# SAFETY DATA SHEET

**According to 29 CFR 1910.1200**

EFX100

## Section 1. Identification

**Product name** : DUPLI-COLOR® EFFEX
Clear

**Product code** : EFX100

**Other means of identification** : Not available.

**Product type** : Aerosol.

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

Paint or paint related material.

**Manufacturer** : Dupli-Color Products Company
101 W. Prospect Avenue
Cleveland, OH 44115

**Emergency telephone number of the company** : (216) 566-2917

**Product Information Telephone Number** : (800) 247-3270

**Transportation Emergency Telephone Number** : (800) 424-9300

## Section 2. Hazards identification

**OSHA/HCS status** : This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

**Classification of the substance or mixture** : AEROSOLS - Category 1
SKIN CORROSION/IRRITATION - Category 2
SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A
SKIN SENSITIZATION - Category 1
TOXIC TO REPRODUCTION - Category 1B
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3

Percentage of the mixture consisting of ingredient(s) of unknown acute toxicity: 11.1% (oral), 19.3% (dermal), 28.4% (inhalation)

**GHS label elements**

**Hazard pictograms** :



**Signal word** : Danger

**Hazard statements** : Extremely flammable aerosol. Pressurized container: may burst if heated.
Causes skin irritation.
May cause an allergic skin reaction.
Causes serious eye irritation.
May cause drowsiness or dizziness.
May damage fertility or the unborn child.

# Section 2. Hazards identification

## Precautionary statements

**General** : Keep out of reach of children. If medical advice is needed, have product container or label at hand.

**Prevention** : Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves, protective clothing and eye or face protection. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not spray on an open flame or other ignition source. Use only outdoors or in a well-ventilated area. Avoid breathing dust or mist. Wash thoroughly after handling. Do not pierce or burn, even after use.

**Response** : IF exposed or concerned: Get medical advice or attention. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor if you feel unwell. IF ON SKIN: Wash with plenty of water. If skin irritation or rash occurs: Get medical advice or attention. Take off contaminated clothing and wash it before reuse. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice or attention.

**Storage** : Store locked up. Protect from sunlight. Do not expose to temperatures exceeding 122 °F/50 °C. Store in a well-ventilated place. Keep container tightly closed.

**Disposal** : Dispose of contents and container in accordance with all local, regional, national and international regulations.

**Supplemental label elements**

DELAYED EFFECTS FROM LONG TERM OVEREXPOSURE. Contains solvents which can cause permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling the contents can be harmful or fatal. WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

Please refer to the SDS for additional information. Keep out of reach of children. Keep upright in a cool, dry place. Do not discard empty can in trash compactor.

**Hazards not otherwise classified** : None known.

**Hazards identified when used** : No known significant effects or critical hazards.

# Section 3. Composition/information on ingredients

**Substance/mixture** : Mixture

**Other means of identification** : Not available.

## CAS number/other identifiers

| Ingredient name | % by weight | Identifiers |
|---|---|---|
| Acetone | ≥25 - ≤50 | 67-64-1 |
| Propane | ≥10 - ≤25 | 74-98-6 |
| Isobutyl Acetate | ≥10 - ≤25 | 110-19-0 |
| Methyl Ethyl Ketone | ≤10 | 78-93-3 |
| Butane | ≤10 | 106-97-8 |
| Ethyl 3-Ethoxypropionate | ≤10 | 763-69-9 |
| Ethanol | ≤3 | 64-17-5 |
| Cyclohexane | <1 | 110-82-7 |
| Toluene | ≤0.3 | 108-88-3 |
| Bis(pentamethyl-4-piperidyl)sebacate | ≤0.3 | 41556-26-7 |

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

**There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified and hence require reporting in this section.**

**Occupational exposure limits, if available, are listed in Section 8.**

# Section 4. First aid measures

## Description of necessary first aid measures

**Eye contact** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.

**Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If necessary, call a poison center or physician. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

**Skin contact** : Wash with plenty of soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse.

**Ingestion** : Wash out mouth with water. Remove dentures if any. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. If necessary, call a poison center or physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

## Most important symptoms/effects, acute and delayed

### Potential acute health effects

**Eye contact** : Causes serious eye irritation.

**Inhalation** : Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness.

**Skin contact** : Causes skin irritation. May cause an allergic skin reaction.

**Ingestion** : Can cause central nervous system (CNS) depression.

### Over-exposure signs/symptoms

**Eye contact** : Adverse symptoms may include the following:
pain or irritation
watering
redness

**Inhalation** : Adverse symptoms may include the following:
respiratory tract irritation
coughing
nausea or vomiting
headache
drowsiness/fatigue
dizziness/vertigo
unconsciousness
reduced fetal weight
increase in fetal deaths
skeletal malformations

# Section 4. First aid measures

**Skin contact** : Adverse symptoms may include the following:
irritation
redness
reduced fetal weight
increase in fetal deaths
skeletal malformations

**Ingestion** : Adverse symptoms may include the following:
reduced fetal weight
increase in fetal deaths
skeletal malformations

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

**Notes to physician** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

**Specific treatments** : No specific treatment.

**Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

**See toxicological information (Section 11)**

# Section 5. Fire-fighting measures

**Extinguishing media**

**Suitable extinguishing media** : Use an extinguishing agent suitable for the surrounding fire.

**Unsuitable extinguishing media** : None known.

**Specific hazards arising from the chemical** : Extremely flammable aerosol. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Gas may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back, causing fire or explosion. Bursting aerosol containers may be propelled from a fire at high speed.

