

# Safety Data Sheet

according to 1907/2006/EC (REACH), 1272/2008/EC (CLP), and  
OSHA GHS

Printing date: February 18, 2016

Revision: February 18, 2016

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

- **1.1 Product identifier**
- **Trade name:** DFO - 1,8-Diazafluoren-9-One - Fingerprint Developer
- **Article number:** 1-0039 (1003861), 1-2793 (1004125)
- **CAS number:**  
54078-29-4
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**  
No further relevant information available.
- **Application of the substance / the mixture:** Forensic examination.
- **Uses advised against:** Contact manufacturer.
- **1.3 Details of the supplier of the Safety Data Sheet**
- **Manufacturer/Supplier:**  
Safariland, LLC  
13386 International Parkway  
Jacksonville, FL 32218  
Customer Care (800) 347-1200
- **1.4 Emergency telephone number:**  
ChemTel Inc.  
+1 (800)255-3924, +1 (813)248-0585



## SECTION 2: Hazards identification

- **2.1 Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**  
The product is not classified as hazardous according to the Globally Harmonized System (GHS).  
The substance is not classified as hazardous according to the CLP regulation.

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- **2.2 Label elements**
- **Labelling according to Regulation (EC) No 1272/2008**  
This product does not have a classification according to the CLP regulation.
- **Hazard pictograms** Not Regulated
- **Signal word** Not Regulated
- **Hazard-determining components of labelling:** Not applicable.
- **Hazard statements** Not Regulated
- **Precautionary statements** Not Regulated.

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- **2.3 Other hazards** There are no other hazards not otherwise classified that have been identified.
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

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## SECTION 3: Composition/information on ingredients

- **3.1 Substances**
- **CAS No. Description**  
54078-29-4 1,8- Diazafluorene-9-one

## SECTION 4: First aid measures

- **4.1 Description of first aid measures**
- **General information:** No special measures required.
- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:**  
Brush off loose particles from skin.  
Wash with soap and water.  
If skin irritation is experienced, consult a doctor.
- **After eye contact:**  
Remove contact lenses if worn.  
Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- **After swallowing:**  
Rinse out mouth and then drink plenty of water.  
Do not induce vomiting; call for medical help immediately.
- **4.2 Most important symptoms and effects, both acute and delayed**  
No further relevant information available.
- **Hazards:** No further relevant information available.
- **4.3 Indication of any immediate medical attention and special treatment needed**  
No further relevant information available.

## SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents:** Use fire extinguishing methods suitable to surrounding conditions.
- **For safety reasons unsuitable extinguishing agents:** None.
- **5.2 Special hazards arising from the substance or mixture**  
Formation of toxic gases is possible during heating or in case of fire.
- **5.3 Advice for firefighters**
- **Protective equipment:**  
Wear self-contained respiratory protective device.  
Wear fully protective suit.
- **Additional information:** No further relevant information available.

## SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**  
Ensure adequate ventilation

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- **6.2 Environmental precautions**  
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
- **6.3 Methods and material for containment and cleaning up**  
Pick up mechanically.  
Dispose of the material collected according to regulations.
- **6.4 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.

## SECTION 7: Handling and storage

- **7.1 Precautions for safe handling** No special measures required.
- **Information about fire - and explosion protection:** No special measures required.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:**  
Avoid storage near extreme heat, ignition sources or open flame.
- **Information about storage in one common storage facility:**  
Store away from oxidising agents.  
Protect from humidity and water.
- **Further information about storage conditions:** Keep container tightly sealed.
- **7.3 Specific end use(s)** No further relevant information available.

## SECTION 8: Exposure controls/personal protection

- **8.1 Control parameters**
- **Ingredients 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.
- **DNELs:** No further relevant information available.
- **PNECs:** No further relevant information available.
- **8.2 Exposure controls**
- **Engineering measures** Provide adequate ventilation.
- **Personal protective equipment:**
- **General protective and hygienic measures:**  
The usual precautionary measures are to be adhered to when handling chemicals.  
Keep away from foodstuffs, beverages and feed.
- **Respiratory protection:** Not required under normal conditions of use.
- **Protection of hands:** Not required under normal conditions of use.
- **Material of gloves**  
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

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- **Eye protection:** Follow relevant national guidelines concerning the use of protective eyewear.
- **Body protection:** Not required under normal conditions of use.
- **Limitation and supervision of exposure into the environment:** No special requirements.
- **Risk management measures:** No special requirements.

## SECTION 9: Physical and chemical properties

### · 9.1 Information on basic physical and chemical properties

#### · Appearance

**Form:** Crystalline powder

**Colour:** White

· **Odour:** Odourless

· **Odour threshold:** Not determined.

· **pH-value:** Not applicable.

· **Melting point/Melting range:** Not determined.

· **Boiling point/Boiling range:** Not determined.

· **Flash point:** Not applicable.

· **Flammability (solid, gaseous):** Product is not flammable.

· **Auto/Self-ignition temperature:** Not determined.

· **Decomposition temperature:** Not determined.

· **Self-igniting:** Not determined.

· **Danger of explosion:** Product does not present an explosion hazard.

#### · Explosion limits

**Lower:** Not determined.

**Upper:** Not determined.

· **Oxidising properties:** Not determined.

· **Vapour pressure:** Not determined.

· **Density:** Not determined.

· **Relative density:** Not determined.

· **Vapour density:** Not applicable.

· **Evaporation rate:** Not applicable.

· **Solubility in / Miscibility with water:**

Insoluble.

· **Partition coefficient (n-octanol/water):** Not determined.

