

SAFETY DATA SHEET



1. Identification

Covestro LLC
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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: Cablelite 751-012 Aqua
Material Number: 50025103
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
Carcinogenicity: Category 2
Reproductive toxicity: 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.
Suspected of causing cancer.
May damage fertility or the unborn child.

Precautionary statements: **Prevention:**
Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.

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Avoid breathing dust, mist, gas, vapors or spray.
 Wash skin and face thoroughly after handling.
 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

| <u>Concentration</u> | <u>Components</u> | <u>CAS-No.</u> |
|----------------------|--|------------------------|
| 15 - 40% | Epoxy Acrylate | 55818-57-0 |
| 10 - 30% | 1,1,1-trimethylol propane triacrylate | 15625-89-5 |
| 5 - 10% | Pentaerythritol Tetracrylate | 4986-89-4 |
| 3 - 7% | Pentaerythritol Triacrylate | 3524-68-3 |
| 3 - 7% | 1,6-Hexanedioldiacrylate | 13048-33-4 |
| 3 - 7% | Titanium dioxide (Rutile) | 13463-67-7 |
| 3 - 7% | Acrylated Resin | CAS# is a trade secret |
| 1 - 5% | Tripropylene Glycol Diacrylate | 42978-66-5 |
| 1 - 5% | 2-methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-one | 71868-10-5 |
| 1 - 5% | Bis(2,4,6-Trimethylbenzoyl)phenylphosphine oxide | 162881-26-7 |
| 0.1 - 1% | Aluminum hydroxide | 21645-51-2 |

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 skin irritation with symptoms of reddening, itching, and swelling., Causes serious eye irritation with symptoms of reddening, tearing, swelling, and burning.

Eye Contact

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.

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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.

Ingestion

If ingested, do not induce vomiting unless directed to do so by medical personnel. Call a physician immediately.

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.

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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

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

Titanium dioxide (Rutile) (13463-67-7)

US. ACGIH Threshold Limit Values, as amended
Time weighted average 10 mg/m³

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000), as amended
Permissible exposure limit 15 mg/m³ (Total dust.)

US. ACGIH Threshold Limit Values, as amended
Hazard Designation: Group A4 Not classifiable as a human carcinogen.

Aluminum hydroxide (21645-51-2)

US. ACGIH Threshold Limit Values, as amended
Time Weighted Average (TWA): 1 mg/m³ (Respirable fraction.)

US. ACGIH Threshold Limit Values, as amended
Time weighted average 1 mg/m³ (Respirable fraction.)

US. ACGIH Threshold Limit Values, as amended
Hazard Designation: Group A4 Not classifiable as a human carcinogen.

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

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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: | viscous liquid |
| Color: | Teal |
| Odor: | characteristic |
| Odor Threshold: | No Data Available |
| pH: | No Data Available |
| Melting Point: | |
| Boiling Point: | |
| Flash Point: | > 100 °C (> 212 °F) (closed cup) |
| Evaporation Rate: | No Data Available |
| Lower explosion limit: | No Data Available |
| Upper Explosion Limit: | No Data Available |
| Vapor Pressure: | No Data Available |
| Vapor Density: | No Data Available |
| Density: | 1.12 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: | 4,100 - 4,400 mPa.s @ 20 °C (68 °F) |
| Kinematic Viscosity: | > 3660 mm ² /s @ 20 °C (68 °F) > 20.5 mm ² /s @ 40 °C (104 °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

Material Name: Cablelite 751-012 Aqua

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Stable

Materials to Avoid

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

Conditions to Avoid

Heat Exposure to sunlight. Protect from freezing. Product contains an inhibitor system. Must be inhibited to prevent hazardous polymerization. Inhibitor only effective in the presence of oxygen.

Hazardous Decomposition Products

By 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 skin irritation with symptoms of reddening, itching, and swelling., Causes serious eye irritation with symptoms of reddening, tearing, swelling, and burning.

