

SAFETY DATA SHEET

A81 Octocryl System Maroon



Section 1. Identification

GHS product identifier : A81 Octocryl System Maroon

Product type : Liquid.

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

Identified uses

Use in coatings - Topcoat

Uses advised against

Not applicable.

Manufacturer : Valspar b.v.
Zuiveringweg 89
8243 PE Lelystad
The Netherlands
tel: +31 (0)320 292200
fax: +31 (0)320 292201

Emergency telephone number : Call: +31 (0)320 292200 (during daytime)

e-mail address of person responsible for this SDS : msds@valspar.com

Emergency telephone number (with hours of operation) : CHEMTREC Brazil (Rio De Janeiro)
CALL: +(55)-2139581449 (Hours of operation - 24 hours)

Section 2. Hazards identification

Classification of the substance or mixture : FLAMMABLE LIQUIDS - Category 3
SKIN IRRITATION - Category 2
EYE IRRITATION - Category 2A
SKIN SENSITISATION - Category 1
SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE (Narcotic effects) - Category 3
SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE - Category 2
SHORT-TERM (ACUTE) AQUATIC HAZARD - Category 3
LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 3

GHS label elements

Hazard pictograms



Signal word : Warning

Hazard statements : Flammable liquid and vapour.
Causes skin irritation.
May cause an allergic skin reaction.
Causes serious eye irritation.
May cause drowsiness or dizziness.
May cause damage to organs through prolonged or repeated exposure.
Harmful to aquatic life with long lasting effects.

Precautionary statements

Section 2. Hazards identification

- Prevention** : Wear protective gloves. Wear eye or face protection. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Avoid release to the environment. Do not breathe vapour. Wash thoroughly after handling.
- Response** : Get medical advice/attention if you feel unwell. IF INHALED: Call a POISON CENTER or doctor if you feel unwell. Take off contaminated clothing and wash it before reuse. IF ON SKIN: Wash with plenty of water. If skin irritation or rash occurs: Get medical advice or 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 advice or attention.
- Storage** : 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.

Other hazards which do not result in classification : None known.

Section 3. Composition/information on ingredients

Substance/mixture : Mixture

| Ingredient name | % | CAS number |
|---|-----------|------------|
| n-butyl acetate | ≥10 - ≤25 | 123-86-4 |
| xylene | ≤12 | 1330-20-7 |
| Solvent naphtha (petroleum), light arom. | ≤7.7 | 64742-95-6 |
| 2-methoxy-1-methylethyl acetate | ≤10 | 108-65-6 |
| ethylbenzene | ≤3 | 100-41-4 |
| 2-butoxyethyl acetate | ≤3 | 112-07-2 |
| bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate | ≤0.72 | 41556-26-7 |
| Naphthenic acids | <1 | 1338-24-5 |
| toluene | ≤0.3 | 108-88-3 |
| methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate | ≤0.24 | 82919-37-7 |

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 or the environment 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** : 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.

Section 4. First aid measures

- 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:
nausea or vomiting
headache
drowsiness/fatigue
dizziness/vertigo
unconsciousness
- Skin contact** : Adverse symptoms may include the following:
irritation
redness
- Ingestion** : No specific data.

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. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

Section 5. Firefighting measures

Extinguishing media

- Suitable extinguishing media** : Use dry chemical, CO₂, water spray (fog) or foam.
- Unsuitable extinguishing media** : Do not use water jet.

Section 5. Firefighting measures

- Specific hazards arising from the chemical** : Flammable liquid and vapour. 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 vapour/gas is heavier than air and will spread along the ground. Vapours may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back. This material is harmful to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.
- Hazardous thermal decomposition products** : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
nitrogen oxides
- 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 spilt material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
- For emergency responders** : If specialised 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 spilt 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). Water polluting material. May be harmful to the environment if released in large quantities.

Methods and material 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 the 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 spilt 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). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Do not get in eyes or on skin or clothing. Do not breathe vapour or mist. Do not ingest. Avoid release to the environment. 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.

