# SAFETY DATA SHEET

AFM0418

## Section 1. Identification

**Product name** : DUPLI-COLOR® Scratch Fix All-in-1™
Blue Lightning (N6)

**Product code** : AFM0418

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

**Product type** : Liquid.

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

Paint or paint related material.

**Manufacturer** : Dupli-Color Products Company
Cleveland, OH 44115

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

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

**Regulatory Information Telephone Number** : (216) 566-2902

**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** : FLAMMABLE LIQUIDS - Category 2
ACUTE TOXICITY (oral) - Category 4
SKIN CORROSION/IRRITATION - Category 2
SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A
CARCINOGENICITY - Category 2
TOXIC TO REPRODUCTION (Unborn child) - Category 2
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3
SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2

Percentage of the mixture consisting of ingredient(s) of unknown acute dermal toxicity: 50.2%
Percentage of the mixture consisting of ingredient(s) of unknown acute inhalation toxicity: 18.8%

**GHS label elements**

**Hazard pictograms** :



**Signal word** : Danger

## Section 2. Hazards identification

**Hazard statements** : Highly flammable liquid and vapor.
Harmful if swallowed.
Causes serious eye irritation.
Causes skin irritation.
Suspected of damaging the unborn child.
Suspected of causing cancer.
May cause respiratory irritation.
May cause drowsiness or dizziness.
May cause damage to organs through prolonged or repeated exposure.

**Precautionary statements**

**General** : Read label before use. 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. Wear eye or face protection. Wear protective clothing. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use explosion-proof electrical, ventilating, lighting and all material-handling equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Keep container tightly closed. Use only outdoors or in a well-ventilated area. Do not breathe vapor. Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling.

**Response** : Get medical attention if you feel unwell. IF exposed or concerned: Get medical attention. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or physician if you feel unwell. IF SWALLOWED: Call a POISON CENTER or physician if you feel unwell. Rinse mouth. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing and wash it before reuse. If skin irritation occurs: Get medical attention. 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 attention.

**Storage** : Store locked up. Store in a well-ventilated place. Keep cool.

**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. Do not transfer contents to other containers for storage.

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

## Section 3. Composition/information on ingredients

**Substance/mixture** : Mixture

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

**CAS number/other identifiers**

# Section 3. Composition/information on ingredients

| Ingredient name | % by weight | CAS number |
|---|---|---|
| Methyl Ethyl Ketone | ≥25 - ≤50 | 78-93-3 |
| Toluene | ≥10 - ≤25 | 108-88-3 |
| Ethyl 3-Ethoxypropionate | ≥10 - ≤25 | 763-69-9 |
| Methyl Isobutyl Ketone | ≤10 | 108-10-1 |
| Ethanol | ≤5 | 64-17-5 |
| Cellulose Nitrate | ≤3 | 9004-70-0 |
| 2-Propanol | ≤3 | 67-63-0 |
| Titanium Dioxide | ≤1 | 13463-67-7 |

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 as hazardous to health 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. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

**Skin contact** : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Continue to rinse for at least 10 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.

**Ingestion** : Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. 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. May cause respiratory irritation.

**Skin contact** : Causes skin irritation.

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

## Over-exposure signs/symptoms

## Section 4. First aid measures

**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

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

**Notes to physician** : In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

**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.

**See toxicological information (Section 11)**

## Section 5. Fire-fighting measures

**Extinguishing media**

**Suitable extinguishing media** : Use dry chemical, $CO_2$, water spray (fog) or foam.

**Unsuitable extinguishing media** : Do not use water jet.

**Specific hazards arising from the chemical** : Highly flammable liquid and vapor. 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. The vapor/gas is heavier than air and will spread along the ground. Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back.

**Hazardous thermal decomposition products** : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
nitrogen oxides
metal oxide/oxides

## Section 5. Fire-fighting measures

**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.

## 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. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. 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. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry 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. 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 (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

## Section 7. Handling and storage

**Precautions for safe handling**

**Protective measures** : Put on appropriate personal protective equipment (see Section 8). 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 breathe vapor or mist. Do not ingest. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. 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. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container.