Chronic: Suspected of causing cancer., May damage fertility or the unborn child.

Toxicity Data for: Cablelite 751-012 Aqua

Data on the product is not available.

Please find the data available for the components.

Acute Oral Toxicity

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

Acute Dermal Toxicity

Acute toxicity estimate: 4,588 mg/kg (Calculation method)

Toxicity Data for: Epoxy Acrylate

Acute Oral Toxicity

LD50: > 2,000 mg/kg (rat, male/female) (OECD Test Guideline 401)

Acute Inhalation Toxicity

LC50: > 4.9 mg/l, 4 h, dust/mist (rat, male/female) (OECD Test Guideline 403)

Acute Dermal Toxicity

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

Skin Irritation

rabbit, OECD Test Guideline 404, non-irritant

Eye Irritation

rabbit, OECD Test Guideline 405, slight irritant

Material Name: Cablelite 751-012 Aqua

Material Number: 50025103

Sensitization

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

Respiratory sensitization:

No data available.

Repeated Dose Toxicity

Oral: LOAEL: 100 mg/kg, (rat, male/female)

Mutagenicity

Genetic Toxicity in Vitro:

Ames test: negative (Metabolic Activation: with/without)

In vitro mammalian cell gene mutation test: negative (Metabolic Activation: with/without)

Genetic Toxicity in Vivo:

In vivo micronucleus test: negative (Mouse, male, Oral)

negative

Carcinogenicity

No data available.

Toxicity to Reproduction/Fertility

Combined Repeated Dose Toxicity Study with the Reproduction/Developmental Toxicity Screening Test,

Oral, (rat, male/female)

Developmental Toxicity/Teratogenicity

rat, female, Oral, NOAEL (teratogenicity): 1000, NOAEL (maternal): > 1000 rabbit, female, Oral, NOAEL

(teratogenicity): 1000, NOAEL (maternal): 1000

Toxicity Data for: 1,1,1-trimethylol propane triacrylate**Acute Oral Toxicity**

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

Acute Inhalation Toxicity

LC50: 0.55 mg/l, 6 h, vapour (rat, male/female)

Acute Dermal Toxicity

LD50: 5,170 mg/kg (rabbit)

assuming density = 1.1 g/cm³

Skin Irritation

rabbit, OECD Test Guideline 404, irritating

Eye Irritation

rabbit, Draize, irritating

Sensitization

Skin sensitisation:: positive (Guinea pig)

Skin sensitisation:: positive (Guinea pig)

Repeated Dose Toxicity

Oral: NOAEL: 300 mg/kg, (rat, male/female, daily)

Dermal: LOAEL: 0.3 mg/kg, (rat, male/female, 5 days/week)

Dermal: NOAEL: 0.3 mg/kg, (Mouse, male/female, 5 days/week)

Mutagenicity

Genetic Toxicity in Vitro:

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

Activation: with/without)

Chromosome aberration test: positive (other mammalian peripheral blood lymphocytes, Metabolic

Activation: with/without)

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

Genetic Toxicity in Vivo:

Micronucleus Assay: negative (Mouse, male/female, oral)

negative

Carcinogenicity

Mouse, male, Dermal, 80, 2 times/week

NOAEL: 50mg/kg body weight/day

Toxicity to Reproduction/Fertility

Oral, daily, (rat, male/female) NOAEL (parental): 300 mg/kg, NOAEL (F1): 300 mg/kg,

Developmental Toxicity/Teratogenicity

rabbit, male and female, Oral, daily, NOAEL (teratogenicity): \geq 130 mg/kg, NOAEL (maternal): \geq 130 mg/kg,

Toxicity Data for: Pentaerythritol Tetracrylate

Toxicity Note

No data available for this product.

