

Orion Photosensitive Systems. 16 Point MSDS Light Sensitive Polymer Resin- Orion Diazo Polymer "Freedom Plus CtCP-1413" (One Pack)

www.orionppp.com

MATERIAL SAFETY DATA SHEET

Version 5.6- Date of Publication -1-1-2023

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

1.1 Product identifiers

Product name : Light Sensitive
Polymer Resin
Orion Diazo Polymer
"Freedom Plus CtCP-1413"
Light Sensitive Polymer
Product Number : Resin
Brand :

1.2 Other means of identification 2-1-4 Diazo Based Polymer and Resin Diazo Naptho Quinone Ester

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

Identified uses : Manufacture of Offset Printing Plates

1.4 Details of the supplier of the safety data sheet

Company : Orion Photosensitive Systems.
241 ½, F, Shaniwar Peth
F.P.No.534
Karad 415110-India

Telephone : 00 91 2164 220 420
Fax : 00 91 2164 220 281

1.5 Emergency telephone number

Emergency Phone # 00 91 2164 223 459

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

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Chemical characterization : Organic Polymer
Synonyms : positive Photo Resists

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Electronically Generated Hence No Need of Stamp and Signature

Formula	:2 Diazo-1 Naphthol -4 Sulphonic Acid Polymer and Resin
Molecular Weight	: 270.50 Grams/ Mole
CAS No.	3770-97-6

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

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

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.

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.

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

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).

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

- | | |
|---|---|
| a) Appearance | Form: Powder
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 | Melting point 140 °C |
| f) Initial boiling point and boiling range | Decomposes at higher temperature
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
no data available
no data available |
| k) Vapour pressure | N.A. |
| l) Vapour density | N.A. |
| m) Relative density | 0.95 g/mL |
| n) Water solubility | Insoluble |
| o) Partition coefficient: n-octanol/water | N.A. |
| p) Auto-ignition temperature | no data available
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.

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

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

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

12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

12.6 Other adverse effects

no data available

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Product

This combustible material may be burned in a chemical incinerator equipped with an afterburner and scrubber. Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

Contaminated packaging

Dispose of as unused product.

14. TRANSPORT INFORMATION

14.1 UN number

ADR/RID: -

IMDG: -

IATA-DGR: -

14.2 UN proper shipping name

ADR/RID: Not dangerous goods

IMDG: Not dangerous goods

IATA-DGR: Not dangerous goods

14.3 Transport hazard class(es)

ADR/RID: -

IMDG: -

IATA-DGR: -

14.4 Packaging group

ADR/RID: -

IMDG: -

IATA-DGR: -

14.5 Environmental hazards

ADR/RID: no

IMDG Marine pollutant: no

IATA-DGR: no

14.6 Special precautions for user

no data available

15. REGULATORY INFORMATION

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

Standard for the Uniform Scheduling of Medicines and Poisons Schedule 6

Carcinogen classification under WHS Regulation 2011, Schedule 10 Not listed

Notification status

AICS: On the inventory, or in compliance with the inventory

DSL: All components of this product are on the Canadian DSL.

ENCS: On the inventory, or in compliance with the inventory

IECSC: On the inventory, or in compliance with the inventory

ISHL: On the inventory, or in compliance with the inventory

KECI: On the inventory, or in compliance with the inventory

NZIoC: On the inventory, or in compliance with the inventory

PICCS:

On the inventory, or in compliance with the inventory

16. OTHER INFORMATION

Further information

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The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Orion Photosensitive Systems and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.orionppp.com

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