

# <u>I-123 SDS, Safety Data Sheet</u> MSDS Sheet, Material Safety Data Sheet

#### **1. Product Identification**

<u>Product name</u>: I-123 <u>Synonyms</u>: CI-BQC1, I-123LT <u>CAS No.</u>: Not Applicable. <u>Recommended uses and uses advised against (if any)</u>: Corrosion Inhibition. Refer to available product literature or ask your local Sales Representative for restrictions on use and dose limits.

#### SUPPLIER

Company: Finoric LLC Address: 8115 Loop 540, Beasley, Texas, 77417 USA

In case of emergency contact: InfoTrac US: 1-800-535-5053 International: 352-323-3500

#### 2. Hazards Identification

# GHS, Globally Harmonized System Classification in accordance with 29 CFR 1910 Classification according to Regulation (EC) No 1272/2008

Flammable liquids Category 3 Acute toxicity, oral Category 4 Acute toxicity, dermal Category 4 Sensitization, Skin Category 1 Serious eye damage/eye irritation Category 2A Acute toxicity, inhalation Category 4 Specific target organ toxicity, single exposure; Respiratory tract irritation Category 3 Specific target organ toxicity, single exposure; Narcotic effects Category 3 Reproductive toxicity Category 1A, 1B Specific target organ toxicity, repeated exposure Category 2 Hazardous to the aquatic environment, long-term hazard Category 2

# Labeling according GHS USA & Regulation (EC) No 1272/2008





# Signal Words: Danger

### **Hazard Statements:**

- H226: Flammable liquid and vapor.
- H302: Harmful if swallowed.
- H312: Harmful in contact with skin.
- H317: May cause an allergic skin reaction.
- H319: Causes serious eye irritation.
- H332: Harmful if inhaled.
- H335: May cause respiratory irritation.
- H336: May cause drowsiness or dizziness.
- H360d: May damage the unborn child.
- H373: May cause damage to organs (Kidney) through prolonged or repeated exposure.
- H411: Toxic to aquatic life with long lasting effects.

#### **Precautionary Statements:**

P210: Keep away from heat/sparks/open flames/hot surfaces – No smoking.

- P240: Ground/bond container and receiving equipment.
- P241: Use explosion-proof electrical/ventilating/light/.../equipment.
- P242: Use only non-sparking tools.
- P243: Take precautionary measures against static discharge.
- P260: Do not breathe dust/fume/gas/mist/vapors/spray.
- P264: Wash contaminated parts thoroughly after handling.
- P270: Do not eat, drink or smoke when using this product.
- P271: Use only outdoors or in a well-ventilated area.
- P272: Contaminated work clothing should not be allowed out of the workplace.
- P273: Avoid release to the environment.
- P280: Wear protective gloves/protective clothing/eye protection/face protection.
- P312: Call a POISON CENTER or doctor/physician if you feel unwell.
- P330: Rinse mouth.
- P301+P310: IF SWALLOWED: Immediately call a POSION CENTER or doctor/physician.
- P302+352: IF ON SKIN: Wash with plenty of soap and water.
- P303+361+353: IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.



P304+P340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P305+351+338: IF IN EYES: Rinse cautiously with water for several minutes. P337+P313: If eye irritation persists get medical advice/attention. Remove contact lenses if present and easy to do – continue rinsing.
P333+313: If skin irritation or a rash occurs: Get medical advice/attention.
P377+313: If eye irritation persists get medical advice/attention.
P370+378: In case of fire: Use Water fog. Alcohol foam. Dry chemical. Polymer foam. Dry chemical powder.
Carbon dioxide (CO2). Do not use a solid water stream as it may scatter and spread fire.
P403+233+235: Store in a well ventilated place. Keep container tightly closed. Keep cool.
P362: Take off contaminated clothing and wash before reuse.
P391: Collect spillage.
P405: Store locked up.
P501: Dispose of contents/container in accordance with local/national regulation.