**Hazardous thermal decomposition products** : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide

**Special protective actions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

**Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

**Remark** : Flammable aerosol.

## Section 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

**For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. In the case of aerosols being ruptured, care should be taken due to the rapid escape of the pressurized contents and propellant. If a large number of containers are ruptured, treat as a bulk material spillage according to the instructions in the clean-up section. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing dust or mist. Put on appropriate personal protective equipment.

**For emergency responders** : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

**Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

### Methods and materials for containment and cleaning up

**Small spill** : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Absorb with an inert material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

**Large spill** : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations.

## Section 7. Handling and storage

### Precautions for safe handling

**Protective measures** : Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use. Avoid exposure - obtain special instructions before use. Avoid exposure during pregnancy. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing gas. Avoid breathing vapor or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Empty containers retain product residue and can be hazardous.

**Advice on general occupational hygiene** : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

**Conditions for safe storage, including any incompatibilities** : Store in accordance with local regulations. Store away from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Eliminate all ignition sources. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

# Section 8. Exposure controls/personal protection

## Control parameters

### Occupational exposure limits (OSHA United States)

| Ingredient name | CAS # | Exposure limits |
|---|---|---|
| Acetone | 67-64-1 | **ACGIH TLV (United States, 1/2025)** A4.<br>TWA 8 hours: 250 ppm.<br>STEL 15 minutes: 500 ppm.<br>**NIOSH REL (United States, 10/2020)**<br>TWA 10 hours: 250 ppm.<br>TWA 10 hours: 590 mg/m³.<br>**OSHA PEL (United States, 5/2018)**<br>TWA 8 hours: 1000 ppm.<br>TWA 8 hours: 2400 mg/m³. |
| Propane | 74-98-6 | **ACGIH TLV (United States, 1/2025)** Oxygen depletion [asphyxiant] , Explosive potential.<br>**NIOSH REL (United States, 10/2020)**<br>TWA 10 hours: 1000 ppm.<br>TWA 10 hours: 1800 mg/m³.<br>**OSHA PEL (United States, 5/2018)**<br>TWA 8 hours: 1000 ppm.<br>TWA 8 hours: 1800 mg/m³. |
| Isobutyl Acetate | 110-19-0 | **ACGIH TLV (United States, 1/2025) [Butyl acetates]**<br>STEL 15 minutes: 150 ppm.<br>TWA 8 hours: 50 ppm.<br>**NIOSH REL (United States, 10/2020)**<br>TWA 10 hours: 150 ppm.<br>TWA 10 hours: 700 mg/m³.<br>**OSHA PEL (United States, 5/2018)**<br>TWA 8 hours: 150 ppm.<br>TWA 8 hours: 700 mg/m³. |
| Methyl Ethyl Ketone | 78-93-3 | **ACGIH TLV (United States, 1/2025)**<br>Absorbed through skin.<br>TWA 8 hours: 75 ppm.<br>STEL 15 minutes: 150 ppm.<br>**NIOSH REL (United States, 10/2020)**<br>TWA 10 hours: 200 ppm.<br>TWA 10 hours: 590 mg/m³.<br>STEL 15 minutes: 300 ppm.<br>STEL 15 minutes: 885 mg/m³.<br>**OSHA PEL (United States, 5/2018)**<br>TWA 8 hours: 200 ppm.<br>TWA 8 hours: 590 mg/m³. |
| Butane | 106-97-8 | **ACGIH TLV (United States, 1/2025) [Butane]** Explosive potential.<br>STEL 15 minutes: 1000 ppm.<br>**NIOSH REL (United States, 10/2020)**<br>TWA 10 hours: 800 ppm.<br>TWA 10 hours: 1900 mg/m³. |
| Ethyl 3-Ethoxypropionate | 763-69-9 | None. |
| Ethanol | 64-17-5 | **ACGIH TLV (United States, 1/2025)** A3.<br>STEL 15 minutes: 1000 ppm.<br>**NIOSH REL (United States, 10/2020)**<br>TWA 10 hours: 1000 ppm.<br>TWA 10 hours: 1900 mg/m³.<br>**OSHA PEL (United States, 5/2018)** |

| | | |
|---|---|---|
| | | TWA 8 hours: 1000 ppm.<br>TWA 8 hours: 1900 mg/m³. |
| Cyclohexane | 110-82-7 | **ACGIH TLV (United States, 1/2025)**<br>TWA 8 hours: 100 ppm.<br>**NIOSH REL (United States, 10/2020)**<br>TWA 10 hours: 300 ppm.<br>TWA 10 hours: 1050 mg/m³.<br>**OSHA PEL (United States, 5/2018)**<br>TWA 8 hours: 300 ppm.<br>TWA 8 hours: 1050 mg/m³. |
| Toluene | 108-88-3 | **ACGIH TLV (United States, 1/2025)** A4. Ototoxicant.<br>TWA 8 hours: 20 ppm.<br>**OSHA PEL Z2 (United States, 2/2013)**<br>TWA 8 hours: 200 ppm.<br>CEIL: 300 ppm.<br>AMP 10 minutes: 500 ppm.<br>**NIOSH REL (United States, 10/2020)**<br>TWA 10 hours: 100 ppm.<br>TWA 10 hours: 375 mg/m³.<br>STEL 15 minutes: 150 ppm.<br>STEL 15 minutes: 560 mg/m³. |
| Bis(pentamethyl-4-piperidyl)sebacate | 41556-26-7 | None. |

