Revision Date: May 7, 2015 Supersedes: February 10, 2012 Version: 2.1

Section 1 - Identification of the Substance/Mixture and of the Company/Undertaking

Product Name: 46V PAG OIL WITH UV DYE Part Number(s): 511046 Product Class: Automotive Refrigerant Lubrication Oil Manufacturer: Cliplight Manufacturing 961 Alness Street Toronto, ON M3J 2J1, Canada email: sales@cliplight.com Telephone: +1 416 736 9036

Emergency Telephone: +1 613 996 6666 (Canutec)

Section 2 – Hazards Identification

GHS Classification

This product is not classified as hazardous under the GHS or 29 CFR 1910.1200.

Precautionary statements:

P280 Wear protective gloves and eye protection.

Section 3 – Composition/Information on Ingredients

The components of this product are non-hazardous under the GHS or CFR 1910.1200. The generic information below is provided for the information of the user.

Ingredient Name	CAS No.	EC No.	Composition, wt%
Polyalkylene glycol blend	-	-	90 - 99.9
UV Dye Solution	-	-	0.1 - 10

Section 4 – First Aid Measures

Inhalation

Inhalation under normal exposure should not cause problems; however, if inhalation has resulted in symptoms, move patient to fresh air and consult a physician.

Eye Contact

Remove contact lenses and immediately flush eyes with a large amount of water for at least 15 minutes. If symptoms exist and/or persist, get medical attention.

Skin Contact

Wash affected skin areas thoroughly with soap and water. Remove contaminated clothing. If skin irritation persists, see a physician.

Ingestion

If swallowed, give large quantities of water to drink. Ingestion may cause gastric disturbances. Consult a physician.

Acute and Delayed Symptoms

Prolonged exposure to mist, although unlikely, may cause irritation of upper respiratory tract (nose and throat) and lungs.

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Section 5 – Firefighting Measures

Extinguishing media

DO NOT USE WATER STREAM. Use alcohol-resistant foam, carbon dioxide, dry chemical powder, or water spray.

Special hazards arising from the substance or mixture

Burning in a fire produces carbon oxides, smoke and fumes. Containers may rupture from gas generation in a fire situation. Violent steam generation or eruption may occur upon application of direct water stream to hot liquids.

Advice for firefighters

Self-contained breathing apparatus and protective clothing as required.

Section 6 – Accidental Release Measures

Personal precautions

Wear chemical-resistant gloves and chemical safety goggles or safety glasses with side shields. Since the product contains a fluorescent dye, it is advisable to take extra care to avoid contact with the product.

Environmental precautions

Avoid runoff to sewers and waterways.

Methods and materials for containment and cleaning up

Evacuate the spill area. Floor may be slippery if product has wetted the floor. Use care to avoid falling. Ventilate the spill area. Avoid breathing vapour. Contain material spills immediately with inert adsorption materials. Transfer liquids and solid adsorption materials and diking material to separate suitable containers for recovery or disposal.

Section 7 – Handling and Storage

Precautions for safe handling

Since the product contains a fluorescent dye, it is advisable to take extra care to avoid contact with the product. Wear chemical-resistant gloves and chemical safety goggles or safety glasses with side shields.

Conditions for safe storage

Store in original unopened container. Use product promptly after opening. This material may soften and lift certain paint and surface coatings. Store in a cool, well ventilated place. Keep containers dry. Store product away from reactive and corrosive materials. The minimum recommended storage temperature for this material is -29°C (-20°F). The maximum storage temperature is 49°C (120°F).

Section 8 – Exposure Controls/Personal Protection

Control Parameters

None of the components of this product have occupational exposure limit values.

Engineering Controls

General room ventilation is expected to be sufficient for use of the product.

Protective Equipment

Use protective gloves due to the presence of fluorescent dye. Use eye protection and chemical protective clothing.

Hygiene

Wash thoroughly after handling. Wash contaminated clothing before reuse.