Hazard Symbols: F Flammable T Toxic C Corrosive Xn Harmful N Dangerous for the environment. <u>Risk Phrases</u>: R10 Flammable R20/22 Harmful by inhalation and if swallowed R35 Causes severe burns R: 36/37/38, Risk Phrase: Irritating to eyes, respiratory system and skin R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment R61 May cause harm to the unborn child R67 Vapors may cause drowsiness and dizziness

#### 3. Composition/Information on Ingredients

Item Name	CAS #	<b>Percent</b>
Methanol	67-56-1	20-50
1-Decanol	112-30-1	2.5 - 15
2-Butoxyethanol	111-76-2	2.5 - 15
Ethoxylated Nonylphenol	68412-54-4	2.5 – 15

#### 4. First Aid Measures

Always seek medical attention after first aid measures are provided.



<u>Inhalation</u>: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Do not use mouth-to-mouth method if victim inhaled the substance. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Get medical attention. <u>Ingestion</u>: Rinse mouth. Do not induce vomiting without medical advice. If vomiting occurs naturally, have victim lean forward to reduce risk of aspiration. Never give anything by mouth to a victim who is unconscious or is having convulsions. Get medical attention.

<u>Skin Contact</u>: Wipe off excess material from skin then immediately flush skin with plenty of water for at least 15 minutes. Use a mild soap if available. Remove contaminated clothing and shoes. Get medical attention. Wash clothing before reuse. Thoroughly clean shoes before reuse. For minor skin contact, avoid spreading material on unaffected skin.

<u>Eye Contact</u>: Immediately flush eyes with plenty of water for at least 15 minutes, lifting lower and upper eyelids occasionally. Get medical attention immediately.

<u>Note to Physician</u>: In case of shortness of breath, give oxygen. Keep victim warm. Keep victim under observation. Symptoms may be delayed.

### **5. Fire Fighting Measures**

<u>Flammability of the Product</u>: Flammable. Combustible by OSHA criteria. Containers may explode when heated. <u>Auto-Ignition Temperature</u>: Not available.

<u>Products of Combustion</u>: Carbon oxides. Ammonia. Nitrogen oxides (NOx). May include oxides of phosphorus and toxic fumes.

<u>Fire Extinguishing Media</u>: Water fog. Alcohol foam. Dry chemical. Polymer foam. Dry chemical powder. Carbon dioxide (CO2). Do not use a solid water stream as it may scatter and spread fire. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. In the event of fire and/or explosion do not breathe fumes.

<u>Special Information</u>: Fire may produce irritating, corrosive and/or toxic gases. In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full face piece operated in the pressure demand or other positive pressure mode.

Keep away from heat and sources of ignition. Flash back possible over considerable distance. Beware of vapors accumulating to form explosive concentrations .Vapors can accumulate in low areas.

If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also consider initial evacuation for 800 meters (1/2 mile) in all directions. ALWAYS stay away from tanks engulfed in flame. Fight fire from maximum distance or use unmanned hose holders or monitor nozzles. Withdraw immediately in case of rising sound from venting safety devices or any discoloration of tanks due to fire. Move containers from fire area if you can do it without risk. For massive fire, use unmanned hose holders or monitor nozzles; if this is impossible, withdraw from area and let fire burn.

# **6. Accidental Release Measures**

<u>Personal precautions</u>: Ensure adequate ventilation. Keep people away from and upwind of spill/leak. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering. Keep out of low areas.

Environmental precautions: Prevent further leakage or spillage if safe to do so. Do not contaminate water.



<u>Methods for containment</u>: Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Stop leak if you can do so without risk. Move the cylinder to a safe and open area if the leak is irreparable. Remove all ignition sources and ventilate area. Dike the spilled material, where this is possible. Contain the spill with sand or other inert absorbent material Prevent entry into waterways, sewers, basements or confined areas.

Methods for cleaning up:

Small Spill: Avoid dust/mist formation. Avoid breathing dust/mist. Ensure adequate ventilation. Wipe up with absorbent material (e.g. cloth, fleece). Clean contaminated surface thoroughly.

Large Spill: Dike far ahead of liquid spill for later disposal. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal.

# 7. Handling and Storage

<u>Precautions for safe handling</u>: Do not handle or store near an open flame, heat or other sources of ignition. All equipment used when handling the product must be grounded. Use only with adequate ventilation. Wash thoroughly after handling. Avoid prolonged exposure. Do not empty into drains. Avoid release to the environment.