**Occupational exposure limits (Canada)**

| Ingredient name | CAS # | Exposure limits |
|---|---|---|
| acetone | 67-64-1 | **CA Saskatchewan Provincial (Canada, 4/2021)**<br>STEL 15 minutes: 750 ppm.<br>TWA 8 hours: 500 ppm.<br>**CA British Columbia Provincial (Canada, 8/2025)**<br>TWA 8 hours: 250 ppm.<br>STEL 15 minutes: 500 ppm.<br>**CA Ontario Provincial (Canada, 6/2019)**<br>TWA 8 hours: 250 ppm.<br>STEL 15 minutes: 500 ppm.<br>**CA Quebec Provincial (Canada, 2/2024)**<br>TWAEV 8 hours: 250 ppm.<br>STEV 15 minutes: 500 ppm.<br>**CA Alberta Provincial (Canada, 3/2023)**<br>OEL 8 hours: 1200 mg/m³.<br>OEL 15 minutes: 1800 mg/m³.<br>OEL 8 hours: 500 ppm.<br>OEL 15 minutes: 750 ppm. |
| Normal propane | 74-98-6 | **CA Saskatchewan Provincial (Canada, 4/2021)**<br>STEL 15 minutes: 1250 ppm.<br>TWA 8 hours: 1000 ppm.<br>**CA British Columbia Provincial (Canada, 8/2025)** Oxygen depletion [asphyxiant] , Explosive potential.<br>**CA Ontario Provincial (Canada, 6/2019)** Oxygen depletion [asphyxiant] , Explosive potential.<br>**CA Quebec Provincial (Canada, 2/2024)** |

## Section 8. Exposure controls/personal protection

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|---|---|---|
| | | Oxygen depletion [asphyxiant] , Explosive potential.<br>**CA Alberta Provincial (Canada, 3/2023)**<br>OEL 8 hours: 1000 ppm. |
| Isobutyl acetate | 110-19-0 | **CA Saskatchewan Provincial (Canada, 4/2021)**<br>STEL 15 minutes: 188 ppm.<br>TWA 8 hours: 150 ppm.<br>**CA British Columbia Provincial (Canada, 8/2025) [butyl acetate, all isomers]**<br>STEL 15 minutes: 150 ppm.<br>TWA 8 hours: 50 ppm.<br>**CA Ontario Provincial (Canada, 6/2019) [butyl acetates, all isomers]**<br>STEL 15 minutes: 150 ppm.<br>TWA 8 hours: 50 ppm.<br>**CA Quebec Provincial (Canada, 2/2024) [butyl acetates]**<br>STEV 15 minutes: 150 ppm.<br>TWAEV 8 hours: 50 ppm.<br>**CA Alberta Provincial (Canada, 3/2023)**<br>OEL 8 hours: 150 ppm.<br>OEL 8 hours: 713 mg/m³. |
| Methyl ethyl ketone | 78-93-3 | **CA Saskatchewan Provincial (Canada, 4/2021)**<br>STEL 15 minutes: 300 ppm.<br>TWA 8 hours: 200 ppm.<br>**CA British Columbia Provincial (Canada, 8/2025)** Repr. Absorbed through skin.<br>TWA 8 hours: 50 ppm.<br>STEL 15 minutes: 100 ppm.<br>**CA Ontario Provincial (Canada, 6/2019)**<br>TWA 8 hours: 200 ppm.<br>STEL 15 minutes: 300 ppm.<br>**CA Quebec Provincial (Canada, 2/2024)**<br>TWAEV 8 hours: 50 ppm.<br>TWAEV 8 hours: 150 mg/m³.<br>STEV 15 minutes: 100 ppm.<br>STEV 15 minutes: 300 mg/m³.<br>**CA Alberta Provincial (Canada, 3/2023)**<br>OEL 15 minutes: 300 ppm.<br>OEL 8 hours: 200 ppm.<br>OEL 8 hours: 590 mg/m³.<br>OEL 15 minutes: 885 mg/m³. |
| Butane | 106-97-8 | **CA Saskatchewan Provincial (Canada, 4/2021) [Aliphatic hydrocarbon gases, Alkane [C1-C4]]**<br>STEL 15 minutes: 1250 ppm.<br>TWA 8 hours: 1000 ppm.<br>**CA Saskatchewan Provincial (Canada, 4/2021) [Butane]**<br>STEL 15 minutes: 1250 ppm.<br>TWA 8 hours: 1000 ppm.<br>**CA British Columbia Provincial (Canada, 8/2025) [butane, all isomers]** Explosive potential.<br>STEL 15 minutes: 1000 ppm. |

## Section 8. Exposure controls/personal protection

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|---|---|---|
| Ethyl alcohol | 64-17-5 | **CA Ontario Provincial (Canada, 6/2019) [Butane, All isomers]** Explosive potential.<br>STEL 15 minutes: 1000 ppm.<br>**CA Quebec Provincial (Canada, 2/2024)**<br>TWAEV 8 hours: 800 ppm.<br>TWAEV 8 hours: 1900 mg/m³.<br>**CA Alberta Provincial (Canada, 3/2023)**<br>OEL 8 hours: 1000 ppm.<br>**CA Saskatchewan Provincial (Canada, 4/2021)**<br>STEL 15 minutes: 1250 ppm.<br>TWA 8 hours: 1000 ppm.<br>**CA British Columbia Provincial (Canada, 8/2025)**<br>STEL 15 minutes: 1000 ppm.<br>**CA Ontario Provincial (Canada, 6/2019)**<br>STEL 15 minutes: 1000 ppm.<br>**CA Quebec Provincial (Canada, 2/2024)** C3.<br>STEV 15 minutes: 1000 ppm.<br>**CA Alberta Provincial (Canada, 3/2023)**<br>OEL 8 hours: 1000 ppm.<br>OEL 8 hours: 1880 mg/m³. |
| toluene | 108-88-3 | **CA Saskatchewan Provincial (Canada, 4/2021)** Absorbed through skin.<br>STEL 15 minutes: 60 ppm.<br>TWA 8 hours: 50 ppm.<br>**CA British Columbia Provincial (Canada, 8/2025)** Repr.<br>TWA 8 hours: 20 ppm.<br>**CA Ontario Provincial (Canada, 6/2019)**<br>TWA 8 hours: 20 ppm.<br>**CA Quebec Provincial (Canada, 2/2024)** Ototoxicant.<br>TWAEV 8 hours: 20 ppm.<br>**CA Alberta Provincial (Canada, 3/2023)** Absorbed through skin.<br>OEL 8 hours: 50 ppm.<br>OEL 8 hours: 188 mg/m³. |