# Section 7. Handling and storage

**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 in a segregated and approved area. Store in original container protected 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. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. 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 |
|---|---|---|
| Methyl Ethyl Ketone | 78-93-3 | **ACGIH TLV (United States, 3/2019).**<br>TWA: 200 ppm 8 hours.<br>TWA: 590 mg/m³ 8 hours.<br>STEL: 300 ppm 15 minutes.<br>STEL: 885 mg/m³ 15 minutes.<br>**NIOSH REL (United States, 10/2016).**<br>TWA: 200 ppm 10 hours.<br>TWA: 590 mg/m³ 10 hours.<br>STEL: 300 ppm 15 minutes.<br>STEL: 885 mg/m³ 15 minutes.<br>**OSHA PEL (United States, 5/2018).**<br>TWA: 200 ppm 8 hours.<br>TWA: 590 mg/m³ 8 hours. |
| Toluene | 108-88-3 | **OSHA PEL Z2 (United States, 2/2013).**<br>TWA: 200 ppm 8 hours.<br>CEIL: 300 ppm<br>AMP: 500 ppm 10 minutes.<br>**NIOSH REL (United States, 10/2016).**<br>TWA: 100 ppm 10 hours.<br>TWA: 375 mg/m³ 10 hours.<br>STEL: 150 ppm 15 minutes.<br>STEL: 560 mg/m³ 15 minutes.<br>**ACGIH TLV (United States, 3/2019).**<br>TWA: 20 ppm 8 hours. |
| Ethyl 3-Ethoxypropionate | 763-69-9 | None. |
| Methyl Isobutyl Ketone | 108-10-1 | **ACGIH TLV (United States, 3/2019).**<br>TWA: 20 ppm 8 hours.<br>STEL: 75 ppm 15 minutes.<br>**NIOSH REL (United States, 10/2016).**<br>TWA: 50 ppm 10 hours.<br>TWA: 205 mg/m³ 10 hours.<br>STEL: 75 ppm 15 minutes.<br>STEL: 300 mg/m³ 15 minutes.<br>**OSHA PEL (United States, 5/2018).**<br>TWA: 100 ppm 8 hours.<br>TWA: 410 mg/m³ 8 hours. |

| | | |
|---|---|---|
| Ethanol | 64-17-5 | **ACGIH TLV (United States, 3/2019).**<br>STEL: 1000 ppm 15 minutes.<br>**NIOSH REL (United States, 10/2016).**<br>TWA: 1000 ppm 10 hours.<br>TWA: 1900 mg/m³ 10 hours.<br>**OSHA PEL (United States, 5/2018).**<br>TWA: 1000 ppm 8 hours.<br>TWA: 1900 mg/m³ 8 hours. |
| Cellulose Nitrate | 9004-70-0 | None. |
| 2-Propanol | 67-63-0 | **ACGIH TLV (United States, 3/2019).**<br>TWA: 200 ppm 8 hours.<br>STEL: 400 ppm 15 minutes.<br>**NIOSH REL (United States, 10/2016).**<br>TWA: 400 ppm 10 hours.<br>TWA: 980 mg/m³ 10 hours.<br>STEL: 500 ppm 15 minutes.<br>STEL: 1225 mg/m³ 15 minutes.<br>**OSHA PEL (United States, 5/2018).**<br>TWA: 400 ppm 8 hours.<br>TWA: 980 mg/m³ 8 hours. |
| Titanium Dioxide | 13463-67-7 | **ACGIH TLV (United States, 3/2019).**<br>TWA: 10 mg/m³ 8 hours.<br>**OSHA PEL (United States, 5/2018).**<br>TWA: 15 mg/m³ 8 hours. Form: Total dust |

