

# Orion Photosensitive Systems.

[www.orionppp.com](http://www.orionppp.com)

## 16 Point MSDS

### Light Sensitive Orion Freedom -2-1-4- Sodium Salt

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## MATERIAL SAFETY DATA SHEET

Version 5.6- Date of Publication -1-1-2024

Print Date 1-7-2025 As per Rules Published by WHMIS- Valid for a Period of 3 Years from Date of Publication)

#### 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

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##### 1.1 Product identifiers

Product name : Light Sensitive  
Diazo Salt  
Orion Freedom -2-1-4-  
Sodium Salt

Product Number : Light Sensitive Salt  
Brand :

##### 1.2 Other means of identification 2-1-4 Diazo Sodium Salt

##### 1.3 Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Manufacture of Offset Printing Plates and Imaging Compounds

##### 1.4 Details of the supplier of the safety data sheet

Company : Orion Photosensitive Systems.  
241 ½, F, Shaniwar Peth  
F.P.No.534  
Radha Infinity, 4<sup>th</sup> Floor,  
Karad 415110-India

Mobile Numbers : 00 91 98230 64420,  
00 91 91755 34420

##### 1.5 Emergency telephone number

Emergency Mobile  
Number # 00 91 91755 34420

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#### 2. HAZARDS IDENTIFICATION

##### 2.1 GHS Classification

Not a dangerous substance or mixture according to the Globally Harmonised System (GHS).

##### 2.2 GHS Label elements, including precautionary statements

Pictogram none  
Signal word none  
Hazard statement(s) none  
Precautionary statement(s) none

Not a dangerous substance or mixture according to the Globally Harmonised System (GHS).

##### 2.3 Other hazards - none

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#### 3. COMPOSITION/ INFORMATION ON INGREDIENTS

### 3.1 Substances

Chemical characterization : Organic Diazo Salt  
Synonyms

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Formula	:2 Diazo-1 Naphthol -4 Sulphonic Acid Sodium Salt.
Molecular Weight	272.21 Grams Per Mole
CAS No.	64173-96-2 ( Not Clearly Defined)

No components need to be disclosed according to the applicable regulations.

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#### 4. FIRST AID MEASURES

##### 4.1 Description of first aid measures

###### General advice

Consult a physician. Show this safety data sheet to the doctor in attendance.

###### If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

###### In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

###### In case of eye contact

Flush eyes with water as a precaution.

###### If swallowed

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

##### 4.2 Most important symptoms and effects, both acute and delayed

###### Vomiting if Swallowed

##### 4.3 Indication of any immediate medical attention and special treatment needed

No data available

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#### 5. FIREFIGHTING MEASURES

##### 5.1 Extinguishing media

###### Suitable extinguishing media

For small (incipient) fires, use media such as "alcohol" foam, dry chemical, or carbon dioxide. For large fires, apply water from as far as possible. Use very large quantities (flooding) of water applied as a mist or spray; solid streams of water may be ineffective. Cool all affected containers with flooding quantities of water.

##### 5.2 Special hazards arising from the substance or mixture

Carbon oxides, Sulphur oxides

##### 5.3 Advice for firefighters

Wear self contained breathing apparatus for firefighting if necessary.

##### 5.4 Further information

Use water spray to cool unopened containers.

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#### 6. ACCIDENTAL RELEASE MEASURES

##### 6.1 Personal precautions, protective equipment and emergency procedures

Avoid breathing vapours, mist or gas. Remove all sources of ignition. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas. For personal protection see section 8.

##### 6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

### 6.3 Methods and materials for containment and cleaning up

Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13). Keep in suitable, closed containers for disposal.

### 6.4 Reference to other sections

For disposal see section 13.

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## 7. HANDLING AND STORAGE

### 7.1 Precautions for safe handling

Avoid inhalation of vapour or mist.

Keep away from sources of ignition - No smoking. Take measures to prevent the build up of electrostatic charge.

For precautions see section 2.2.

### 7.2 Conditions for safe storage, including any incompatibilities

Store in cool place. Keep container tightly closed in a dry and well-ventilated place.

Store in Dark place. Avoid Sun Light

### 7.3 Specific end use(s)

A part from the uses mentioned in section 1.2 no other specific uses are stipulated

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## 8. EXPOSURE CONTROLS/PERSONAL

### PROTECTION 8.1 Control parameters

#### Occupational Exposure Limits

We are not aware of any national exposure limit.