**Occupational exposure limits (Mexico)**

| Ingredient name | CAS # | Exposure limits |
|---|---|---|
| Acetone | 67-64-1 | **NOM-010-STPS-2014 (Mexico, 4/2016)** A4.<br>TWA 8 hours: 500 ppm.<br>STEL 15 minutes: 750 ppm. |
| Isobutyl Acetate | 110-19-0 | **NOM-010-STPS-2014 (Mexico, 4/2016)**<br>TWA 8 hours: 150 ppm. |
| Methyl Ethyl Ketone | 78-93-3 | **NOM-010-STPS-2014 (Mexico, 4/2016)**<br>TWA 8 hours: 200 ppm.<br>STEL 15 minutes: 300 ppm. |
| Ethanol | 64-17-5 | **NOM-010-STPS-2014 (Mexico, 4/2016)** A3.<br>STEL 15 minutes: 1000 ppm. |
| Toluene | 108-88-3 | **NOM-010-STPS-2014 (Mexico, 4/2016)** A4.<br>TWA 8 hours: 20 ppm. |

**Biological exposure indices (United States)**

# Section 8. Exposure controls/personal protection

| Ingredient name | Exposure indices |
|---|---|
| Acetone | **ACGIH BEI (United States, 1/2025)**<br>BEI: 25 mg/l, acetone [in urine]. Sampling time: end of shift. |
| Methyl Ethyl Ketone | **ACGIH BEI (United States, 1/2025)**<br>BEI: 2 mg/l, methyl ethyl ketone [in urine]. Sampling time: end of shift. |
| Cyclohexane | **ACGIH BEI (United States, 1/2025)**<br>BEI: 50 mg/g creatinine, 1,2-cyclohexanediol [in urine]. Sampling time: end of shift at end of workweek. |
| Toluene | **ACGIH BEI (United States, 1/2025)**<br>BEI: 0.03 mg/l, toluene [in urine]. Sampling time: end of shift.<br>BEI: 0.3 mg/g creatinine, o-cresol [in urine]. Sampling time: end of shift.<br>BEI: 0.02 mg/l, toluene [in blood]. Sampling time: prior to last shift of workweek. |

**Biological exposure indices (Canada)**

No exposure indices known.

**Biological exposure indices (Mexico)**

| Ingredient name | Exposure indices |
|---|---|
| Acetone | **Official Mexican STANDARD NOM-047-SSA1-2011, Environmental Health-Biological exposure indices for personnel occupationally exposed to chemical substances. (Mexico, 6/2012)**<br>BEI: 50 mg/L [non-specific.The determinant is nonspecific, since it can be found after exposure to other chemicals.], acetone [in urine]. Sampling time: at the end of the work shift. |
| Methyl Ethyl Ketone | **Official Mexican STANDARD NOM-047-SSA1-2011, Environmental Health-Biological exposure indices for personnel occupationally exposed to chemical substances. (Mexico, 6/2012)**<br>BEI: 2 mg/L, MEK [in urine]. Sampling time: at the end of the work shift. |
| Toluene | **Official Mexican STANDARD NOM-047-SSA1-2011, Environmental Health-Biological exposure indices for personnel occupationally exposed to chemical substances. (Mexico, 6/2012)**<br>BEI: 0.05 mg/L, toluene [in blood]. Sampling time: sample time not specified.<br>BEI: 1.6 g/g creatinine [Basal level.The determinant may be present in the biological sample obtained from subjects who have not |

| | |
|---|---|
| | been occupationally exposed, at a concentration that could affect the interpretation of the results. These background levels are included in the valu; non-specific.The determinant is nonspecific, since it can be found after exposure to other chemicals.], hippuric acid [in urine]. Sampling time: at the end of the work shift.<br>BEI: 0.5 mg/L [Basal level.The determinant may be present in the biological sample obtained from subjects who have not been occupationally exposed, at a concentration that could affect the interpretation of the results. These background levels are included in the valu], o-cresol [in urine]. Sampling time: at the end of the work shift. |

**Appropriate engineering controls** : Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

**Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

**Individual protection measures**

**Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

**Eye/face protection** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.

**Skin protection**

**Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

**Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.

**Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

## Section 8. Exposure controls/personal protection

**Respiratory protection** : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

## Section 9. Physical and chemical properties

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

**Appearance**

**Physical state** : Liquid.

**Color** : Clear.

**Odor** : Not available.

**Odor threshold** : Not available.

**pH** : 7

**Melting point/freezing point** : Not available.

**Boiling point or initial boiling point and boiling range** : Not available.

**Flash point** : Closed cup: -29°C (-20.2°F) [Pensky-Martens Closed Cup]

**Evaporation rate** : 5.6 (butyl acetate = 1)

**Flammability** : Flammable aerosol.

**Lower and upper explosion limit/flammability limit** : Lower: 1.05%
Upper: 19%

**Vapor pressure** : 101.3 kPa (760 mm Hg)

**Relative vapor density** : 1.5 [Air = 1]

**Relative density** : 0.75

**Density** : 0.75 g/cm³

**Solubility(ies)** :

| Media | Result |
|---|---|
| cold water | Not soluble |

**Partition coefficient: n-octanol/water** : Not applicable.

**Auto-ignition temperature** : Not available.

**Decomposition temperature** : Not available.

**Viscosity** : Dynamic (room temperature): Not available.
Kinematic (room temperature): Not available.
Kinematic (40°C (104°F)): <20.5 $mm^2/s$ (<20.5 cSt)

