

SAFETY DATA SHEET (SDS)

**Manufacturer:**

Covestro

Product Name:

Covestro Desolite® DP-1021 Primary Optical Fiber Coating, UV Cure (10 kg)

Manufacturer Part Number:

COV-DP-1021-10KG

▶ [Click here for more details on the Covestro Desolite® DP-1021 Primary Optical Fiber Coating, UV Cure \(10 kg\)](#)

SAFETY DATA SHEET



1. Identification

Covestro LLC
1 Covestro Circle
Pittsburgh, PA 15205
USA

TRANSPORTATION EMERGENCY

CALL CHEMTREC: (800) 424-9300
INTERNATIONAL: (703) 527-3887

NON-TRANSPORTATION

Emergency Phone: Call Chemtrec
Information Phone: (844) 646-0545

Product Name: DeSolute DP-1021
Material Number: 50025061
Chemical Family: UV-Curable Mixture
Use: Raw material for coatings, inks, adhesives, sealants, or elastomers in industrial applications
Restrictions on use: Do-It-Yourself Applications

2. Hazards Identification

GHS Classification

Skin irritation: Category 2
Eye irritation: Category 2A
Skin sensitisation: Category 1
Reproductive toxicity (Oral): Category 1B

GHS Label Elements

Hazard pictograms:



Signal word: Danger

Hazard statements: Causes skin irritation.
May cause an allergic skin reaction.
Causes serious eye irritation.
May damage fertility or the unborn child if swallowed.

Precautionary statements: **Prevention:**
Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Avoid breathing dust, mist, gas, vapors or spray.
Wash skin and face thoroughly after handling.

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Contaminated work clothing must not be allowed out of the workplace.

Wear permeation resistant protective gloves and clothing. Wear eye and face protection.

Response:

IF ON SKIN: Wash with plenty of soap and water.

IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing.

IF exposed or concerned: Get medical attention.

If skin irritation or rash occurs: Get medical attention.

If eye irritation persists: Get medical attention.

Take off contaminated clothing and wash before reuse.

Storage:

Store locked up.

Disposal:

Dispose of contents and container in accordance with existing federal, state, and local environmental control laws.

3. Composition/Information on Ingredients

Hazardous Components

Concentration	Components	CAS-No.
30 - 60%	Ethoxylated nonyl phenol acrylate	678991-31-6
1 - 5%	Phosphine oxide, diphenyl(2,4,6-trimethylbenzoyl)-	75980-60-8
0.1 - 1%	1-Propanethiol, 3-(trimethoxysilyl)-	4420-74-0
0.1 - 1%	Ethoxylated Nonylphenol	68412-54-4

The specific chemical identity and/or exact percentage of component(s) have been withheld as a trade secret.

4. First Aid Measures

Most Important Symptom(s)/Effect(s)

Acute: May cause allergic skin reaction with symptoms of reddening, itching, swelling, and rash., Causes serious eye irritation with symptoms of reddening, tearing, swelling, and burning., Causes skin irritation with symptoms of reddening, itching, and swelling.

Eye Contact

In case of contact, flush eyes with plenty of lukewarm water. Irrigate copiously with clean, fresh water for at least 10 minutes, holding the eyelids apart. Get medical attention if irritation develops.

Skin Contact

In case of skin contact, wash affected areas with soap and water. Wash off immediately with plenty of water for at least 15 minutes. Immediately remove contaminated clothing and shoes. Call a physician if irritation develops or persists. Wash clothing and shoes before reuse.

Inhalation

If inhaled, remove to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Get medical attention.

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Ingestion

If ingested, do not induce vomiting unless directed to do so by medical personnel. If a person vomits when lying on his back, place him in the recovery position. Get medical attention.

5. Firefighting Measures

Suitable Extinguishing Media: All extinguishing media are suitable.

Unsuitable Extinguishing Media No Data Available

Fire Fighting Procedure

Firefighters should be equipped with self-contained breathing apparatus to protect against potentially toxic and irritating fumes. Use cold water spray to cool fire-exposed containers to minimize the risk of rupture.

Hazardous Decomposition Products

By Fire and Thermal Decomposition: Carbon dioxide (CO₂), carbon monoxide (CO), dense black smoke., Acrylate monomers, Aldehydes, Organic acids

Unusual Fire/Explosion Hazards

Toxic and irritating gases/fumes may be given off during burning or thermal decomposition.

6. Accidental Release Measures**Spill and Leak Procedures**

Cleanup personnel must use appropriate personal protective equipment. Dike or dam spilled material and control further spillage, if possible. Prevent from entering open drains and waterways. Cover spill with inert material (e. g., dry sand or earth) and collect for proper disposal.

7. Handling and Storage**Handling/Storage Precautions**

Avoid breathing dust, vapor, or mist. Avoid contact with skin or clothing. Avoid contact with eyes. Use only with adequate ventilation/personal protection. Wash thoroughly after handling. Keep container closed when not in use.