### 8.2 Exposure controls

#### Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

#### Personal protective equipment

##### Eye/face protection

Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

##### Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

##### Splash contact

Material: Nitrile rubber

Minimum layer thickness: 0.2 mm

Break through time: 38 min

Material tested: Dermatril® P (KCL 743 / Aldrich Z677388, Size M)

data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail sales@kcl.de, test method: EN374

If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

### Body Protection

impervious clothing, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

### Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

- |   |   |
|---|---|
| a) Appearance                                   | Form: Powder<br>Colour: Yellow to Brown                     |
| b) Odour  | no data available   |
| c) Odour Threshold                              | no data available   |
| d) pH   | no data available   |
| e) Melting point/freezing point                 | No data available   |
| f) Initial boiling point and boiling range      | Decomposes at higher temperature<br>N.A.                    |
| g) Flash point                                  | N.A.  |
| h) Evaporation rate                             | N.A.  |
| i) Flammability (solid, gas)                    | no data available   |
| j) Upper/lower flammability or explosive limits | no data available<br>no data available<br>no data available |
| k) Vapour pressure                              | N.A.  |
| l) Vapour density                               | N.A.  |
| m) Relative density                             | 0.95 g/mL   |
| n) Water solubility                             | soluble   |
| o) Partition coefficient: n-octanol/water       | N.A.  |
| p) Auto-ignition temperature                    | no data available<br>no data available                      |
| q) Decomposition temperature                    | no data available   |
| r) Viscosity                                    | no data available   |
| s) Explosive properties                         | no data available   |
| t) Oxidizing properties                         | no data available   |

### 9.2 Other safety information

Relative vapour density N.A.

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## 10. STABILITY AND REACTIVITY

### 10.1 Reactivity

no data available

### 10.2 Chemical stability

Stable under recommended storage conditions.

### 10.3 Possibility of hazardous reactions

no data available

### 10.4 Conditions to avoid

Heat, flames and sparks.

### 10.5 Incompatible materials

Acid chlorides, Phosphorus halides, Strong acids, Strong oxidizing agents, Strong reducing agents

### 10.6 Hazardous decomposition products

Other decomposition products - no data available

In the event of fire: see section 5

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## 11. TOXICOLOGICAL INFORMATION

### 11.1 Information on toxicological effects

#### Acute toxicity

LD50 Oral - rat - 14,500 mg/kg

LC50 Inhalation - rat - 4 h - 40250 ppm

LD50 Dermal - rabbit - > 5,000 mg/kg

#### Skin corrosion/irritation

no data available

#### Serious eye damage/eye irritation

no data available

#### Respiratory or skin sensitisation

no data available

#### Germ cell mutagenicity

no data available

mouse

lymphocyte

Cytogenetic analysis

mouse

lymphocyte

Mutation in mammalian somatic cells.

rat

Cytogenetic analysis

mouse

DNA damage

#### Carcinogenicity

Carcinogenicity - rat - Oral

Tumorigenic: Equivocal tumorigenic agent by RTECS criteria. Skin and Appendages: Other:

Tumors. Carcinogenicity - mouse - Oral

Tumorigenic: Equivocal tumorigenic agent by RTECS criteria. Leukaemia Skin and Appendages: Other: Tumors.

IARC: No components of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

### **Reproductive toxicity**

Reproductive toxicity - rat - Intraperitoneal  
Effects on Fertility: Abortion.

Reproductive toxicity - rat - Intraperitoneal  
Effects on Fertility: Post-implantation mortality (e.g., dead and/or resorbed implants per total number of implants).

Reproductive toxicity - rat - Subcutaneous  
Effects on Fertility: Post-implantation mortality (e.g., dead and/or resorbed implants per total number of implants). Effects on Fertility: Litter size (e.g.; # fetuses per litter; measured before birth).

Reproductive toxicity - mouse - Oral  
Effects on Fertility: Pre-implantation mortality (e.g., reduction in number of implants per female; total number of implants per corpora lutea). Effects on Embryo or Fetus: Fetotoxicity (except death, e.g., stunted fetus). Specific Developmental Abnormalities: Musculoskeletal system.

no data available

Developmental Toxicity - mouse - Intraperitoneal  
Effects on Embryo or Fetus: Fetotoxicity (except death, e.g., stunted fetus). Specific Developmental Abnormalities: Musculoskeletal system.

### **Specific target organ toxicity - single exposure**

no data available

### **Specific target organ toxicity - repeated exposure**

no data available

### **Aspiration hazard**

no data available

### **Additional Information**

RTECS: PV6210000

Effects due to ingestion may include:, Nausea, Fatigue,  
Headache Eyes - Eye disease - Based on Human Evidence

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## **12. ECOLOGICAL**

### **INFORMATION 12.1 Toxicity**

Toxicity to fish	LC50 - Pimephales promelas (fathead minnow) - 34,000 mg/l - 96 h LC50 - Oncorhynchus mykiss (rainbow trout) - 35,000 mg/l - 96 h
Toxicity to daphnia and other aquatic invertebrates	EC50 - Daphnia pulex (Water flea) - 27,500 mg/l

### **12.2 Persistence and degradability**

no data available

### **12.3 Bioaccumulative potential**

no data available

### **12.4 Mobility in soil**

no data available



**PICCS:**

On the inventory, or in compliance with the inventory

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**16. OTHER INFORMATION**

**Further information**

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