**Occupational exposure limits (Canada)**

| Ingredient name | CAS # | Exposure limits |
|---|---|---|
| Methyl ethyl ketone | 78-93-3 | **CA Alberta Provincial (Canada, 6/2018).**<br>15 min OEL: 300 ppm 15 minutes.<br>8 hrs OEL: 200 ppm 8 hours.<br>8 hrs OEL: 590 mg/m³ 8 hours.<br>15 min OEL: 885 mg/m³ 15 minutes.<br>**CA British Columbia Provincial (Canada, 5/2019).**<br>TWA: 50 ppm 8 hours.<br>STEL: 100 ppm 15 minutes.<br>**CA Ontario Provincial (Canada, 1/2018).**<br>TWA: 200 ppm 8 hours.<br>STEL: 300 ppm 15 minutes.<br>**CA Quebec Provincial (Canada, 1/2014).**<br>TWAEV: 50 ppm 8 hours.<br>TWAEV: 150 mg/m³ 8 hours.<br>STEV: 100 ppm 15 minutes.<br>STEV: 300 mg/m³ 15 minutes.<br>**CA Saskatchewan Provincial (Canada, 7/2013).**<br>STEL: 300 ppm 15 minutes.<br>TWA: 200 ppm 8 hours. |
| Toluene | 108-88-3 | **CA Alberta Provincial (Canada, 6/2018). Absorbed through skin.**<br>8 hrs OEL: 50 ppm 8 hours.<br>8 hrs OEL: 188 mg/m³ 8 hours.<br>**CA British Columbia Provincial (Canada, 5/2019).**<br>TWA: 20 ppm 8 hours.<br>**CA Ontario Provincial (Canada, 1/2018).** |

## Section 8. Exposure controls/personal protection

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|---|---|---|
| | | TWA: 20 ppm 8 hours.<br>**CA Quebec Provincial (Canada, 1/2014). Absorbed through skin.**<br>TWAEV: 50 ppm 8 hours.<br>TWAEV: 188 mg/m³ 8 hours.<br>**CA Saskatchewan Provincial (Canada, 7/2013). Absorbed through skin.**<br>STEL: 60 ppm 15 minutes.<br>TWA: 50 ppm 8 hours. |
| Methyl isobutyl ketone | 108-10-1 | **CA Alberta Provincial (Canada, 6/2018).**<br>8 hrs OEL: 205 mg/m³ 8 hours.<br>8 hrs OEL: 50 ppm 8 hours.<br>15 min OEL: 75 ppm 15 minutes.<br>15 min OEL: 307 mg/m³ 15 minutes.<br>**CA British Columbia Provincial (Canada, 5/2019).**<br>TWA: 20 ppm 8 hours.<br>STEL: 75 ppm 15 minutes.<br>**CA Ontario Provincial (Canada, 1/2018).**<br>TWA: 20 ppm 8 hours.<br>STEL: 75 ppm 15 minutes.<br>**CA Quebec Provincial (Canada, 1/2014).**<br>TWAEV: 50 ppm 8 hours.<br>TWAEV: 205 mg/m³ 8 hours.<br>STEV: 75 ppm 15 minutes.<br>STEV: 307 mg/m³ 15 minutes.<br>**CA Saskatchewan Provincial (Canada, 7/2013).**<br>STEL: 75 ppm 15 minutes.<br>TWA: 50 ppm 8 hours. |
| Ethyl alcohol | 64-17-5 | **CA Alberta Provincial (Canada, 6/2018).**<br>8 hrs OEL: 1000 ppm 8 hours.<br>8 hrs OEL: 1880 mg/m³ 8 hours.<br>**CA British Columbia Provincial (Canada, 5/2019).**<br>STEL: 1000 ppm 15 minutes.<br>**CA Ontario Provincial (Canada, 1/2018).**<br>STEL: 1000 ppm 15 minutes.<br>**CA Quebec Provincial (Canada, 1/2014).**<br>TWAEV: 1000 ppm 8 hours.<br>TWAEV: 1880 mg/m³ 8 hours.<br>**CA Saskatchewan Provincial (Canada, 7/2013).**<br>STEL: 1250 ppm 15 minutes.<br>TWA: 1000 ppm 8 hours. |
| Isopropyl alcohol | 67-63-0 | **CA Alberta Provincial (Canada, 6/2018).**<br>15 min OEL: 984 mg/m³ 15 minutes.<br>8 hrs OEL: 200 ppm 8 hours.<br>15 min OEL: 400 ppm 15 minutes.<br>8 hrs OEL: 492 mg/m³ 8 hours.<br>**CA British Columbia Provincial (Canada, 5/2019).**<br>TWA: 200 ppm 8 hours.<br>STEL: 400 ppm 15 minutes.<br>**CA Ontario Provincial (Canada, 1/2018).**<br>TWA: 200 ppm 8 hours.<br>STEL: 400 ppm 15 minutes. |