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Section 9 – Physical and Chemical Properties

Appearance	Oily yellow liquid	
Odour	Mild	
Odour threshold	No data available	
pH (water extract)	5.6	
Freezing point	No data available	
Boiling point	>200°C (>392°F)	
Flash point	174°C (345°F)	
Evaporation rate	<0.1	
Flammability or explosive limits	No data available	
Vapour pressure	< 0.1 mm Hg @ 20°C ASTM E1719	
Vapour density	>10	
Specific Gravity	0.998 @ 20°C	
Water Solubility	<7 wt%	
Partition coefficient:	No data available	
n-octanol/water		
Auto-ignition temperature	No data available	
Decomposition temperature	No data available	
Viscosity	$49 \pm 5 \text{ cSt} @ 40^{\circ}\text{C}$	

Section 10 – Stability and Reactivity

Reactivity

Will not react under normal conditions

Chemical stability

Stable under recommended storage conditions

Possibility of hazardous reactions

Unlikely

Conditions to avoid

Exposure to elevated temperatures can cause product to decompose. Generation of gas during decomposition could cause pressure build-up and rupture of the container.

Incompatible materials

Avoid contact with strong oxidizing and reducing agents.

Hazardous decomposition products

Decomposition products depend upon temperature, air supply and the presence of other materials. Decomposition products can include and are not limited to: aldehydes, alcohols, ethers, hydrocarbons, ketones, organic acids, polymer fragments.

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Section 11 – Toxicological Information

The toxicological properties of this product have not been fully investigated. Available information is provided below.

Sensitization

Substance did not cause allergic skin reactions when tested in humans.

Repeated Dose Toxicity

Mist may cause irritation of upper respiratory tract (nose and throat) and lungs.

Carcinogenicity

Similar material(s) did not cause cancer in laboratory animals.

Potential Health Effects

Inhalation: Should not occur in normal use.

Eye Contact: Liquid splashes may cause eye irritation.

Skin Contact: Brief contact is essentially nonirritating to skin. Prolonged contact may cause slight skin irritation with local redness but is unlikely to result in absorption of harmful amounts.

Ingestion: Very low toxicity if swallowed. Harmful effects not anticipated from swallowing small amounts.

Section 12 – Ecological Information

Ecotoxicity

No data available

Persistence and degradability

This product is not considered readily biodegradable.

Bioaccumulative potential

Bioaccumulation is not expected because of its high water solubility.

Mobility in soil No data available

Other adverse effects

No data available

Section 13 – Disposal Considerations

Product

Dispose of this material at a facility that complies with local, state, and federal regulations. Dispose of product by incineration in an approved chemical waste facility.

Contaminated packaging

Dispose of as product.

Section 14 – Transport Information

DOT/IATA/IACO/IMDG/TDG

This product is non-regulated.

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Section 15 – Regulatory Information

All components of this product are on the Canadian Domestic Substances List (DSL).

All components of this product are listed in or exempt from the U.S. Toxic Substances Control Act (TSCA) Inventory.

All components of this product are on or in compliance with the Australian Inventory of Chemical Substances (AICS).

A chemical safety assessment has not been carried out for this product.

Section 16 – Other Information

HMIS CLASSIFICATION

Health Hazard:	1
Flammability:	1
Physical Hazards:	0

Notes to this Revision

This version 2.1 (May 7, 2015) has been updated from the previous version of February 10, 2012 to conform to the requirements of OSHA Hazard Communications Standard 2012 and EU (No.) 453/2010 from June 1, 2015. The SDS continues to meet requirements of the GHS.

No changes have been made to the classification of the mixture, description of the product or to instructions for its safe use, transportation, handling and storage.

All information appearing herein is based upon data obtained from manufacturers and/or recognized technical sources. While the information is believed to be accurate, we make no representations as to its accuracy or sufficiency. Conditions of use are beyond our control therefore users are responsible for verifying the data under their own operating conditions to determine whether the product is suitable for their particular purposes and they assume all risks of their use, handling, and disposal of the product. Users also assume all risks in regards to the publication or use of, or reliance upon information contained herein. This information relates only to the product designated herein, and does not relate to its use in combination with any other material or process.