<u>Conditions for safe storage, including any incompatibilities</u>: Keep away from heat and sources of ignition (spark or flame). Keep containers tightly closed in a cool, well-ventilated place. Store in a closed container away from incompatible materials like Alkaline metals. Amines. Isocyanates. Strong oxidizing agents. Caustics. Use care in handling/storage. Store in accordance with local/regional/national/international regulation.

# 8. Exposure Controls/Personal Protection

<u>Airborne Exposure Limits</u>: Exposure guidelines have not been established for this product. Available exposure limits for the substance(s) are shown below:

US. ACGIH Threshold Limit V	alues:		
Components	Туре	Value H	form
2-Butoxyethanol (111-76-2)	TWA	20 ppm	
USA OSHA Table Z-1 Limits for Ai	r Contaminants (29 CF	<u>R 1910.1000):</u>	<b>Exposure</b>
Components	Туре	Value	guidelines:
2-Butoxyethanol (111-76-2)	PEL	240 mg/m3 50 ppm	US OSHA Table Z-1: Skin

designation:

2-Butoxyethanol (CAS 111-76-2): Can be absorbed through the skin.

<u>Ventilation System</u>: A system of local and/or general exhaust is recommended to keep employee exposures as low as possible. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area.

Personal Respirators (NIOSH Approved): For conditions of use where exposure to dust or mist is apparent and



engineering controls are not feasible, a particulate respirator may be worn. For emergencies or instances where the exposure levels are not known, use a full-face positive-pressure, air-supplied respirator.

Skin Protection: Wear protective gloves and clean body-covering clothing.

<u>Eye Protection</u>: Use chemical safety goggles and/or full face shield where dusting or splashing of solutions is possible. Maintain eye wash fountain and quick-drench facilities in work area.

<u>Other Control Measures</u>: Maintain good housekeeping in work area. Dust deposits on floors and other surfaces may pick up moisture and cause the surfaces to become slippery and present safety hazards. Handle in accordance with good industrial hygiene and safety practice. Wash hands after handling.

# 9. Physical and Chemical Properties

Appearance: Dark Red/Purple liquid Odor: Alcohol/aromatic. Odor threshold: Not available. pH: 2 - 3.5 Relative density: 0.85 - 1.05 Boiling point: 180 °F Melting point/Freezing point: 12.74 °F (-10.7 °C) estimated Flash point: 79 °F Auto-ignition temperature: Not available. Decomposition temperature: Not available. Upper/lower flammability or explosive limits: Not available. Vapor pressure: 0.55 hPa estimated Vapor density: Not available. Evaporation rate: Not available. Flammability (solid, gas): Not available. Partition coefficient: n-octanol/water: Not available. Solubility(ies): Not available. Viscosity: Not available.

# **10. Stability and Reactivity**

<u>Stability</u>: It is stable under ordinary conditions of use and storage.

<u>Hazardous Decomposition Products</u>: It emits toxic fumes when heated to decomposition. It may form Carbon oxides. Ammonia. Nitrogen oxides (NOx). May include oxides of phosphorus.

Hazardous Polymerization: Will not occur.

Incompatibilities: Alkaline metals. Amines. Isocyanates. Strong oxidizing agents. Caustics.

Conditions to Avoid: Incompatibles. Heat, flames and sparks.

# **<u>11. Toxicological Information</u>**



Eyes: Causes serious eye damage.

Skin: Toxic in contact with skin. Causes severe skin burns. Harmful if absorbed through skin.

Ingestion: Toxic if swallowed. Causes digestive tract burns. May cause blindness if swallowed.

<u>Inhalation</u>: Toxic if inhaled. Inhalation may cause central nervous system effects. May cause nose, throat, and lung irritation.

<u>Chronic</u> Exposure: May cause cancer. May damage the unborn child.

### Toxicity data:

Product	Test Results .
Product I-123	Acute Dermal LD50 Mouse: 40000 mg/kg estimated
	Acute Dermal LD50 Rabbit: 0.5617 mg/kg estimated
	Acute Dermal LD50 Rat: 980.6323 mg/kg estimated
	Acute Inhalation LC50 Mouse: 5.849 mg/l estimated
	Acute Inhalation LC50 Rat: 1196.9783 mg/l/4h estimated
	Acute Oral LD50 Mouse: 178.3379 mg/kg estimated
	Acute Oral LD50 Mouse: 54.4 ml/kg estimated
	Acute Oral LD50 Rabbit: 31692.9473 mg/kg estimated Acute Oral
	LD50 Rat: 603.4669 mg/kg estimated

Carcinogenicity: Not expected to be hazardous by OSHA criteria.

