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Supersedes: April 7, 2014

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

Product Name: Super Change **Part Numbers:** 981, 981B

Product Class: HVAC and A/C refrigeration additive

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

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	10 - 30
N-phenyl-1,1,3,3-	68259-36-9	269-527-3	1 - 5
tetramethylbutylnaphthalen-1-			
amine			

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

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Section 4 – First-Aid Measures

Inhalation

Remove person to fresh air. Give artificial respiration if not breathing. Obtain medical attention.

Eye Contact

Remove contact lenses and immediately flush eyes with copious amounts of water for at least 15 minutes.

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. Consult a physician.

Acute and Delayed Symptoms

None known

Special Treatment Needed

Only as above.

Section 5 – Fire-Fighting Measures

Extinguishing media

DO NOT USE WATER. Use carbon dioxide, dry chemical powder or foam.

Special hazards arising from the substance or mixture

Carbon dioxide and monoxide form under fire conditions.

Advice for firefighters

Wear self contained breathing apparatus for fire fighting as necessary. Use water spray to cool unopened containers. Vapour may travel considerable distance to source of ignition and flash back.

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.

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. 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. Keep away from heat, sparks, and open flame. No smoking.

Conditions for safe storage

Keep container closed. Keep away from heat, sparks, and open flame. This product is sensitive to moisture.

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Section 8 – Exposure Controls/Personal Protection

Control Parameters

This product contains no components with occupational exposure limits.

Engineering Controls

Use non-sparking tools. Ensure good ventilation.

Protective Equipment

Wear chemical-resistant gloves and chemical safety goggles or safety glasses with side shields.

Hygiene

Handle in accordance with good industrial hygiene and safety practices. Wash hands after use.

Section 9 – Physical and Chemical Properties

Appearance Clear liquid; colourless or light amber.

Odour Ethereal

Odour threshold No data available No data available рH 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 Specific Gravity 0.93 @ 25°C (77°F) Water Solubility No data available Partition coefficient: No data available

n-octanol/water

Auto-ignition temperature

Decomposition temperature

Viscosity

No data available

No data available

No data available

Section 10 – Stability and Reactivity

Reactivity

Reacts with water.

Chemical stability

Stable under conditions of recommended storage.

Possibility of hazardous reactions

None likely.

Conditions to avoid

Heat, sparks, and open flame

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Incompatible materials

Moisture, acids, strong oxidizing agents

Hazardous decomposition products

In combustion, forms carbon dioxide/ monoxide.

Section 11 – Toxicological Information

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

Acute toxicity

Triethylorthoformate: LD50 Oral - rat - 7060 mg/kg

LD50 Dermal - rabbit - 17820 mg/kg LD50 Dermal - guinea pig - >8910 mg/kg

Skin corrosion/irritation

Triethylorthoformate: Skin - rabbit - Mild skin irritation - 24 h

Serious eye damage/irritation

Triethylorthoformate: Eyes - rabbit - No eye irritation - OECD Test Guideline 405

Respiratory or skin sensitization

No data available

Germ cell mutagenicity

No data available

Carcinogenicity

No components of this product are listed as carcinogens by IARC or ACGIH.

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

Toxicity

No data available

Persistence and degradability

No data available

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Bioaccumulative potential

No data available

Mobility in soil

No data available

Other adverse effects

No data available

Section 13 – Product Disposal

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) Inventory.

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

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Section 16 – Other Information

HMIS Classification

Health Hazard 0 Flammability 3 Reactivity 0

Notes to this revision

This version 2.0 (April 27, 2015) has been updated from version 1.0 of April 7, 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.

No changes have been made to the classification of the product and no substantive changes have been made to the 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.