| | | |
|---|---|---|
| Titanium dioxide | 13463-67-7 | **CA Quebec Provincial (Canada, 1/2014).**<br>TWAEV: 400 ppm 8 hours.<br>TWAEV: 983 mg/m³ 8 hours.<br>STEV: 500 ppm 15 minutes.<br>STEV: 1230 mg/m³ 15 minutes.<br>**CA Saskatchewan Provincial (Canada, 7/2013).**<br>STEL: 400 ppm 15 minutes.<br>TWA: 200 ppm 8 hours.<br>**CA British Columbia Provincial (Canada, 5/2019).**<br>TWA: 3 mg/m³ 8 hours. Form: Respirable dust<br>TWA: 10 mg/m³ 8 hours. Form: Total dust<br>**CA Quebec Provincial (Canada, 1/2014).**<br>TWAEV: 10 mg/m³ 8 hours. Form: Total dust.<br>**CA Alberta Provincial (Canada, 6/2018).**<br>8 hrs OEL: 10 mg/m³ 8 hours.<br>**CA Ontario Provincial (Canada, 1/2018).**<br>TWA: 10 mg/m³ 8 hours.<br>**CA Saskatchewan Provincial (Canada, 7/2013).**<br>STEL: 20 mg/m³ 15 minutes.<br>TWA: 10 mg/m³ 8 hours. |

**Occupational exposure limits (Mexico)**

| | CAS # | Exposure limits |
|---|---|---|
| Methyl Ethyl Ketone | 78-93-3 | **NOM-010-STPS-2014 (Mexico, 4/2016).**<br>TWA: 200 ppm 8 hours.<br>STEL: 300 ppm 15 minutes. |
| Toluene | 108-88-3 | **NOM-010-STPS-2014 (Mexico, 4/2016).**<br>TWA: 20 ppm 8 hours. |
| Methyl Isobutyl Ketone | 108-10-1 | **NOM-010-STPS-2014 (Mexico, 4/2016).**<br>TWA: 50 ppm 8 hours.<br>STEL: 75 ppm 15 minutes. |
| ethanol | 64-17-5 | **NOM-010-STPS-2014 (Mexico, 4/2016).**<br>STEL: 1000 ppm 15 minutes. |
| 2-Propanol | 67-63-0 | **NOM-010-STPS-2014 (Mexico, 4/2016).**<br>TWA: 200 ppm 8 hours.<br>STEL: 400 ppm 15 minutes. |

**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**

## Section 8. Exposure controls/personal protection

**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. 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.

**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

**Appearance**

**Physical state** : Liquid.

**Color** : Not available.

**Odor** : Not available.

**Odor threshold** : Not available.

**pH** : Not available.

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

**Boiling point/boiling range** : 77°C (170.6°F)

**Flash point** : Closed cup: 2°C (35.6°F) [Pensky-Martens Closed Cup]

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

**Flammability (solid, gas)** : Not available.

**Lower and upper explosive (flammable) limits** : Lower: 1%
Upper: 19%

**Vapor pressure** : 12.1 kPa (90.6 mm Hg) [at 20°C]

**Vapor density** : 1.5 [Air = 1]

**Relative density** : 0.9

**Solubility** : Not available.

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

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

## Section 9. Physical and chemical properties

**Decomposition temperature** : Not available.

**Viscosity** : Kinematic (40°C (104°F)): >0.205 $cm^2/s$ (>20.5 cSt)

**Molecular weight** : Not applicable.

**Aerosol product**

**Heat of combustion** : 23.869 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). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition. Do not allow vapor to accumulate in low or confined areas.

