

Safety Data Sheet

v 2

Revision Date: 04/09/2015

1 Identification

- **Product identifier**
 - **Trade name: AC Universal Dye**
 - **Part number:** 69700, 69702, 69703, 69721, 69727, 69788 and 69789
 - **Application of the substance / the mixture** fluorescent dye for refrigeration oils
- **Details of the supplier of the safety data sheet**
 - **Manufacturer/Supplier:**
 - Ritchie Engineering Company, Inc.
 - 10950 Hampshire Avenue South
 - Bloomington, MN 55438-2623 U.S.A
 - Phone: 952-943-1333, Fax: 1-800-322-8684
 - **Emergency telephone number:**
 - US & Canada 800-424-9300 (24 HOURS) CHEMTREC; Call collect outside
 - continental US & Canada: 703-527-3887

2 Hazard(s) identification

Classified according to the criteria of the Globally Harmonized System of Classification and Labelling of Chemicals (GHS), OSHA Hazardous Communication Standard (29 CFR 1910.1200) and the Canadian Controlled Products Regulations.

- **Classification of the substance or mixture**

The product is not classified according to the Globally Harmonized System (GHS).
- **Label elements**
 - **GHS label elements** Not Applicable
 - **Hazard pictograms** Not Applicable
 - **Signal word** Not Applicable
 - **Hazard statements** Not Applicable
 - **Additional information:** For Professional Use Only
- **Other hazards**
 - **Results of PBT and vPvB assessment**
 - **PBT:** Not applicable.
 - **vPvB:** Not applicable.

3 Composition/information on ingredients

- **Chemical characterization: Mixtures**
 - **Description:** Mixture: consisting of the following hazardous components.
 - **Chemical components:** Not Applicable
 - **Additional information:** For the wording of the listed risk phrases refer to section 16.

4 First-aid measures

- **Description of first aid measures**
 - **General information:** No special measures required.
 - **After inhalation:** Supply fresh air; consult doctor in case of complaints.
 - **After eye contact:**

Rinse cautiously with water. Remove contact lenses, if present and easy to do. Get medical attention if eye irritation develops or persists.
 - **After swallowing:** DO NOT INDUCE VOMITING. Get immediate medical attention.
 - **Information for doctor:** Treat Symptomatically

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- **Most important symptoms and effects, both acute and delayed**
May cause eye irritation. Symptoms may include discomfort or pain, excessive blinking and tear production, with possible redness and swelling.
May cause mild skin irritation. Prolonged or repeated skin contact as from clothing wet with material may cause dermatitis. Symptoms may include redness, edema, drying, and cracking of the skin.
May cause respiratory tract irritation.
May be harmful if swallowed. May cause stomach distress, nausea or vomiting.
- **Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

5 Fire-fighting measures

- **Extinguishing media**
 - **Suitable extinguishing agents:** Use fire fighting measures that suit the environment.
 - **For safety reasons unsuitable extinguishing agents:** Water with full jet
- **Special hazards arising from the substance or mixture** See section 10 for additional information.
- **Advice for firefighters**
 - **Protective equipment:**
Recommend wearing self-contained breathing apparatus. Water may cause splattering.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**
Particular danger of slipping on leaked/spilled product.
Personal protective equipment must be worn. Avoid contact with skin, eyes or clothing.
- **Environmental precautions:** Do not allow product to reach sewage system or any water course.
- **Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
- **Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

7 Handling and storage

- **Handling:**
 - **Precautions for safe handling**
Keep containers closed when not in use. Wash thoroughly after handling. Launder contaminated clothing before reuse. Empty container contains product residue which may exhibit hazards of product. Dispose of packaging or containers in accordance with local, regional, national and international regulations.
 - **Information about protection against explosions and fires:** No special measures required.
- **Conditions for safe storage, including any incompatibilities**
 - **Storage:**
 - **Requirements to be met by storerooms and receptacles:**
See section 10 for incompatible materials.
 - **Information about storage in one common storage facility:**
Store in a cool dry place in tightly closed containers.
 - **Further information about storage conditions:**
Protect from humidity and water.
Protect from heat and direct sunlight.

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 · **Specific end use(s)** No further relevant information available.

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8 Exposure controls/personal protection

- **Control parameters**
 - **Components with limit values that require monitoring at the workplace:**
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
 - **Additional information:** The lists that were valid during the creation were used as basis.
- **Exposure controls**
 - **Personal protective equipment:**
 - **General protective and hygienic measures:**
Clean skin thoroughly immediately after handling the product.
Do not store food in the working area.
The usual precautionary measures for handling chemicals should be followed.
Do not inhale dust / smoke / mist.
 - **Breathing equipment:**
Use suitable respiratory protective device only when aerosol or mist is formed.
Avoid breathing in mist or vapor. Under normal use conditions this is not a breathing hazard.
Prolonged exposure to vapors may cause dizziness and headaches.
 - **Protection of hands:**



Chemical resistant protective gloves

- **Eye protection:**



Safety glasses. If potential for splash or mist exists, wear chemical goggles or faceshield.

9 Physical and chemical properties

- **Information on basic physical and chemical properties**
 - **General Information**
 - **Appearance:**
 - **Form:** Liquid
 - **Color:** Dark brown
 - **Odor:** Mineral-oil-like
 - **Odour threshold:** Not determined.
 - **pH-value:** Not determined.
 - **Change in condition**
 - **Melting point/Melting range:** Undetermined.
 - **Boiling point/Boiling range:** Undetermined.
 - **Flash point:** > 200 °C
 - **Flammability (solid, gaseous):** Not applicable.