Skin Irritation

irritating

Eye Irritation

irritating

Sensitization

Skin sensitisation::

Classification according to Directive 2006/121/EC Annex VI

Respiratory sensitization:

no data available

Toxicity Data for: Pentaerythritol Triacrylate

Acute Oral Toxicity

LD50: 1,830 mg/kg (rat)

Acute Dermal Toxicity

LD50: 4,668 mg/kg (rabbit)

Skin Irritation

rabbit, Moderately irritating

Draize, Moderately irritating

Eye Irritation

rabbit, Draize, Severely irritating

Sensitization

dermal: (Maximisation Test)

Skin sensitisation:: May cause sensitization by skin contact.

Mutagenicity

Genetic Toxicity in Vitro:

Ames: negative (Salmonella typhimurium)

Genetic Toxicity in Vivo:

Micronucleus Assay: Ambiguous. (Mouse, male, dermal)

Ambiguous.

Carcinogenicity

Mouse, dermal, 80 weekspositive

Toxicity to Reproduction/Fertility

Reproductive effects have been observed in animal studies.

Developmental Toxicity/Teratogenicity

Rat, female, oral, gestation, daily, NOAEL (teratogenicity): 500 mg/kg, NOAEL (maternal): < 500 mg/kg,

No Teratogenic effects observed at doses tested.

Fetotoxicity seen only with maternal toxicity.

Toxicity Data for: 1,6-Hexanedioldiacrylate

Acute Oral Toxicity

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

Acute Inhalation Toxicity

LC0: 0.41 mg/l, 7 h, vapour (rat, male/female)

Acute Dermal Toxicity

LD50: 3,650 mg/kg (rabbit) (OECD Test Guideline 402)

Skin Irritation

rabbit, OECD Test Guideline 404, Exposure Time: 4 h, irritating

Eye Irritation

rabbit, irritating

Sensitization

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

Repeated Dose Toxicity

Oral: NOAEL: 250 mg/kg, (rat, male/female)

Mutagenicity

Genetic Toxicity in Vitro:

Ames test: negative (Metabolic Activation: with/without)

In vitro mammalian cell gene mutation test: negative (Metabolic Activation: with/without)

Genetic Toxicity in Vivo:

In vivo micronucleus test: negative (Mouse, Male)

Studies of a comparable product.

negative

Toxicity to Reproduction/Fertility

Combined Repeated Dose Toxicity Study with the Reproduction/Developmental Toxicity Screening Test, Oral, (rat, Male/Female) NOAEL (parental): 250 mg/kg,

Developmental Toxicity/Teratogenicity

rat, male and female, Oral, NOAEL (teratogenicity): 750 mg/kg, NOAEL (maternal): 250 mg/kg, Did not show teratogenic effects in animal experiments.

Toxicity Data for: Titanium dioxide (Rutile)

Acute Oral Toxicity

LD50: > 5,000 mg/kg (rat, female) (OECD Test Guideline 425)

Acute Inhalation Toxicity

LC50: > 6.82 mg/l, 4 h, dust/mist (rat, male)

Acute Dermal Toxicity

LD50: > 10,000 mg/kg (rabbit)

Skin Irritation

rabbit, OECD Test Guideline 404, Exposure Time: 24 h, Non-irritating

rabbit, Exposure Time: 24 h, Non-irritating

Eye Irritation

rabbit, OECD Test Guideline 405, Non-irritating

rabbit, Draize, Non-irritating

Sensitization

dermal: non-sensitizer (Guinea pig, Maximization Test)

dermal: non-sensitizer (Human, Patch Test)

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

dermal: non-sensitizer (Guinea pig, Maximization Test)

dermal: non-sensitizer (Human, Patch Test)

Repeated Dose Toxicity

28 Days, inhalation: NOAEL: 35 mg/m³, (Rat)

29 days, Oral: NOAEL: 24,000 mg/kg, (rat, male, daily)

up to 2 years, inhalation: NOAEL: 0.01 mg/l, (Rat, male/female, 6 hrs/day 5 days/week)