**Incompatible materials** : Reactive or incompatible with the following materials:
oxidizing materials

**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 | Species | Dose | Exposure |
|---|---|---|---|---|
| Methyl Ethyl Ketone | LD50 Dermal | Rabbit | 6480 mg/kg | - |
| | LD50 Oral | Rat | 2737 mg/kg | - |
| Toluene | LC50 Inhalation Vapor | Rat | 49 $g/m^3$ | 4 hours |
| | LD50 Oral | Rat | 636 mg/kg | - |
| Ethyl 3-Ethoxypropionate | LD50 Oral | Rat | 3200 mg/kg | - |
| Methyl Isobutyl Ketone | LD50 Oral | Rat | 2080 mg/kg | - |
| Ethanol | LC50 Inhalation Vapor | Rat | 124700 $mg/m^3$ | 4 hours |
| | LD50 Oral | Rat | 7 g/kg | - |
| Cellulose Nitrate | LD50 Oral | Rat | >5 g/kg | - |
| 2-Propanol | LD50 Dermal | Rabbit | 12800 mg/kg | - |
| | LD50 Oral | Rat | 5000 mg/kg | - |

**Irritation/Corrosion**

| Product/ingredient name | Result | Species | Score | Exposure | Observation |
|---|---|---|---|---|---|
| Methyl Ethyl Ketone | Skin - Mild irritant | Rabbit | - | 24 hours 14 mg | - |
| | Skin - Moderate irritant | Rabbit | - | 24 hours 500 mg | - |
| Toluene | Eyes - Mild irritant | Rabbit | - | 0.5 minutes 100 mg | - |
| | Eyes - Mild irritant | Rabbit | - | 870 ug | - |
| | Eyes - Severe irritant | Rabbit | - | 24 hours 2 mg | - |
| | Skin - Mild irritant | Pig | - | 24 hours 250 | - |

# Section 11. Toxicological information

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|---|---|---|---|---|---|
| | | | | Ul | |
| | Skin - Mild irritant | Rabbit | - | 435 mg | - |
| | Skin - Moderate irritant | Rabbit | - | 24 hours 20 mg | - |
| | Skin - Moderate irritant | Rabbit | - | 500 mg | - |
| Ethyl 3-Ethoxypropionate | Skin - Mild irritant | Rabbit | - | 24 hours 500 mg | - |
| Methyl Isobutyl Ketone | Eyes - Moderate irritant | Rabbit | - | 24 hours 100 Ul | - |
| | Eyes - Severe irritant | Rabbit | - | 40 mg | - |
| | Skin - Mild irritant | Rabbit | - | 24 hours 500 mg | - |
| Ethanol | Eyes - Mild irritant | Rabbit | - | 24 hours 500 mg | - |
| | Eyes - Moderate irritant | Rabbit | - | 0.066666667 minutes 100 mg | - |
| | Eyes - Moderate irritant | Rabbit | - | 100 Ul | - |
| | Eyes - Severe irritant | Rabbit | - | 500 mg | - |
| | Skin - Mild irritant | Rabbit | - | 400 mg | - |
| | Skin - Moderate irritant | Rabbit | - | 24 hours 20 mg | - |
| 2-Propanol | Eyes - Moderate irritant | Rabbit | - | 24 hours 100 mg | - |
| | Eyes - Moderate irritant | Rabbit | - | 10 mg | - |
| | Eyes - Severe irritant | Rabbit | - | 100 mg | - |
| | Skin - Mild irritant | Rabbit | - | 500 mg | - |
| Titanium Dioxide | Skin - Mild irritant | Human | - | 72 hours 300 ug l | - |

## Sensitization

Not available.

## Mutagenicity

Not available.

## Carcinogenicity

Not available.

## Classification

| Product/ingredient name | OSHA | IARC | NTP |
|---|---|---|---|
| Toluene | - | 3 | - |
| Methyl Isobutyl Ketone | - | 2B | - |
| Ethanol | - | 1 | - |
| 2-Propanol | - | 3 | - |
| Titanium Dioxide | - | 2B | - |

## Reproductive toxicity

Not available.

## Teratogenicity

Not available.