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· Ignition temperature:	
· Decomposition temperature:	Not determined.
· Auto igniting:	Product is not selfigniting.
· Danger of explosion:	Product does not present an explosion hazard.
· Explosion limits:	
· Lower:	Not determined.
· Upper:	Not determined.
· Vapor pressure:	Not determined.
· Density at 20 °C:	0.96 g/cm ³
· Relative density	Not determined.
· Vapour density	Not determined.
· Evaporation rate	Not determined.
· Solubility in / Miscibility with	
· Water:	Not miscible or difficult to mix.
· Partition coefficient (n-octanol/water):	Not determined.
· Viscosity:	
· Dynamic:	Not determined.
· Kinematic at 40 °C:	90 mm ² /s
· Other information	No further relevant information available.

10 Stability and reactivity

- **Reactivity** No further relevant information available.
- **Chemical stability**
 - **Thermal decomposition / conditions to be avoided:**
No decomposition if used and stored according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid** Heat, open flames, sparks.
- **Incompatible materials:** May react with strong oxidizing materials.
- **Hazardous decomposition products:**
Smoke, carbon monoxide, carbon dioxide and other products of incomplete combustion.

11 Toxicological information

- **Information on toxicological effects**

- **Acute toxicity:**

- **LD/LC50 values that are relevant for classification:**

Oral	LD50	>2000 mg/kg (rat)
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- **Primary irritant effect:**

- **on the skin:**

May cause mild skin irritation. Prolonged or repeated skin contact as from clothing wet with material may cause dermatitis. Symptoms may include redness, edema, drying, and cracking of the skin.

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- **on the eye:**
May cause eye irritation. Symptoms may include discomfort or pain, excessive blinking and tear production, with possible redness and swelling.
- **Inhalation:** May cause respiratory tract irritation.
- **Ingestion:**
May be harmful if swallowed. May cause stomach distress, nausea or vomiting.
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:**
When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

- **Carcinogenic categories**

- **IARC (International Agency for Research on Cancer)**

None of the ingredients is listed.

- **NTP (National Toxicology Program)**

None of the ingredients is listed.

- **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

12 Ecological information

- **Toxicity**

- **Aquatic toxicity:** No further relevant information available.

- **Persistence and degradability**

Persistence and Degradability | 75.7% 28 d (-) (OECD 301B)

- **Behavior in environmental systems:**

- **Bioaccumulative potential**

Bioaccumulation | Log POW > 7 (-)

- **Mobility in soil** Not Determined

- **Additional ecological information:**

- **General notes:**

Do not allow product to reach ground water, water course or sewage system.
Danger to drinking water if even small quantities leak into the ground.

- **Results of PBT and vPvB assessment**

- **PBT:** Not applicable.
- **vPvB:** Not applicable.

- **Other adverse effects** No further relevant information available.

13 Disposal considerations

- **Waste treatment methods**

- **Recommendation:**

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

- **Uncleaned packagings:**

- **Recommendation:** Disposal must be made according to official regulations.

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14 Transport information

· UN-Number · DOT, IMDG, IATA	Not Regulated
· UN proper shipping name · DOT, IMDG, IATA	Not Regulated
· Transport hazard class(es) · DOT, IMDG, IATA · Class	Not Regulated
· Packing group · DOT, IMDG, IATA	Not Regulated
· Environmental hazards: · Marine pollutant:	No
· Special precautions for user	Not applicable.
· Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.
· UN "Model Regulation":	-

15 Regulatory information

· **Safety, health and environmental regulations/legislation specific for the substance or mixture**

· **Sara**

· **Section 355 (extremely hazardous substances):**

None of the ingredients is listed.

· **Section 313 (Specific toxic chemical listings):**

None of the ingredients is listed.

· **TSCA (Toxic Substances Control Act):**

All ingredients are listed.

· **Proposition 65**

· **Chemicals known to cause cancer:**

None of the ingredients is listed.

· **Chemicals known to cause reproductive toxicity for females:**

None of the ingredients is listed.

· **Chemicals known to cause reproductive toxicity for males:**

None of the ingredients is listed.

· **Chemicals known to cause developmental toxicity:**

None of the ingredients is listed.

· **Carcinogenic categories**

· **EPA (Environmental Protection Agency)**

None of the ingredients is listed.

· **TLV (Threshold Limit Value established by ACGIH)**

None of the ingredients is listed.

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· NIOSH-Ca (National Institute for Occupational Safety and Health)

None of the ingredients is listed.

· Canadian substance listings:**· Canadian Domestic Substances List (DSL)**

All ingredients are listed.

· Canadian Ingredient Disclosure list (limit 0.1%)

None of the ingredients is listed.

· Canadian Ingredient Disclosure list (limit 1%)

None of the ingredients is listed.

- **GHS label elements** Not Applicable
- **Hazard pictograms** Not Applicable
- **Signal word** Not Applicable
- **Hazard statements** Not Applicable

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Contact:** Engineering Department
- **Issue Date** July 17, 2015
- **Revision Changes:**
 - v 1.0 - original release (April 9, 2015)
 - v 2.0 - modified section 2 (July 17, 2015)
- **Abbreviations and acronyms:**
 - IMDG: International Maritime Code for Dangerous Goods
 - DOT: US Department of Transportation
 - IATA: International Air Transport Association
 - ACGIH: American Conference of Governmental Industrial Hygienists
 - EINECS: European Inventory of Existing Commercial Chemical Substances
 - ELINCS: European List of Notified Chemical Substances
 - CAS: Chemical Abstracts Service (division of the American Chemical Society)
 - LC50: Lethal concentration, 50 percent
 - LD50: Lethal dose, 50 percent
 - PBT: Persistent, Bioaccumulative and Toxic
 - vPvB: very Persistent and very Bioaccumulative

NA