28 Days, inhalation: NOAEL: 35 mg/m³, (Rat)

Mutagenicity

Genetic Toxicity in Vitro:

Ames: negative (Salmonella typhimurium, Metabolic Activation: with/without)
Mammalian cell - gene mutation assay: negative (Mouse lymphoma cells (L5178Y/TK), Metabolic Activation: with/without)
Chromosome aberration test: negative (Chinese hamster ovary (CHO) cells, Metabolic Activation: with/without)
Ames: negative (Salmonella typhimurium, Metabolic Activation: with/without)

Genetic Toxicity in Vivo:
Drosophila SLRL test: negative (Drosophila melanogaster)
negative

Cytogenetic assay: negative (Mouse, male, intraperitoneal)
negative

Drosophila SLRL test: negative (Drosophila melanogaster)
negative

Carcinogenicity

Rat, Male/Female, inhalation According to IARC, several rat inhalation and intratracheal installation studies using titanium dioxide have shown increases in benign and malignant lung tumors. Reviewed human exposure data did not suggest an association between occupational exposure to titanium dioxide and risk for cancer. Additionally, the IARC working group determined that, "No significant exposure to titanium dioxide is thought to occur during the use of products in which titanium dioxide is bound to other material, such as in paints." Rat, Male/Female, inhalation According to IARC, several rat inhalation and intratracheal installation studies using titanium dioxide have shown increases in benign and malignant lung tumors. Reviewed human exposure data did not suggest an association between occupational exposure to titanium dioxide and risk for cancer. Additionally, the IARC working group determined that, "No significant exposure to titanium dioxide is thought to occur during the use of products in which titanium dioxide is bound to other material, such as in paints."

Other Relevant Toxicity Information

May cause irritation of respiratory tract.

Toxicity Data for: Acrylated Resin

Eye Irritation

Irritating to eyes.

Toxicity Data for: Tripropylene Glycol Diacrylate

Acute Oral Toxicity

LD50: 6,200 mg/kg (rat)

Acute Dermal Toxicity

LD50: > 2,000 mg/kg (rabbit, male/female) (OECD Test Guideline 402)

Skin Irritation

rabbit, irritating

Eye Irritation

rabbit, irritating

Sensitization

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

Repeated Dose Toxicity

Oral: NOAEL: 375, (rat, male/female, daily)

Dermal: NOAEL: 66,7, (rat, male/female, 5 days/week)

Mutagenicity

Genetic Toxicity in Vitro:

In vitro mammalian cell gene mutation test: negative (Chinese hamster ovary (CHO) cells, Metabolic Activation: with/without)

In vitro mammalian cell gene mutation test: positive (Mouse lymphoma cells, Metabolic Activation: with/without)

Genetic Toxicity in Vivo:

In vivo micronucleus test: negative (Mouse, male/female, intraperitoneal)
negative

In vivo micronucleus test: negative (Mouse, female, intraperitoneal)
negative

Carcinogenicity

Mouse, male, Dermal, 2 times/week

NOAEL: > 25mg/kg bw/day

Toxicity to Reproduction/Fertility

Oral, daily, (rat, male/female) Oral, daily, (rat, male/female)

Developmental Toxicity/Teratogenicity

rat, female, Oral, daily, NOAEL (maternal): > 375 rabbit, female, Oral, daily, NOAEL (maternal): 450 rat, female, Oral, daily, NOAEL (teratogenicity): 250, NOAEL (maternal): 250

Other Relevant Toxicity Information

May cause irritation of respiratory tract.