## Specific target organ toxicity (single exposure)

# Section 11. Toxicological information

| Name | Category | Route of exposure | Target organs |
|---|---|---|---|
| Methyl Ethyl Ketone | Category 3 | Not applicable. | Narcotic effects |
| | Category 3 | Not applicable. | Respiratory tract irritation |
| Toluene | Category 3 | Not applicable. | Narcotic effects |
| | Category 3 | Not applicable. | Respiratory tract irritation |
| Methyl Isobutyl Ketone | Category 3 | Not applicable. | Narcotic effects |
| | Category 3 | Not applicable. | Respiratory tract irritation |
| Ethanol | Category 3 | Not applicable. | Narcotic effects |
| | Category 3 | Not applicable. | Respiratory tract irritation |
| 2-Propanol | Category 3 | Not applicable. | Narcotic effects |

**Specific target organ toxicity (repeated exposure)**

| Name | Category | Route of exposure | Target organs |
|---|---|---|---|
| Methyl Ethyl Ketone | Category 2 | Not determined | Not determined |
| Toluene | Category 2 | Not determined | Not determined |
| Methyl Isobutyl Ketone | Category 2 | Not determined | Not determined |
| Ethanol | Category 2 | Not determined | Not determined |

**Aspiration hazard**

| Name | Result |
|---|---|
| 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. May cause respiratory irritation.

**Skin contact** : Causes skin irritation.

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

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

**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 11. Toxicological information

**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.

**General** : May cause damage to organs through prolonged or repeated exposure.

**Carcinogenicity** : Suspected of causing cancer. Risk of cancer depends on duration and level of exposure.

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

**Teratogenicity** : Suspected of damaging the unborn child.

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

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

## Numerical measures of toxicity

### Acute toxicity estimates

| Route | ATE value |
|---|---|
| Oral<br>Inhalation (vapors) | 1856.96 mg/kg<br>164.74 mg/l |

# Section 12. Ecological information

## Toxicity

| Product/ingredient name | Result | Species | Exposure |
|---|---|---|---|
| Methyl Ethyl Ketone | Acute EC50 >500000 µg/l Marine water | Algae - Skeletonema costatum | 96 hours |
| | Acute EC50 5091000 µg/l Fresh water | Daphnia - Daphnia magna - Larvae | 48 hours |
| | Acute LC50 3220000 µg/l Fresh water | Fish - Pimephales promelas | 96 hours |
| Toluene | Acute EC50 12500 µg/l Fresh water | Algae - Pseudokirchneriella subcapitata | 72 hours |
| | Acute EC50 11600 µg/l Fresh water | Crustaceans - Gammarus pseudolimnaeus - Adult | 48 hours |

## Section 12. Ecological information

| | | | |
|---|---|---|---|
| | Acute EC50 6000 µg/l Fresh water | Daphnia - Daphnia magna - Juvenile (Fledgling, Hatchling, Weanling) | 48 hours |
| | Acute LC50 5500 µg/l Fresh water | Fish - Oncorhynchus kisutch - Fry | 96 hours |
| | Chronic NOEC 1000 µg/l Fresh water | Daphnia - Daphnia magna | 21 days |
| Methyl Isobutyl Ketone | Acute LC50 505000 µg/l Fresh water | Fish - Pimephales promelas | 96 hours |
| | Chronic NOEC 78 mg/l Fresh water | Daphnia - Daphnia magna | 21 days |
| | Chronic NOEC 168 mg/l Fresh water | Fish - Pimephales promelas - Embryo | 33 days |
| Ethanol | Acute EC50 17.921 mg/l Marine water | Algae - Ulva pertusa | 96 hours |
| | Acute EC50 2000 µg/l Fresh water | Daphnia - Daphnia magna | 48 hours |
| | Acute LC50 25500 µg/l Marine water | Crustaceans - Artemia franciscana - Larvae | 48 hours |
| | Acute LC50 42000 µg/l Fresh water | Fish - Oncorhynchus mykiss | 4 days |
| | Chronic NOEC 4.995 mg/l Marine water | Algae - Ulva pertusa | 96 hours |
| | Chronic NOEC 100 ul/L Fresh water | Daphnia - Daphnia magna - Neonate | 21 days |
| | Chronic NOEC 0.375 ul/L Fresh water | Fish - Gambusia holbrooki - Larvae | 12 weeks |
| Cellulose Nitrate | Acute EC50 579000 µg/l Fresh water | Algae - Pseudokirchneriella subcapitata | 96 hours |
| 2-Propanol | Acute EC50 7550 mg/l Fresh water | Daphnia - Daphnia magna - Neonate | 48 hours |
| | Acute LC50 1400000 µg/l Marine water | Crustaceans - Crangon crangon | 48 hours |
| | Acute LC50 4200 mg/l Fresh water | Fish - Rasbora heteromorpha | 96 hours |
| Titanium Dioxide | Acute LC50 >1000000 µg/l Marine water | Fish - Fundulus heteroclitus | 96 hours |