#### ACGIH Carcinogens:

2-Butoxyethanol (CAS 111-76-2)	A3 Confirmed animal carcinogen with unknown relevance to
	humans.

# IARC Monographs. Overall Evaluation of Carcinogenicity:

2-Butoxyethanol (CAS 111-76-2) 3 Not classifiable as to carcinogenicity to humans.

Sensitization: May cause sensitization by skin contact.

<u>Local effects</u>: Harmful if swallowed. Harmful if inhaled or absorbed through the skin. Irritating to eyes, respiratory system and skin. May cause sensitization by skin contact.

<u>Chronic effects</u>: Hazardous by OSHA criteria. Repeated absorption may cause disorder of central nervous system, liver, kidneys and blood. Prolonged or repeated exposure may cause lung injury. Prolonged exposure may cause chronic effects.

2-Butoxy ethanol may be absorbed through the skin in toxic amounts if contact is repeated and prolonged. These effects have not been observed in humans.

Subchronic effects: Liver and kidney injuries may occur.

Epidemiology: Hazardous by OSHA criteria.

Neurological effects: Hazardous by OSHA criteria.

<u>Reproductive effects</u>: Potential embryo-fetal toxicity and teratogenicity.

<u>Teratogenicity</u>: Components in this product have been shown to cause birth defects and reproductive disorders in laboratory animals. Avoid exposure to women during early pregnancy.

Further information: Symptoms may be delayed.



#### **12.** Ecological Information

### Product I-123:

EC50 Daphnia: 99.8179 mg/L 48 Hours IC50 Algae: 47619 mg/L 72 Hours LC50 Fish: 71.0527 mg/L 96 Hours

#### Components wise information is as under:

<u>2- Butoxyethanol (111-76-2)</u>: LC50 Fish: 1490 mg/L 96 Hours; LC50 Inland silverside (Menidia beryllina): 1250 mg/l 96 hours.
<u>1-Decanol (112-30-1)</u>: LC50 Fish: 13.1 mg/L 96 Hours; EC50 Daphnia: 3 mg/L 48 Hours; LC50 Fathead minnow (Pimephales promelas): 2.2 - 2.5 mg/l 96 hours; LC50 Fish: 2.4 mg/L 96 Hours.

<u>Ecotoxicity</u>: Components of this product have been identified as having potential environmental concerns <u>Aquatic toxicity</u>: May cause long-term adverse effects in the aquatic environment. <u>Persistence and Degradability</u>: No information available. <u>Bioaccumulation/ Accumulation</u>: No information available. <u>Mobility</u>: No information available. <u>Results of PBT and vPvB assessment</u>: No data available for assessment.

#### **13. Disposal Considerations**

Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste disposal facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.

#### **14. Transport Information**

Department of Transportation (DOT) Requirements: UN1993, Flammable Liquid, N.O.S. (Methanol), 3, III Proper shipping name: Flammable Liquid, N.O.S. (Methanol) Hazard class: 3 UN number: 1993 Packing group: III

### **15. Regulatory Information**

USA:

<u>Superfund Amendments and Reauthorization Act of 1986 (SARA) Hazard categories</u>: Immediate Hazard, Delayed Hazard. Section 302 extremely hazardous substance: No



#### **Section 16 - Additional Information**

#### Prepared by AJK on 27 November 2019 - Printed on: 18 January 2020

Disclaimer:

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The information and recommendations set forth herein are presented in good faith and believed correct as of the date the SDS was created. It is compiled from various sources and it is not necessarily all inclusive nor fully adequate in every circumstance. In addition, these suggestions should not be confused with nor followed in violation of applicable laws, regulations, rules or insurance requirements applicable. This SDS is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product. Individuals receiving the information must exercise their independent judgment in determining its appropriateness for a particular purpose. This shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.