SAFETY DATA SHEET
CLIPLIGHT FLASH™

Revision Date: April 24, 2015 **Version:** 3.1
Supersedes: February 14, 2014

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

Product Name: Cliplight FLASH™
Part Numbers: 980, 980082KIT, 98084KIT, 98087KIT, 980450KIT, 98181KIT*, 98381KIT*, 9802KIT
*For these kits see also Safety Data Sheets for dye products 909006B and 990006B
Product Class: Refrigeration additive
Manufacturer: Cliplight Manufacturing
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email: sales@cliplight.com
Telephone: +1 416 736 9036

Emergency Telephone: +1 613 996 6666 (Canutec)

Section 2 – Hazards Identification

GHS Classification

Flammable liquids: Category 3
Skin irritation: Category 3

Label elements:

Warning

Hazard statements:
H226 Flammable liquid and vapour
H316 Causes mild skin irritation

Precautionary statements:
P280 Wear protective gloves and eye protection.
P332 + P313 If skin irritation occurs: Get medical attention.

Other hazards:
None known.

Section 3 – Composition/Information on Ingredients

Ingredient Name	CAS No.	EC No.	Composition, wt%
Triethylorthoformate	122-51-0	204-550-4	50

Remaining components of this product are not classified as hazardous under the GHS, 29 CFR 1910.1200, WHMIS 2015, or (EC) No 1272/2008.

Section 4 – First-Aid Measures

Inhalation
Remove person to fresh air. Give artificial respiration if not breathing. If breathing is difficult, oxygen may be given by qualified personnel. Obtain medical attention.

Eye Contact
Remove contact lenses and immediately flush eyes with copious amounts of water for at least 15 minutes. Obtain medical attention.

Skin Contact
Immediately wash skin with soap and copious amounts of water. If irritation persists, obtain medical attention.

Ingestion
Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. If conscious, drink plenty of water. Consult a physician.

Acute and Delayed Symptoms
None known

Special Treatment Needed
Only as above.

Section 5 – Fire-Fighting Measures

Extinguishing media
Use water spray, carbon dioxide, dry chemical powder or appropriate foam.

Special hazards arising from the substance or mixture
In combustion carbon monoxide, carbon dioxide, fumes and smoke will be produced.
Collect contaminated fire fighting water separately. Do not allow to enter the sewage system.
Vapour may travel considerable distance to source of ignition and flash back.

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. Avoid breathing vapours. Ensure adequate ventilation. Since the product contains a concentrated colourant, it is advisable to take extra care to avoid contact with the product.

Environmental precautions
Shut off all sources of ignition. Vapours are heavier than air and can accumulate. Avoid runoff to sewers and waterways.

Methods and materials for containment and cleaning up
Cover spill with dry-lime, sand, or soda ash. Place in covered containers using non-sparking tools and transport outdoors. Ventilate area and wash spill site after material pickup is complete. Treat or dispose of waste material in accordance with all local, state, provincial and national requirements.

Section 7 – Handling and Storage

Precautions for safe handling
Avoid breathing vapour. Avoid contact with eyes, skin and clothing. Since the product contains a concentrated colourant, it is advisable to take extra care to avoid contact with the product. Avoid prolonged or repeated exposure. Use spark-proof tools. No smoking.

Conditions for safe storage
Keep away from heat, sparks and open flame. In the opened canister, this product is sensitive to moisture. Store in a cool dry area.

Section 8 – Exposure Controls/Personal Protection

Control Parameters
None of the components of this product have listed occupational exposure limits.

Engineering Controls
General room ventilation is expected to be sufficient for use of the product. Use non-sparking tools.

Protective Equipment
Wear chemical-resistant gloves and chemical safety goggles or safety glasses with side shields. The product contains a concentrated colourant and may stain skin and other articles.

Hygiene
Wash hands thoroughly after handling.

Section 9 – Physical and Chemical Properties

Appearance	Clear amber liquid
Odour	Mild ethereal
Odour threshold	No data available
pH	No data available
Freezing point	No data available
Boiling point	No data available
Flash point	35°C (95°F)
Evaporation rate	No data available
Flammability or explosive limits	No data available
Vapour pressure	No data available
Vapour density	No data available
Density	0.97 g/cm3 @ 20°C (68°F)
Water Solubility	No data available
Partition coefficient: n-octanol/water	No data available
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Viscosity	No data available

Section 10 – Stability and Reactivity

Reactivity
Reacts with water.

Chemical stability
Stable under recommended storage conditions.

Possibility of hazardous reactions
Unlikely

Conditions to avoid
Moisture, heat, flames and sparks

Incompatible materials
Water (except in application), acids, strong oxidizing agents

Hazardous decomposition products
In the case of a fire, carbon monoxide, carbon dioxide, fumes and smoke will be produced.

Section 11 – Toxicological Information

The toxicological properties of this product have not been investigated. Information for the triethylorthoformate component is included below.

Acute toxicity

Oral LD50 rat:	Triethylorthoformate: 7060 mg/kg
Skin LD50 rabbit:	Triethylorthoformate: 20 ml/kg

Skin corrosion/irritation

rabbit	Triethylorthoformate – mild irritation – 24 h

Serious eye damage/irritation

rabbit	Triethylorthoformate – no irritation

Respiratory or skin sensitization
No data available

Germ cell mutagenicity
No data available

Carcinogenicity
None of the components of this product is identified as a carcinogen by IARC, ACGIH, NTP or OSHA.

Reproductive toxicity
No data available

Specific target organ toxicity
No data available

Aspiration hazard
No data available

Potential Health Effects
Inhalation: May be harmful if inhaled.
Skin: May cause skin irritation.
Eyes: May cause eye irritation.
Ingestion: May be harmful if swallowed.

Section 12 – Ecological Information

Aquatic toxicity
No data available

Persistence and degradability
No data available

Bioaccumulative potential
No data available

Mobility in soil
No data available

Other adverse effects
No data available

Section 13 – Disposal Considerations

Product
Contact a licensed professional waste disposal service to dispose of this material. Observe all local, state, provincial and national requirements.

Contaminated packaging
Dispose of as product.

Section 14 – Transport Information

DOT/IMDG/IACO/IATA/TDG

Shipping Name: FLAMMABLE LIQUID, N.O.S. (ethyl orthoformate)
UN #: 1993
Class: 3
Packing Group: III

Section 15 – Regulatory Information

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

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

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	3
Reactivity	0

Notes to this revision

This version 3.1 (April 24, 2015) has been updated from the version of August 15, 2013 and the EU version 2.1 of February 26, 2014 to conform to the requirements of the GHS, OSHA Hazard Communications Standard 2012, WHMIS 2015 and (EU) No 453/2010 from June 1, 2015.

Section 2 has been updated to classify the product as a mild skin irritant.

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