**Molecular weight** : Not applicable.

**Particle characteristics**

**Median particle size** : Not applicable.

**Aerosol product**

**Type of aerosol** : Spray

**Heat of combustion** : 29.338 kJ/g

## Section 10. Stability and reactivity

**Reactivity** : No specific test data related to reactivity available for this product or its ingredients.

**Chemical stability** : The product is stable.

**Possibility of hazardous reactions** : Under normal conditions of storage and use, hazardous reactions will not occur.

**Conditions to avoid** : Avoid all possible sources of ignition (spark or flame).

**Incompatible materials** : No specific data.

**Hazardous decomposition products** : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## Section 11. Toxicological information

### Information on toxicological effects

#### Acute toxicity

| Product/ingredient name | Result |
|---|---|
| Acetone | **Rat - Oral - LD50**<br>5800 mg/kg<br>Toxic effects: Behavioral - Altered sleep time (including change in righting reflex) Behavioral - Tremor |
| Isobutyl Acetate | **Rat - Oral - LD50**<br>13400 mg/kg<br>**Rabbit - Dermal - LD50**<br>>17400 mg/kg |
| Methyl Ethyl Ketone | **Rabbit - Dermal - LD50**<br>6480 mg/kg<br>**Rat - Oral - LD50**<br>2737 mg/kg |
| Butane | **Rat - Inhalation - LC50 Vapor**<br>658000 mg/m³ [4 hours] |
| Ethyl 3-Ethoxypropionate | **Rat - Oral - LD50**<br>3200 mg/kg<br>Toxic effects: Behavioral - Ataxia |
| Ethanol | **Rat - Oral - LD50**<br>7 g/kg<br>**Rat - Inhalation - LC50 Vapor**<br>124700 mg/m³ [4 hours] |
| Cyclohexane | **Rat - Oral - LD50**<br>6240 mg/kg<br>Toxic effects: Behavioral - Somnolence (general depressed activity) Gastrointestinal - Changes in structure or function of salivary glands Gastrointestinal - Hypermotility, diarrhea |
| Toluene | **Rat - Oral - LD50**<br>636 mg/kg<br>**Rat - Inhalation - LC50 Vapor**<br>49 g/m³ [4 hours] |

**Conclusion/Summary [Product]** : Not available.

# Section 11. Toxicological information

## Skin corrosion/irritation

| Product/ingredient name | Result |
|---|---|
| Acetone | **Rabbit - Skin - Mild irritant**<br>Duration of treatment/exposure: 24 hours<br>Amount/concentration applied: 500 mg<br>**Rabbit - Skin - Mild irritant**<br>Amount/concentration applied: 395 mg |
| Isobutyl Acetate | **Rabbit - Skin - Mild irritant**<br>Amount/concentration applied: 500 mg<br>**Rabbit - Skin - Moderate irritant**<br>Duration of treatment/exposure: 24 hours<br>Amount/concentration applied: 500 mg |
| Methyl Ethyl Ketone | **Rabbit - Skin - Mild irritant**<br>Duration of treatment/exposure: 24 hours<br>Amount/concentration applied: 14 mg<br>**Rabbit - Skin - Mild irritant**<br>Duration of treatment/exposure: 24 hours<br>Amount/concentration applied: 402 mg<br>**Rabbit - Skin - Moderate irritant**<br>Duration of treatment/exposure: 24 hours<br>Amount/concentration applied: 500 mg |
| Ethyl 3-Ethoxypropionate | **Rabbit - Skin - Mild irritant**<br>Duration of treatment/exposure: 24 hours<br>Amount/concentration applied: 500 mg |
| Ethanol | **Rabbit - Skin - Mild irritant**<br>Amount/concentration applied: 400 mg<br>**Rabbit - Skin - Moderate irritant**<br>Duration of treatment/exposure: 24 hours<br>Amount/concentration applied: 20 mg |
| Toluene | **Pig - Skin - Mild irritant**<br>Duration of treatment/exposure: 24 hours<br>Amount/concentration applied: 250 uL<br>**Rabbit - Skin - Mild irritant**<br>Amount/concentration applied: 435 mg<br>**Rabbit - Skin - Moderate irritant**<br>Duration of treatment/exposure: 24 hours<br>Amount/concentration applied: 20 mg<br>**Rabbit - Skin - Moderate irritant**<br>Amount/concentration applied: 500 mg |

**Conclusion/Summary [Product]** : Not available.

## Serious eye damage/eye irritation

| Product/ingredient name | Result |
|---|---|
| Acetone | **Human - Eyes - Mild irritant**<br>Amount/concentration applied: 186300 ppm<br>**Rabbit - Eyes - Mild irritant**<br>Amount/concentration applied: 10 uL<br>**Rabbit - Eyes - Moderate irritant**<br>Duration of treatment/exposure: 24 hours<br>Amount/concentration applied: 20 mg<br>**Rabbit - Eyes - Severe irritant**<br>Amount/concentration applied: 20 mg |
| Isobutyl Acetate | **Rabbit - Eyes - Moderate irritant**<br>Duration of treatment/exposure: 24 hours |