Toxicity Data for: 2-methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-one

Acute Oral Toxicity

LD50: 1,984 mg/kg (rat, male/female) (OECD Test Guideline 401)

Acute Dermal Toxicity

LD50: > 2,000 mg/kg (rabbit, male/female) (OECD Test Guideline 402)

Skin Irritation

rabbit, OECD Test Guideline 404, non-irritant

Eye Irritation

rabbit, OECD Test Guideline 405, slight irritant

Sensitization

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

Respiratory sensitization:

no data available

Repeated Dose Toxicity

Oral: NOAEL: 100 mg/kg, (rat, male/female, daily)

Mutagenicity

Genetic Toxicity in Vitro:

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

Chromosome aberration test in vitro: negative (Chinese hamster V79 cell line, Metabolic Activation: with/without)

In vitro mammalian cell gene mutation test: negative (mouse lymphoma cells, Metabolic Activation: with/without)

Genetic Toxicity in Vivo:

In vivo micronucleus test: negative (hamster, male/female, Oral)
negative

Toxicity to Reproduction/Fertility

Oral, daily, (rat, male/female)

Developmental Toxicity/Teratogenicity

rat, male and female, Oral, daily, NOAEL (maternal): 40 mg/kg,

Toxicity Data for: Bis(2,4,6-Trimethylbenzoyl)phenylphosphine oxide**Acute Oral Toxicity**

LD50: > 2,000 mg/kg (rat)

Acute Dermal Toxicity

LD50: > 2,000 mg/kg (rat)

Skin Irritation

Non-irritating

Eye Irritation

rabbit, non-irritant

Sensitization

dermal: sensitizer (Guinea pig)

Repeated Dose Toxicity

28 days, Oral: NOAEL: 1,000 mg/kg, (rat)

There were no adverse effects seen at highest dose tested.

Mutagenicity

Genetic Toxicity in Vitro:

Ames: Negative results were reported in various in vitro studies.

Toxicity Data for: Aluminum hydroxide**Acute Oral Toxicity**

LD50: > 2,000 mg/kg (rat, female) (OECD Test Guideline 423)

Skin Irritation

rabbit, OECD Test Guideline 404, Non-irritating

Eye Irritation

rabbit, OECD Test Guideline 405, Slightly irritating

Sensitization

Respiratory sensitization: negative (Mouse)

Studies of a comparable product.

Repeated Dose Toxicity

28 Days, Oral: NOAEL: 14,470 ppm, (rat, male)

Mutagenicity

Genetic Toxicity in Vitro:

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

Activation: with/without)

Genetic Toxicity in Vivo:

Micronucleus Assay: negative (rat, male/female, Oral)

negative

Developmental Toxicity/Teratogenicity

rat, female, oral, NOAEL (teratogenicity): 1,000 mg/kg, No Teratogenic effects observed at doses tested.

No fetotoxicity observed at doses tested.rat, female, oral, GD 6-15, daily, NOAEL (teratogenicity): 266 mg/kg, No Teratogenic effects observed at doses tested.

No fetotoxicity observed at doses tested.

Carcinogenicity:

1,1,1-trimethylol propane triacrylate

IARC - Overall evaluation: 2B Possibly carcinogenic to humans.

Titanium dioxide (Rutile)

IARC - Overall evaluation: 2B Possibly carcinogenic to humans.

12. Ecological Information

Ecological Data for: Cablelite 751-012 Aqua

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

Ecological Data for 1,1,1-trimethylol propane triacrylate

Biodegradation

aerobic, 82 - 90 %, Exposure time: 28 d, i.e. readily biodegradable

Bioaccumulation

123 BCF

Accumulation in aquatic organisms is unlikely.

Acute and Prolonged Toxicity to Fish

LC50: 0.87 mg/l (Danio rerio (zebra fish), 96 h)

Acute Toxicity to Aquatic Invertebrates

LC50: 19.9 mg/l (Daphnia magna (Water flea), 48 h)

Toxicity to Aquatic Plants

EC50: 18.8 mg/l, (Desmodesmus subspicatus (Green algae), 72 h)

ErC50: 4.86 mg/l, (scenedesmus subspicatus, 72 h)

EC50: 18.8 mg/l, (Desmodesmus subspicatus (Green algae), 72 h)

EC10: 1.9 mg/l, (Desmodesmus subspicatus (Green algae), 72 h)

Toxicity to Microorganisms

EC20: 625 mg/l, (activated sludge, 0.5 h)

Ecological Data for Pentaerythritol Tetracrylate

Additional Ecotoxicological Remarks

No data available for this product.