Storage Temperature

Minimum: 15 °C (59 °F)

Maximum: 30 °C (86 °F)

Storage Conditions

Inhibitor only effective in the presence of oxygen. Exposure to light may cause product polymerization. Extreme heat will result in product polymerization. Protect against heat and direct sunlight.

Employee education and training in the safe use and handling of this product are required under the OSHA Hazard Communication Standard 29 CFR 1910.1200.

Substances to Avoid

Exothermic reaction with:, Free radical initiators, Peroxides, strong alkalis, Strong acids, Reactive metals

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8. Exposure Controls/Personal Protection

The recommendations in this section should not be a substitute for a personal protective equipment (PPE) assessment performed by the employer as required by 29 CFR 1910 Subpart I.

Exposure Limits

Country specific exposure limits have not been established or are not applicable

Any component which is listed in section 3 and is not listed in this section does not have a known ACGIH TLV, OSHA PEL or supplier recommended occupational exposure limit.

Industrial Hygiene/Ventilation Measures

General dilution and local exhaust as necessary to control airborne vapors, mists, dusts and thermal decomposition products below appropriate airborne concentration standards/guidelines.

Respiratory Protection

Respiratory protection is recommended in insufficiently ventilated working areas and during heating or spraying. For components with occupational exposure limits, when workers are facing concentrations above those limits, they must use appropriate certified respirators.

Hand Protection

Ensure gloves remain in good condition during use and replace if any deterioration is observed. Permeation resistant gloves., Nitrile rubber gloves., Avoid natural rubber gloves., Do not wear PVC gloves, as PVC absorbs acrylates.

Eye Protection

Chemical safety goggles or safety glasses with side-shields.

Skin Protection

Permeation resistant clothing, Gloves, long sleeved shirts and pants.

Additional Protective Measures

Ultraviolet (UV) light source is used for curing this product. UV light can be hazardous to unprotected skin and eyes. Protective eyewear should always be worn when working in UV curing areas. Skin protection such as long sleeves, long pants, and gloves should be worn when UV lights are being used. Employees should wash their hands and face before eating, drinking, or using tobacco products. Educate and train employees in the safe use and handling of this product. Emergency showers and eye wash stations should be available.

9. Physical and Chemical Properties

State of Matter:	liquid
Appearance:	liquid
Color:	Colorless to light yellow
Odor:	characteristic
Odor Threshold:	No Data Available
pH:	not applicable
Melting Point:	
Boiling Point:	
Flash Point:	> 100 °C (> 212 °F) (closed cup)
Evaporation Rate:	No Data Available
Lower explosion limit:	No Data Available

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Upper Explosion Limit:	No Data Available
Vapor Pressure:	No Data Available
Vapor Density:	No Data Available
Density:	1 g/cm ³ @ 20 °C (68 °F)
Relative Vapor Density:	No Data Available
Specific Gravity:	No Data Available
Solubility in Water:	No Data Available
Partition Coefficient: n-octanol/water:	No Data Available
Auto-ignition Temperature:	No Data Available
Decomposition Temperature:	Stable under recommended storage conditions. The product is chemically stable.
Unblocking Temperature:	No Data Available
Dynamic Viscosity:	4,800 - 6,200 mPa.s @ 20 °C (68 °F)
Kinematic Viscosity:	> 20.5 mm ² /s @ 40 °C (104 °F) > 4800 mm ² /s @ 20 °C (68 °F)
Bulk Density:	No Data Available
Molecular Weight:	No Data Available
Self Ignition:	not applicable

10. Stability and Reactivity

Hazardous Reactions

No hazardous reactions when stored and handled correctly.

Stability

Stable

Materials to Avoid

Exothermic reaction with: Free radical initiators, Peroxides, strong alkalis, Strong acids, Reactive metals

Conditions to Avoid

Exposure to sunlight. Product contains an inhibitor system. Must be inhibited to prevent hazardous polymerization. Inhibitor only effective in the presence of oxygen. Heat, flames and sparks.

Hazardous Decomposition ProductsBy Fire and Thermal Decomposition: Carbon dioxide (CO₂), carbon monoxide (CO), dense black smoke., Acrylate monomers, Aldehydes, Organic acids

11. Toxicological Information

Likely Routes of Exposure:Skin Contact
Eye Contact
Ingestion
Inhalation**Health Effects and Symptoms**

Acute: May cause allergic skin reaction with symptoms of reddening, itching, swelling, and rash., Causes serious eye irritation with symptoms of reddening, tearing, swelling, and burning., Causes skin irritation with symptoms of reddening, itching, and swelling.
Chronic: May damage fertility or the unborn child.

Toxicity Data for: DeSolite DP-1021

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Data on the product is not available.

