

Safety Data Sheet

Fluorescence Beads

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Hazardous components

1. Water

| | |
|---------------|---------------------|
| Concentration | 90 - 100 % (weight) |
| EC no. | 231-791-2 |
| CAS no. | 7732-18-5 |

2. Polysorbate 80

| | |
|---------------|--------------|
| Concentration | 2 % (weight) |
| EC no. | 500-019-9 |
| CAS no. | 9005-65-6 |

3. POLYSTYRENE

| | |
|---------------|--------------|
| Concentration | 1 % (weight) |
| EC no. | 500-008-9 |
| CAS no. | 9003-53-6 |

SECTION 4: First-aid measures

4.1 Description of necessary 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. |
| In case of skin contact | Rinse with plenty of water. Get medical attention if irritation develops and persists. |
| In case of eye contact | Rinse cautiously with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention/advice. |
| 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/effects, acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

4.3 Indication of immediate medical attention and special treatment needed, if necessary

No data available

SECTION 5: Fire-fighting measures

5.1 Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2 Specific hazards arising from the chemical

Carbon oxides

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5.3 Special protective actions for fire-fighters

Wear self-contained breathing apparatus for firefighting if necessary.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Remove all sources of ignition.

6.3 Methods and materials for containment and cleaning up

Soak up with inert absorbent material (e.g. sand, silica gel). Keep in suitable, closed containers for disposal.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed. Keep away from sources of ignition - No smoking. For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry and well-ventilated place. Light sensitive.

SECTION 8: Exposure controls/personal protection

8.2 Appropriate engineering controls

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

8.3 Individual protection measures, such as personal protective equipment (PPE)

Eye/face protection

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.

Respiratory protection

Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

SECTION 9: Physical and chemical properties

Appearance, such as physical state and colour
Odour
Odour threshold
pH
Melting point and freezing point
Initial boiling point and boiling range
Flash point
Evaporation rate
Flammability, in the case of solids and gases
Upper and lower flammability or explosive limits

Opaque liquid
No information available
No information available
No information available
0.0°C
100°C
No information available
No information available
No information available
No information available

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| | |
|---|--------------------------|
| Vapour pressure | No information available |
| Vapour density | No information available |
| Relative density | No information available |
| Solubility | No information available |
| Partition coefficient — n-octanol/water | No information available |
| Auto-ignition temperature | No information available |
| Decomposition temperature | No information available |
| Viscosity | No information available |

Additional properties

| | |
|----------------|----------------|
| Physical state | Liquid |
| Colour | Opaque colored |

Particle characteristics

Not Applicable

Supplemental information regarding physical hazard classes

No information available

Further safety characteristics (supplemental)

No information available

SECTION 10: Stability and reactivity

10.1 Reactivity

None under normal use conditions.

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

None under normal use conditions.

10.4 Conditions to avoid

None under normal use conditions.

10.5 Incompatible materials

Strong oxidizing agents

Polysorbate 80: Bases, Heavy metal salts, Strong oxidizing agents

10.6 Hazardous decomposition products

Other decomposition products - No data available

In the event of fire: see section 5

SECTION 11: Toxicological information

Information on toxicological effects

Acute toxicity

Based on available data, classification data are not met

Skin corrosion/irritation

Based on available data, classification data are not met

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Serious eye damage/irritation

Based on available data, classification data are not met

Respiratory or skin sensitization

Based on available data, classification data are not met

Germ cell mutagenicity

Based on available data, classification data are not met

Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive toxicity

Based on available data, classification data are not met

Specific target organ toxicity (STOT) - single exposure

Based on available data, classification data are not met

Specific target organ toxicity (STOT) - repeated exposure

Based on available data, classification data are not met

Aspiration hazard

No data available

SECTION 12: Ecological information

Toxicity

Based on available data, classification data are not met

Persistence and degradability

No data available

Bioaccumulative potential

No data available

Mobility in soil

No data available

Results of PBT and vPvB assessment

No data available

Endocrine disrupting properties

No data available

Other adverse effects

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

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SECTION 13: Disposal considerations

Disposal methods

Product disposal

Products covered by this SDS, in their original form, when disposed as waste, are considered non hazardous waste according to Federal RCRA regulations (40 CFR 261). Disposal should be in accordance with local, state and federal regulations. Dispose of empty container in the trash or recycle where facilities exist.

Packaging disposal

Dispose of as unused product.

SECTION 14: Transport information

| | | |
|------|--|------|
| 14.1 | UN Number | None |
| 14.2 | UN Proper Shipping Name | None |
| 14.3 | Transport hazard class(es) | None |
| 14.4 | Packing group | None |
| 14.5 | Environmental hazards | None |
| 14.6 | Special precautions for user | None |
| 14.7 | Transport in bulk according to IMO instruments | None |

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations specific for the product in question

California Prop. 65 Components

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

Canadian Domestic Substances List (DSL)

Chemical name: Water

CAS: 7732-18-5

Chemical name: Sorbitan, mono-9-octadecenoate, poly(oxy-1,2-ethanediyl) derivs., (Z)-

CAS: 9005-65-6

Chemical name: Benzene, ethenyl-, homopolymer

CAS: 9003-53-6

Massachusetts Right To Know Components

No components are subject to the Massachusetts Right to Know Act.

New Jersey Right To Know Components

Water

CAS-No. 7732-18-5

Sorbitan monooleate, ethoxylated

CAS-No. 9005-65-6

Pennsylvania Right To Know Components

Water

CAS-No. 7732-18-5

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Sorbitan monooleate, ethoxylated
CAS-No. 9005-65-6

SARA 302 Components

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 311/312 Hazards

No SARA Hazards

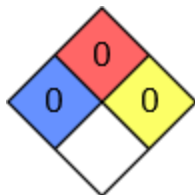
SARA 313 Components

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

HMIS Rating

| Fluorescence Beads | |
|---------------------|---|
| HEALTH | 0 |
| FLAMMABILITY | 0 |
| PHYSICAL HAZARD | 0 |
| PERSONAL PROTECTION | |

NFPA Rating



SECTION 16: Other information

16.2 Preparation information

DISCLAIMER:

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. DeNovix Inc. shall not be held liable for any damage resulting from handling or from contact with the above product