Ecological Data for Pentaerythritol Triacrylate

Biodegradation

6 - 14 %, Exposure time: 28 d, i.e. not readily degradable

Acute and Prolonged Toxicity to Fish

LC50: 3.2 mg/l (Cyprinus carpio (Carp), 96 h)

NOEC: 2.2 mg/l (Cyprinus carpio (Carp), 96 h)

Acute Toxicity to Aquatic Invertebrates

EC50: 13 mg/l (Daphnia magna (Water flea), 48 h)

NOEC: 10.3 mg/l (Daphnia magna (Water flea), 48 h)

Toxicity to Aquatic Plants

ErC50: 12 mg/l, End Point: Growth inhibition (Pseudokirchneriella subcapitata (green algae), 96 h)

Ecological Data for 1,6-Hexanedioldiacrylate

Biodegradation

60 - 70 %, Exposure time: 28 d, i.e. inherently degradable

60 - 70 %, Exposure time: 28 d, i.e. readily biodegradable

Acute and Prolonged Toxicity to Fish

LC50: 0.38 mg/l (Oryzias latipes (Japanese medaka), 96 h)

Acute Toxicity to Aquatic Invertebrates

EC50: 2.7 mg/l (Daphnia magna (Water flea), 48 h)

Toxicity to Aquatic Plants

EC50: 2.33 mg/l, (Selenastrum capricornutum (green algae), 72 h)

NOEC: 0.9 mg/l, (Selenastrum capricornutum (green algae), 72 h)

Toxicity to Microorganisms

EC50: 270 mg/l, (activated sludge, 30 min)

Ecological Data for Titanium dioxide (Rutile)

Acute and Prolonged Toxicity to Fish

LC0: > 1,000 mg/l (Golden orfe (Leuciscus idus), 48 h)

Acute Toxicity to Aquatic Invertebrates

EC0: > 3 mg/l (Water flea (Daphnia magna))

Toxicity to Microorganisms

EC0: > 10,000 mg/l, (Pseudomonas fluorescens, 24 h)

Ecological Data for Tripropylene Glycol Diacrylate

Biodegradation

40 - 50 %, i.e. not readily degradable

Bioaccumulation

Accumulation in aquatic organisms is unlikely.

Acute and Prolonged Toxicity to Fish

LC50: 1 - 10 mg/l (Leuciscus idus (Golden orfe), 96 h)

Acute Toxicity to Aquatic Invertebrates

EC50: 10 - 100 mg/l (Daphnia magna (Water flea), 48 h)

Toxicity to Aquatic Plants

ErC50: 10 - 100 mg/l, (scenedesmus subspicatus, 72 h)

Toxicity to Microorganisms

EC50: > 10,000 mg/l, (Pseudomonas putida, 0.5 h)

Ecological Data for 2-methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-one

Biodegradation

aerobic, <= 1 %, Exposure time: 28 d, i.e. not readily degradable

Bioaccumulation

Oryzias latipes (Orange-red killifish), Exposure time: 56 d, < 10 BCF

Acute and Prolonged Toxicity to Fish

LC50: 9 mg/l (Danio rerio (zebra fish), 96 h)

Acute Toxicity to Aquatic Invertebrates

EC50: 15.3 mg/l (Daphnia magna (Water flea), 24 h)

Toxicity to Aquatic Plants

EC50: 1.6 mg/l, (Desmodesmus subspicatus (Green algae), 72 h)

NOEC: 0.86 mg/l, (Desmodesmus subspicatus (Green algae), 72 h)

Toxicity to Microorganisms

EC50: > 100 mg/l, (activated sludge, 3 h)

Ecological Data for Bis(2,4,6-Trimethylbenzoyl)phenylphosphine oxide

Biodegradation

Exposure time: 28 d, Not readily biodegradable.