Please find the data available for the components.

Acute Dermal Toxicity

Acute toxicity estimate: > 5,000 mg/kg (Calculation method)

Toxicity Data for: Ethoxylated nonyl phenol acrylate**Acute Oral Toxicity**

LD50: > 5,000 mg/kg (rat)

Skin Irritation

rabbit, Skin irritation

Eye Irritation

irritating

Sensitization

Skin sensitisation: negative (Guinea pig)

Respiratory sensitization:

No data available.

Repeated Dose Toxicity

NOAEL: 40 mg/kg, (rat, male/female)

NOAEL: 200 mg/kg, (rat, male/female)

Toxicity Data for: Phosphine oxide, diphenyl(2,4,6-trimethylbenzoyl)-**Acute Oral Toxicity**

LD50: > 5,000 mg/kg (rat) (OECD Test Guideline 401)

Acute Dermal Toxicity

LD50: > 2,000 mg/kg (rat) (OECD Test Guideline 402)

Skin Irritation

rabbit, Non-irritating

Eye Irritation

rabbit, Non-irritating

Sensitization

Skin sensitization (local lymph node assay (LLNA)):: sensitizer (Mouse, OECD Test Guideline 429)

Repeated Dose Toxicity

90 Days, oral: NOAEL: 100 mg/kg, (Rat)

Mutagenicity

Genetic Toxicity in Vitro:

gene mutation test: negative (Bacteria, Metabolic Activation: with/without)

In vitro mammalian cell gene mutation test: negative (Chinese hamster lung cells)

Chromosome aberration test in vitro: negative (Chinese hamster lung cells)

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Toxicity to Reproduction/Fertility

oral, (Rat) NOAEL (parental): 200 mg/kg, NOAEL (F2): 60 mg/kg, Reproductive effects have been observed in animal studies.

Paternal Effects - Spermatogenesis (including genetic material, sperm morphology, motility, and count), testes, epididymis, sperm duct

Developmental Toxicity/Teratogenicity

Rat, NOAEL (maternal): 150 mg/kg,

Toxicity Data for: 1-Propanethiol, 3-(trimethoxysilyl)-**Acute Oral Toxicity**

LD50: 2,380 mg/kg (rat)

Acute Dermal Toxicity

LD50: 2,137.86 mg/kg (rabbit)

Skin Irritation

rabbit, non-irritant

Eye Irritation

Slightly irritating

Sensitization

Skin sensitisation:: positive (Guinea pig, OECD Test Guideline 406)

Toxicity Data for: Ethoxylated Nonylphenol**Acute Oral Toxicity**

LD50: > 15,000 mg/kg (rat, male)

Acute Dermal Toxicity

LD50: 2,830 mg/kg (rabbit)

Skin Irritation

rabbit, Acute Dermal Irritation, Exposure Time: 24 h, irritating

Eye Irritation

rabbit, OECD Test Guideline 405, Severely irritating

Sensitization

Maximisation Test: negative (Guinea pig, OECD Test Guideline 406)

Repeated Dose Toxicity

90 Days, oral: NOAEL: < 200 mg/kg, (Rat,)

90 Days, oral: NOAEL: < 3 mg/kg, (Dog,)

Mutagenicity

Genetic Toxicity in Vitro:

Ames test: negative (Salmonella typhimurium, Metabolic Activation: with/without)

Mammalian cell - gene mutation assay: negative (Mouse lymphoma cells (L5178Y/TK), Metabolic

Activation: with/without)

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Carcinogenicity:

No carcinogenic substances as defined by IARC, NTP and/or OSHA

12. Ecological Information**Ecological Data for: DeSolute DP-1021**

Data on the product is not available. Please find below the ecotoxicological data available to us for the components.

Ecological Data for Ethoxylated nonyl phenol acrylate**Acute and Prolonged Toxicity to Fish**

No data available.

Acute Toxicity to Aquatic Invertebrates

No data available.

Toxicity to Aquatic Plants

No data available.

Ecological Data for Phosphine oxide, diphenyl(2,4,6-trimethylbenzoyl)-**Acute and Prolonged Toxicity to Fish**LC50: 10 - 100 mg/l (Golden orfe (*Leuciscus idus*), 96 h)**Acute Toxicity to Aquatic Invertebrates**EC50: 10 - 100 mg/l (Water flea (*Daphnia magna*), 48 h)**Toxicity to Aquatic Plants**

EC50: 10 - 100 mg/l, (72 h)

Toxicity to Microorganisms

EC50: > 500 mg/l, (Wastewater bacteria, 17 h)

Ecological Data for Ethoxylated Nonylphenol**Biodegradation**

58.7 %, Exposure time: 35 d, i.e. not readily degradable

Studies of a comparable product.