### Persistence and degradability

| Product/ingredient name | Aquatic half-life | Photolysis | Biodegradability |
|---|---|---|---|
| Methyl Ethyl Ketone | - | - | Readily |
| Toluene | - | - | Readily |
| Methyl Isobutyl Ketone | - | - | Readily |
| Ethanol | - | - | Readily |
| 2-Propanol | - | - | Readily |

### Bioaccumulative potential

| Product/ingredient name | $LogP_{ow}$ | BCF | Potential |
|---|---|---|---|
| Toluene | - | 90 | low |

### Mobility in soil

**Soil/water partition coefficient ($K_{OC}$)** : 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

## Section 13. Disposal considerations

when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

## Section 14. Transport information

| | DOT Classification | TDG Classification | Mexico Classification | IATA | IMDG |
|---|---|---|---|---|---|
| **UN number** | UN1263 | UN1263 | UN1263 | UN1263 | UN1263 |
| **UN proper shipping name** | PAINT | PAINT | PAINT | PAINT | PAINT |
| **Transport hazard class(es)** | 3   | 3   | 3   | 3   | 3   |
| **Packing group** | II | II | II | II | II |
| **Environmental hazards** | No. | No. | No. | No. | No. |
| **Additional information** | - <br><br>**ERG No.** <br>128 | Product classified as per the following sections of the Transportation of Dangerous Goods Regulations: 2.18-2.19 (Class 3). <br>**ERG No.** <br>128 | - <br><br>**ERG No.** <br>128 | - | **Emergency schedules** F-E, S-E |

**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 Annex II of MARPOL and the IBC Code** : Not available.

**Proper shipping name** : Not available.

## Section 14. Transport information

**Ship type** : Not available.

**Pollution category** : Not available.

## Section 15. Regulatory information

**SARA 313**

SARA 313 (40 CFR 372.45) supplier notification can be found on the Environmental Data Sheet.

**California Prop. 65**

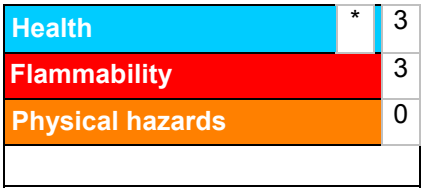
WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

**International regulations**

**International lists** : **Australia inventory (AICS)**: Not determined.
**China inventory (IECSC)**: Not determined.
**Japan inventory (ENCS)**: 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.
**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 |
|---|---|
| FLAMMABLE LIQUIDS - Category 2 | On basis of test data |
| ACUTE TOXICITY (oral) - Category 4 | Calculation method |
| SKIN CORROSION/IRRITATION - Category 2 | Calculation method |
| SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A | Calculation method |
| CARCINOGENICITY - Category 2 | Calculation method |
| TOXIC TO REPRODUCTION (Unborn child) - Category 2 | Calculation method |
| SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3 | Calculation method |
| SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3 | Calculation method |
| SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2 | Calculation method |

**History**

**Date of printing** : 6/5/2020

# Section 16. Other information

**Date of issue/Date of revision** : 6/5/2020

**Date of previous issue** : 5/12/2020

**Version** : 3.01

**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

**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.**