#### · Viscosity

**Dynamic:** Not applicable.

**Kinematic:** Not applicable.

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<b>· 9.2 Other information</b>	No further relevant information available.
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## SECTION 10: Stability and reactivity

- **10.1 Reactivity** No further relevant information available.
- **10.2 Chemical stability** Stable under normal temperatures and pressures.
- **Thermal decomposition / conditions to be avoided:**  
No decomposition if used and stored according to specifications.
- **10.3 Possibility of hazardous reactions**  
Reacts with strong oxidising agents.  
Toxic fumes may be released if heated above the decomposition point.
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials** No further relevant information available.
- **10.6 Hazardous decomposition products** Possible in traces.

## SECTION 11: Toxicological information

- **11.1 Information on toxicological effects**
- **Acute toxicity:** Based on available data, the classification criteria are not met.
- **LD/LC50 values relevant for classification:** None.
- **Primary irritant effect**
- **Skin corrosion/irritation:** Based on available data, the classification criteria are not met.
- **Serious eye damage/irritation:** Based on available data, the classification criteria are not met.
- **Respiratory or skin sensitisation:** Based on available data, the classification criteria are not met.

- **Carcinogenic categories**

<b>· IARC (International Agency for Research on Cancer):</b>
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Substance is not listed.
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<b>· NTP (National Toxicology Program):</b>
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Substance is not listed.
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<b>· OSHA-Ca (Occupational Safety &amp; Health Administration):</b>
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Substance is not listed.
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- **Probable routes of exposure:**

Ingestion.  
Inhalation.  
Eye contact.  
Skin contact.

- **Acute effects (acute toxicity, irritation and corrosivity):** None.
- **Repeated dose toxicity:** None.
- **Germ cell mutagenicity:** Based on available data, the classification criteria are not met.
- **Carcinogenicity:** Based on available data, the classification criteria are not met.
- **Reproductive toxicity:** Based on available data, the classification criteria are not met.
- **STOT-single exposure:** Based on available data, the classification criteria are not met.

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- **STOT-repeated exposure:** Based on available data, the classification criteria are not met.
- **Aspiration hazard:** Based on available data, the classification criteria are not met.

## SECTION 12: Ecological information

- **12.1 Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **12.2 Persistence and degradability** No further relevant information available.
- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:**  
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **12.6 Other adverse effects** No further relevant information available.

## SECTION 13: Disposal considerations

- **13.1 Waste treatment methods**
- **Recommendation** Smaller quantities can be disposed of with household waste.
- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.

## SECTION 14: Transport information

- |  |                 |
|--|-----------------|
| <b>14.1 UN-Number</b>                  |                 |
| · DOT, ADR, IMDG, IATA                 | Not Regulated   |
| <b>14.2 UN proper shipping name</b>    |                 |
| · DOT, ADR, IMDG, IATA                 | Not Regulated   |
| <b>14.3 Transport hazard class(es)</b> |                 |
| · DOT, ADR, IMDG, IATA                 |                 |
| · Class                                | Not Regulated   |
| <b>14.4 Packing group</b>              |                 |
| · DOT, ADR, IMDG, IATA                 | Not Regulated   |
| <b>14.5 Environmental hazards:</b>     | Not applicable. |

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<b>· 14.6 Special precautions for user</b>	Not applicable.
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<b>· 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code</b>	Not applicable.
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**SECTION 15: Regulatory information**

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

- **United States (USA)**
- **SARA**

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

Substance is not listed.

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

Substance is not listed.

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

Substance is not listed.

- **Proposition 65 (California):**

- **Chemicals known to cause cancer:**

Substance is not listed.

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

Substance is not listed.

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

Substance is not listed.

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

Substance is not listed.

- **Carcinogenic Categories**

- **EPA (Environmental Protection Agency)**

Substance is not listed.

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

Substance is not listed.

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

Substance is not listed.

- **Canada**

- **Canadian Domestic Substances List (DSL)**

Substance is not listed.

- **Canadian Ingredient Disclosure list (limit 0,1%)**

Substance is not listed.

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· **Canadian Ingredient Disclosure list (limit 1%)**

Substance is not listed.

· **Directive 2012/18/EU**

· **Named dangerous substances - ANNEX I** Substance is not listed.

· **Other regulations, limitations and prohibitive regulations**

· **Substances of very high concern (SVHC) according to REACH, Article 57**

Substance is not listed.

· **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

## SECTION 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.

· **Abbreviations and acronyms:**

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

CAS: Chemical Abstracts Service (division of the American Chemical Society)

DNEL: Derived No-Effect Level (REACH)

PNEC: Predicted No-Effect Concentration (REACH)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

SVHC: Substances of Very High Concern

vPvB: very Persistent and very Bioaccumulative

NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety & Health

· **Sources**

Website, European Chemicals Agency (echa.europa.eu)

Website, US EPA Substance Registry Services (ofmpub.epa.gov/sor internet/registry/substreg/home/overview/home.do)

Website, Chemical Abstracts Registry, American Chemical Society (www.cas.org)

Patty's Industrial Hygiene, 6th ed., Rose, Vernon, ed. ISBN: ISBN: 978-0-470-07488-6

Casarett and Doull's Toxicology: The Basic Science of Poisons, 8th Ed., Klaasen, Curtis D., ed., ISBN: 978-0-07-176923-5.

Safety Data Sheets, Individual Manufacturers

SDS Prepared by:

ChemTel Inc.

1305 North Florida Avenue

Tampa, Florida USA 33602-2902

Toll Free North America 1-888-255-3924 Intl. +01 813-248-0573

Website: www.chemtelinc.com