# Section 11. Toxicological information

| | |
|---|---|
| | Amount/concentration applied: 500 mg |
| Ethanol | **Rabbit - Eyes - Mild irritant**<br>Duration of treatment/exposure: 24 hours<br>Amount/concentration applied: 500 mg<br>**Rabbit - Eyes - Moderate irritant**<br>Duration of treatment/exposure: 0.066666667 minutes<br>Amount/concentration applied: 100 mg<br>**Rabbit - Eyes - Moderate irritant**<br>Amount/concentration applied: 100 uL<br>**Rabbit - Eyes - Severe irritant**<br>Amount/concentration applied: 500 mg<br>**Rabbit - Eyes - Mild irritant**<br>Duration of treatment/exposure: 1 hours<br>Amount/concentration applied: 50 pph |
| Cyclohexane | **Rabbit - Eyes - Severe irritant**<br>Amount/concentration applied: 0.1 Ml |
| Toluene | **Rabbit - Eyes - Mild irritant**<br>Duration of treatment/exposure: 0.5 minutes<br>Amount/concentration applied: 100 mg<br>**Rabbit - Eyes - Mild irritant**<br>Amount/concentration applied: 870 ug<br>**Rabbit - Eyes - Severe irritant**<br>Duration of treatment/exposure: 24 hours<br>Amount/concentration applied: 2 mg<br>**Rabbit - Eyes - Severe irritant**<br>Amount/concentration applied: 0.1 Ml |

**Conclusion/Summary [Product]** : Not available.

## Respiratory corrosion/irritation

Not available.

**Conclusion/Summary [Product]** : Not available.

## Respiratory or skin sensitization

Not available.

### Skin

**Conclusion/Summary [Product]** : Not available.

### Respiratory

**Conclusion/Summary [Product]** : Not available.

## Germ cell mutagenicity

Not available.

**Conclusion/Summary [Product]** : Not available.

## Carcinogenicity

Not available.

# Section 11. Toxicological information

**Conclusion/Summary [Product]** : Not available.

## Classification

| Product/ingredient name | OSHA | IARC | NTP |
|---|---|---|---|
| Ethanol | - | 1 | - |
| Toluene | - | 3 | - |

## Reproductive toxicity

Not available.

**Conclusion/Summary [Product]** : Not available.

## Specific target organ toxicity (single exposure)

| Product/ingredient name | Result |
|---|---|
| Acetone | SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3 |
| Isobutyl Acetate | SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3 |
| Methyl Ethyl Ketone | SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3 |
| Ethanol | SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3 |
| Cyclohexane | SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3 |
| Toluene | SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3 |

## Specific target organ toxicity (repeated exposure)

| Product/ingredient name | Result |
|---|---|
| Toluene | SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2 |

## Aspiration hazard

| Product/ingredient name | Result |
|---|---|
| Cyclohexane | ASPIRATION HAZARD - Category 1 |
| Toluene | ASPIRATION HAZARD - Category 1 |

## Information on the likely routes of exposure

Not available.

## Potential acute health effects

**Eye contact** : Causes serious eye irritation.

**Inhalation** : Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness.

**Skin contact** : Causes skin irritation. May cause an allergic skin reaction.

**Ingestion** : Can cause central nervous system (CNS) depression.

## Symptoms related to the physical, chemical and toxicological characteristics

# Section 11. Toxicological information

**Eye contact** : Adverse symptoms may include the following:
pain or irritation
watering
redness

**Inhalation** : Adverse symptoms may include the following:
respiratory tract irritation
coughing
nausea or vomiting
headache
drowsiness/fatigue
dizziness/vertigo
unconsciousness
reduced fetal weight
increase in fetal deaths
skeletal malformations

**Skin contact** : Adverse symptoms may include the following:
irritation
redness
reduced fetal weight
increase in fetal deaths
skeletal malformations

**Ingestion** : Adverse symptoms may include the following:
reduced fetal weight
increase in fetal deaths
skeletal malformations

## Delayed and immediate effects and also chronic effects from short and long term exposure

### Short term exposure

**Potential immediate effects** : Not available.

**Potential delayed effects** : Not available.

### Long term exposure

**Potential immediate effects** : Not available.

**Potential delayed effects** : Not available.

## Potential chronic health effects

Not available.

**Conclusion/Summary [Product]** : Not available.

**General** : Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.

**Carcinogenicity** : No known significant effects or critical hazards.

**Mutagenicity** : No known significant effects or critical hazards.

**Reproductive toxicity** : May damage fertility or the unborn child.

## Numerical measures of toxicity

### Acute toxicity estimates

# Section 11. Toxicological information

| Product/ingredient name | Oral (mg/kg) | Dermal (mg/kg) | Inhalation (gases) (ppm) | Inhalation (vapors) (mg/l) | Inhalation (dusts and mists) (mg/l) |
|---|---|---|---|---|---|
| DUPLI-COLOR® EFFEX | 16882.8 | N/A | N/A | N/A | N/A |
| Acetone | 5800 | N/A | N/A | N/A | N/A |
| Isobutyl Acetate | 13400 | N/A | N/A | N/A | N/A |
| Methyl Ethyl Ketone | 2737 | 6480 | N/A | N/A | N/A |
| Butane | N/A | N/A | N/A | 658 | N/A |
| Ethyl 3-Ethoxypropionate | 3200 | N/A | N/A | N/A | N/A |
| Ethanol | 7000 | N/A | N/A | 124.7 | N/A |
| Cyclohexane | 6240 | N/A | N/A | N/A | N/A |
| Toluene | N/A | N/A | N/A | 49 | N/A |