Bioaccumulation

Cyprinus carpio (Carp), < 5 BCF

Acute and Prolonged Toxicity to Fish

LC50: > 90 ppm (Zebra fish (Brachydanio rerio), 96 h)

No harmful effect at saturation concentration.

Acute Toxicity to Aquatic Invertebrates

EC50: > 1.175 mg/l (Water flea (Daphnia magna), 48 h)

No effects seen at saturation concentration.

Toxicity to Aquatic Plants

EC50: 0.26 mg/l, (Green algae (Scenedesmus subspicatus), 72 h)

No effects seen at saturation concentration.

Toxicity to Microorganisms

EC50: > 100 mg/l, (Wastewater bacteria)

Ecological Data for Aluminum hydroxide

Additional Ecotoxicological Remarks

No data available for this component.

13. Disposal Considerations

Waste Disposal Method

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

Empty Container Precautions

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

14. Transportation Information

Land transport (DOT)

Non-Regulated

Sea transport (IMDG)

Proper Shipping Name:

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains BADGE epoxy acrylate, Trimethylolpropane triacrylate)

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 BADGE epoxy acrylate, Trimethylolpropane triacrylate)

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.

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

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

None

Material Name: Cablelite 751-012 Aqua

Material Number: 50025103

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> |
|-----------------------------|--|------------------------|
| 15 - 40% | Epoxy Acrylate | 55818-57-0 |
| 10 - 30% | 1,1,1-trimethylol propane triacrylate | 15625-89-5 |
| >=1% | Aliphatic urethane acrylate | CAS# is a trade secret |
| 7 - 13% | Pentaerythritol Tetracrylate | 4986-89-4 |
| 5 - 10% | Tripropylene Glycol Diacrylate | 42978-66-5 |
| 3 - 7% | 1,6-Hexanedioldiacrylate | 13048-33-4 |
| 3 - 7% | Titanium dioxide (Rutile) | 13463-67-7 |
| 3 - 7% | Acrylated Resin | CAS# is a trade secret |
| 3 - 7% | Pentaerythritol Triacrylate | 3524-68-3 |
| 1 - 5% | 2-Benzoyl-2-hydroxypropane | 7473-98-5 |
| 1 - 5% | 2-methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-one | 71868-10-5 |
| 1 - 5% | Bis(2,4,6-Trimethylbenzoyl)phenylphosphine oxide | 162881-26-7 |

California Proposition 65 List:

| <u>Concentration</u> | <u>Components</u> | <u>CAS-No.</u> |
|-----------------------------|---------------------------------------|-----------------------|
| 10 - 30% | 1,1,1-trimethylol propane triacrylate | 15625-89-5 |
| 3 - 7% | Titanium dioxide (Rutile) | 13463-67-7 |
| <100 ppm | Toluene | 108-88-3 |

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

The method of hazard communication for Covestro LLC is comprised of product labels and safety data sheets. Safety data sheets for all of our products and general product declarations are available for download at www.productsafetyfirst.covestro.com.

Contact: Product Safety Department
Telephone: (412) 413-2835
Version Date: 11/16/2023
SDS Version: 1.5

Information contained in this Safety Data Sheet (SDS) is believed to be accurate but is furnished without warranty, express or implied, including warranties of merchantability or fitness for a particular purpose. The information relates only to the specific material designated herein. Covestro LLC assumes no legal responsibility for use of or reliance upon the information in this SDS and such information shall in no case be considered a part of our terms and conditions of sale. The user is responsible for determining whether the Covestro product is suitable for user's method of use or application. Covestro is not liable for any failure to observe the precautionary measures described in this SDS or for any misuse of the product.