Acute and Prolonged Toxicity to FishLC50: 0.323 mg/l (*Pimephales promelas* (fathead minnow), 96 h)

Studies of a comparable product.

Acute Toxicity to Aquatic InvertebratesLC50: 0.716 mg/l (*Ceriodaphnia dubia*, 48 h)

Studies of a comparable product.

Toxicity to Aquatic PlantsEC10: 1.22 mg/l, End Point: Growth inhibition (*Pseudokirchneriella subcapitata* (green algae), 72 h)

Studies of a comparable product.

Toxicity to Microorganisms

EC20: > 1,000 mg/l, (activated sludge, 3 h)

Studies of a comparable product.

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13. Disposal Considerations**Waste Disposal Method**

Waste disposal should be in accordance with existing federal, state and local environmental control laws.

Empty Container Precautions

Empty containers retain product residue (dust, liquid, vapor and/or gases) and can be dangerous. Do not reuse empty container.

14. Transportation Information**Land transport (DOT)**

Non-Regulated

Sea transport (IMDG)

Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains Ethoxylated Isononylphenol)
Hazard Class or Division: 9
UN number: UN3082
Packaging Group: III
Hazard Label(s): MISCELLANEOUS
Marine pollutant: Marine pollutant

Air transport (ICAO/IATA)

Proper Shipping Name: Environmentally hazardous substance, liquid, n.o.s. (contains Ethoxylated Isononylphenol)
Hazard Class or Division: 9
UN number: UN3082
Packaging Group: III
Hazard Label(s): MISCELLANEOUS
Marine pollutant: Marine pollutant

15. Regulatory Information**United States Federal Regulations****US. Toxic Substances Control Act:** Listed on the Active Portion of the TSCA Inventory.**SNUR Components**

No substances are subject to Section 5 Significant New Use Rule (SNUR) requirements.

Section 6 Risk Management Components:

No substances are subject to Section 6 Risk Management rule requirement.

Section 12b Components:

No substances are subject to TSCA 12(b) export notification requirements.

Section 4 Test Order/Rule Components:

No substances are subject to Section 4 Final Test Orders or Rules.

Consent Order:

No substances are subject to Section 5 Consent Order requirements.

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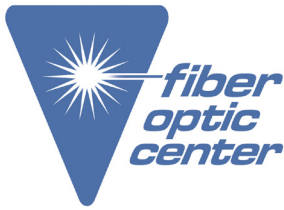
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US. EPA CERCLA Hazardous Substances (40 CFR 302.4) Components:

None

SARA Section 311/312 Hazard Categories:

Refer to hazard classification information in Section 2.

US. EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III Section 302 Extremely Hazardous Substance (40 CFR 355, Appendix A) Components:

None

US. EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III Section 313 Toxic Chemicals (40 CFR 372.65) - Supplier Notification Required Components:

None

US. EPA Resource Conservation and Recovery Act (RCRA) Composite List of Hazardous Wastes and Appendix VIII Hazardous Constituents (40 CFR 261):

Under RCRA, it is the responsibility of the person who generates a solid waste, as defined in 40 CFR 261.2, to determine if that waste is a hazardous waste.

State Right-To-Know Information

The following chemicals are specifically listed by individual states; other product specific health and safety data in other sections of the SDS may also be applicable for state requirements. For details on your regulatory requirements you should contact the appropriate agency in your state.

Massachusetts, New Jersey or Pennsylvania Right to Know Substance Lists:

<u>Concentration</u>	<u>Components</u>	<u>CAS-No.</u>
>=1%	polymer	CAS# is a trade secret
30 - 60%	Ethoxylated nonyl phenol acrylate	678991-31-6
1 - 5%	Phosphine oxide, diphenyl(2,4,6-trimethylbenzoyl)-	75980-60-8
>=1%	Acrylate	CAS# is a trade secret

Massachusetts Right to Know Extraordinarily Hazardous Substance List:

<u>Concentration</u>	<u>Components</u>	<u>CAS-No.</u>
<100 ppm	Furan	110-00-9
<100 ppm	Propylene Oxide	75-56-9
<100 ppm	Hydrogen chloride	7647-01-0
<100 ppm	Acetaldehyde	75-07-0

CFATS (Chemical Facility Anti-Terrorism Standards) Chemicals

To the best of our knowledge, this product does not contain Appendix A Chemicals of Interest (COI), at or above the Screening Threshold Quantity (STQ), as defined by the Department of Homeland Security Chemical Facility Anti-terrorism Standard (CFATS, 6 CFR Part 27).

Based on information provided by our suppliers, this product is considered "DRC Conflict Free" as defined by the SEC Conflict Minerals Final Rule (Release No. 34-67716; File No. S7-40-10; Date: 2012-08-22).

16. Other Information

Contact: Product Safety Department
Telephone: (412) 413-2835

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Version Date: 11/25/2024
SDS Version: 1.3

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