# Section 12. Ecological information

## Toxicity

| Product/ingredient name | Result |
|---|---|
| Acetone | **Acute - EC50 - Fresh water**<br>Algae - Green algae - *Selenastrum sp.*<br>7200 mg/l [96 hours]<br>Effect: Population<br>**Chronic - NOEC - Marine water**<br>Algae - Green algae - *Ulva pertusa*<br>4.95 mg/l [96 hours]<br>Effect: Reproduction<br>**Chronic - NOEC - Fresh water**<br>Crustaceans - Daphnia - *Daphniidae*<br>0.016 ml/l [21 days]<br>Effect: Population<br>**Chronic - NOEC - Marine water**<br>Fish - Threespine stickleback - *Gasterosteus aculeatus* - Larvae<br>Age: 7 days<br>5 µg/l [42 days]<br>Effect: Population<br>**Acute - LC50 - Marine water**<br>ISO<br>Crustaceans - Calanoid copepod - *Acartia tonsa* - Copepodid<br>4.42589 ml/l [48 hours]<br>Effect: Mortality<br>**Acute - LC50 - Fresh water**<br>Fish - Guppy - *Poecilia reticulata*<br>Age: 4 to 12 months; Size: 2 to 10 cm; Weight: 0.5 to 14 g<br>5600 ppm [96 hours]<br>Effect: Mortality |
| Methyl Ethyl Ketone | **Acute - EC50 - Fresh water**<br>Daphnia - Water flea - *Daphnia magna* - Larvae<br>Age: <24 hours<br>5091 mg/l [48 hours]<br>Effect: Intoxication<br>**Acute - LC50 - Fresh water**<br>Fish - Fathead minnow - *Pimephales promelas*<br>Age: 31 days; Size: 22 mm; Weight: 0.167 g<br>3220 mg/l [96 hours]<br>Effect: Mortality |

## Section 12. Ecological information

| | |
|---|---|
| | **Acute - EC50 - Marine water**<br>Algae - Diatom - *Skeletonema costatum*<br>>500 mg/l [96 hours]<br>Effect: Population |
| Ethanol | **Acute - LC50 - Fresh water**<br>Fish - Rainbow trout,donaldson trout - *Oncorhynchus mykiss*<br>42 mg/l [4 days]<br>Effect: Mortality<br>**Acute - EC50 - Marine water**<br>Algae - Green algae - *Ulva pertusa*<br>17.921 mg/l [96 hours]<br>Effect: Reproduction<br>**Chronic - NOEC - Marine water**<br>Algae - Green algae - *Ulva pertusa*<br>4.995 mg/l [96 hours]<br>Effect: Reproduction<br>**Chronic - NOEC - Fresh water**<br>Daphnia - Water flea - *Daphnia magna* - Neonate<br>Age: <24 hours<br>100 µl/l [21 days]<br>Effect: Mortality<br>**Chronic - NOEC - Fresh water**<br>Fish - Eastern mosquitofish - *Gambusia holbrooki* - Larvae<br>Age: 3 days<br>0.375 µl/l [12 weeks]<br>Effect: Morphology<br>**Acute - EC50 - Fresh water**<br>Daphnia - Water flea - *Daphnia magna*<br>2 mg/l [48 hours]<br>Effect: Intoxication |
| Cyclohexane | **Acute - LC50 - Fresh water**<br>Fish - Fathead minnow - *Pimephales promelas*<br>Age: 30 days; Size: 20.5 mm; Weight: 0.119 g<br>4530 µg/l [96 hours]<br>Effect: Mortality |
| Toluene | **Acute - LC50 - Fresh water**<br>Fish - Coho salmon,silver salmon - *Oncorhynchus kisutch* - Fry<br>Weight: 1 g<br>5500 µg/l [96 hours]<br>Effect: Mortality<br>**Acute - EC50 - Fresh water**<br>Daphnia - Water flea - *Daphnia magna* - Juvenile (Fledgling, Hatchling, Weanling)<br>6000 µg/l [48 hours]<br>Effect: Intoxication<br>**Chronic - NOEC - Fresh water**<br>Daphnia - Water flea - *Daphnia magna*<br>Age: ≤24 hours<br>1 mg/l [21 days]<br>Effect: Mortality<br>**Acute - EC50 - Fresh water**<br>Algae - Green algae - *Raphidocelis subcapitata*<br>12.5 mg/l [72 hours]<br>Effect: Growth |

**Conclusion/Summary [Product]** : Not available.

# Section 12. Ecological information

## Persistence and degradability

Not available.

**Conclusion/Summary [Product]** : Not available.

| Product/ingredient name | Aquatic half-life | Photolysis | Biodegradability |
|---|---|---|---|
| Acetone | - | - | Readily |
| Methyl Ethyl Ketone | - | - | Readily |
| Ethanol | - | - | Readily |
| Toluene | - | - | Readily |

## Bioaccumulative potential

| Product/ingredient name | $LogP_{ow}$ | BCF | Potential |
|---|---|---|---|
| Cyclohexane | - | 167 | Low |
| Toluene | - | 90 | Low |

## Mobility in soil

**Soil/Water partition coefficient** : Not available.

## Other adverse effects

No known significant effects or critical hazards.

