State Compliance Information

CAS No.	<u>Component Name</u>	<u>State Compliance Information</u>
102-54-5	ferrocene	Listed in State Right to Know for CA, MA, NJ, PA, MN, FL Canada DSL/NDSL Listed Clean Air Act: None Clean Water Act: None WGK Not Listed TSCA Listed OSHA Not highly hazardous Carcinogenicity: Not listed by ACGIH, IARC, NIOSH, NTP, or OSHA.
110553-27-0	IRGASTAB® CABLE KV10	Listed in State Right to Know for CA, MA, NJ, PA, MN, FL
108-32-7	propylene carbonate	TSCA listed DSL listed

The information contained in this document has been gathered from reference materials and/or test data and is to our best knowledge and belief accurate and reliable. Such information is offered solely for your consideration, identification, and verification. It is not suggested or guaranteed that the hazard precautions or procedures described are the only ones which exist. There are no warranties expressed or implied with respect to the use of such information and we assume no responsibility therefore.

It is advised that users carry out their own tests to determine the safety and suitability of each product or combination of products for their end use.

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