# Section 13. Disposal considerations

**Disposal methods** : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Do not puncture or incinerate container.

# Section 14. Transport information

| | DOT Classification | TDG Classification | Mexico Classification | IATA | IMDG |
|---|---|---|---|---|---|
| **UN number** | UN1950 | UN1950 | UN1950 | UN1950 | UN1950 |
| **UN proper shipping name** | AEROSOLS | AEROSOLS | AEROSOLS | AEROSOLS, flammable | AEROSOLS |
| **Transport hazard class(es)** | 2.1   | 2.1   | 2.1   | 2.1   | 2.1   |
| **Packing group** | - | - | - | - | - |

## Section 14. Transport information

| | | | | | |
|---|---|---|---|---|---|
| **Environmental hazards** | No. | No. | No. | No. | No. |
| **Additional information** | - | Product classified as per the following sections of the Transportation of Dangerous Goods Regulations: 2.13-2.17 (Class 2). | - | - | **Emergency schedules** F-D, S-U |
| | **ERG No.** | **ERG No.** | **ERG No.** | | |
| | 126 | 126 | 126 | | |
| | Dependent upon container size, this product may ship under the Limited Quantity shipping exception. | Dependent upon container size, this product may ship under the Limited Quantity shipping exception. | Dependent upon container size, this product may ship under the Limited Quantity shipping exception. | Dependent upon container size, this product may ship under the Limited Quantity shipping exception. | Dependent upon container size, this product may ship under the Limited Quantity shipping exception. |

**Special precautions for user** : Multi-modal shipping descriptions are provided for informational purposes and do not consider container sizes. The presence of a shipping description for a particular mode of transport (sea, air, etc.), does not indicate that the product is packaged suitably for that mode of transport. All packaging must be reviewed for suitability prior to shipment, and compliance with the applicable regulations is the sole responsibility of the person offering the product for transport. People loading and unloading dangerous goods must be trained on all of the risks deriving from the substances and on all actions in case of emergency situations.

**Transport in bulk according to IMO instruments** : Not available.

**Bulk cargo shipping name** : Not available.

## Section 15. Regulatory information

**U.S. Federal regulations** :

**California Prop. 65**

WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

**International regulations**

**Montreal Protocol**

Not listed.

**Stockholm Convention on Persistent Organic Pollutants**

| List name | Ingredient name | Status |
|---|---|---|
| Annex A - Elimination - Production | UV-328 | Listed |
| Annex A - Elimination - Use | UV-328 | Listed |

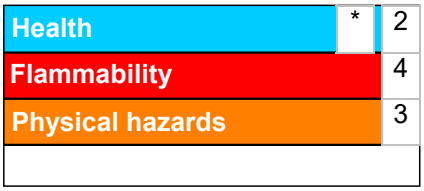
**International lists** : **Australia inventory (AIIC)**: Not determined.
**China inventory (IECSC)**: Not determined.
**Japan inventory (CSCL)**: Not determined.
**Japan inventory (ISHL)**: Not determined.
**Korea inventory (KECI)**: Not determined.
**New Zealand Inventory of Chemicals (NZIoC)**: Not determined.
**Philippines inventory (PICCS)**: Not determined.
**Taiwan Chemical Substances Inventory (TCSI)**: Not determined.

# Section 15. Regulatory information

**Thailand inventory**: Not determined.
**Turkey inventory**: Not determined.
**Vietnam inventory**: Not determined.

# Section 16. Other information

## Hazardous Material Information System (U.S.A.)




**The customer is responsible for determining the PPE code for this material. For more information on HMIS® Personal Protective Equipment (PPE) codes, consult the HMIS® Implementation Manual.**

**Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings and the associated label are not required on SDSs or products leaving a facility under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered trademark and service mark of the American Coatings Association, Inc.**

## Procedure used to derive the classification

| Classification | Justification |
|---|---|
| AEROSOLS - Category 1 | On basis of test data |
| SKIN CORROSION/IRRITATION - Category 2 | Calculation method |
| SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A | Calculation method |
| SKIN SENSITIZATION - Category 1 | Calculation method |
| TOXIC TO REPRODUCTION - Category 1B | Calculation method |
| SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3 | Calculation method |

## History

**Date of printing** : 8/9/2026

**Date of issue/Date of revision** : 8/9/2026

**Date of previous issue** : 4/30/2026

**Version** : 21

**Key to abbreviations** : ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IATA = International Air Transport Association
IBC = Intermediate Bulk Container
IMDG = International Maritime Dangerous Goods
LogPow = logarithm of the octanol/water partition coefficient
MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
N/A = Not available
SGG = Segregation Group
UN = United Nations

**Indicates information that has changed from previously issued version.**

## Notice to reader

## Section 16. Other information

**It is recommended that each customer or recipient of this Safety Data Sheet (SDS) study it carefully and consult resources, as necessary or appropriate, to become aware of and understand the data contained in this SDS and any hazards associated with the product. This information is provided in good faith and believed to be accurate as of the effective date herein. However, no warranty, express or implied, is given. The information presented here applies only to the product as shipped. The addition of any material can change the composition, hazards and risks of the product. Products shall not be repackaged, modified, or tinted except as specifically instructed by the manufacturer, including but not limited to the incorporation of products not specified by the manufacturer, or the use or addition of products in proportions not specified by the manufacturer. Regulatory requirements are subject to change and may differ between various locations and jurisdictions. The customer/buyer/user is responsible to ensure that his activities comply with all country, federal, state, provincial or local laws. The conditions for use of the product are not under the control of the manufacturer; the customer/buyer/user is responsible to determine the conditions necessary for the safe use of this product. The customer/buyer/user should not use the product for any purpose other than the purpose shown in the applicable section of this SDS without first referring to the supplier and obtaining written handling instructions. Due to the proliferation of sources for information such as manufacturer-specific SDS, the manufacturer cannot be responsible for SDSs obtained from any other source.**