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 oxidising 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 unlabelled 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

| Ingredient name | Exposure limits |
|-----------------------|---|
| n-butyl acetate | ACGIH TLV (United States, 1/2022). [Butyl acetates all isomers] STEL: 150 ppm 15 minutes. TWA: 50 ppm 8 hours. Ministry of Labor and Employment (Brazil, 11/2001). [Xylenes (o-, m-, p- isomers)] TWA: 78 ppm 8 hours. TWA: 340 mg/m ³ 8 hours. Ministry of Labor and Employment (Brazil, 11/2001). TWA: 78 ppm 8 hours. TWA: 340 mg/m ³ 8 hours. ACGIH TLV (United States, 1/2022). Notes: Refers to Appendix A -- Carcinogens. ACGIH 2003 Adoption TWA: 20 ppm 8 hours. Ministry of Labor and Employment (Brazil, 11/2001). Absorbed through skin. TWA: 78 ppm 8 hours. TWA: 290 mg/m ³ 8 hours. |
| xylene | |
| ethylbenzene | |
| 2-butoxyethyl acetate | |
| toluene | |

Section 8. Exposure controls/personal protection

- 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, vapour 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. Recommended: chemical splash goggles and/or face shield.
- 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. > 8 hours (breakthrough time): Recommended EN 374 polyvinyl alcohol (PVA) ≥ 0.7 mm
< 1 hour (breakthrough time): Conditionally suitable materials for protective gloves; EN 374: Nitrile rubber - NBR (≥ 0.35 mm). Only suitable as splash protection. Only suitable for brief exposure. In the event of contamination, change protective gloves immediately.
- 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. Recommended: Cotton or cotton/synthetic overalls or coveralls are normally suitable.
- 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. Recommended: EN 405:2001 + A1:2009 organic vapour (Type A) and particulate filter FFA2P3 R D

Section 9. Physical and chemical properties and safety characteristics

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

Appearance

- Physical state** : Liquid.
- Colour** : Violet.

Section 9. Physical and chemical properties and safety characteristics

| | |
|--|---|
| Odour | : Pungent, fruity. |
| Odour threshold | : Not available. |
| pH | : Not applicable. |
| Melting point/freezing point | : Not applicable. |
| Boiling point, initial boiling point, and boiling range | : >100°C (>212°F) |
| Flash point | : Closed cup: 30°C (86°F) |
| Evaporation rate | : 1 (butyl acetate = 1) |
| Flammability | : Not available. |
| Lower and upper explosion limit/flammability limit | : Lower: 0.8% Upper: 7.6% |
| Vapour pressure | : 1.3 kPa (10 mm Hg) |
| Relative vapour density | : 4 [Air = 1] |
| Relative density | : 1.006 |
| Density | : 1.006 g/cm ³ |
| Solubility | : Insoluble in the following materials: cold water and hot water. |
| Solubility in water | : Not applicable. |
| Miscible with water | : No. |
| Partition coefficient: n-octanol/water | : Not applicable. |
| Auto-ignition temperature | : 415°C (779°F) |
| Decomposition temperature | : Not applicable. |
| Viscosity | : Kinematic (40°C (104°F)): >20.5 mm ² /s (>20.5 cSt) |
| Flow time (ISO 2431) | : Not available. |
| <u>Particle characteristics</u> | |
| Median particle size | : Not applicable. |

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 pressurise, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition. Do not allow vapour to accumulate in low or confined areas. |
| Incompatible materials | : Reactive or incompatible with the following materials: oxidising 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 |
|---|------------------------|------------|------------------------|----------|
| n-butyl acetate | LC50 Inhalation Gas. | Rat | 390 ppm | 4 hours |
| | LC50 Inhalation Vapour | Rat | >21.1 mg/l | 4 hours |
| | LD50 Dermal | Rabbit | >14112 mg/kg | - |
| | LD50 Oral | Rat | 10760 mg/kg | - |
| xylene | LC50 Inhalation Gas. | Rat | 5000 ppm | 4 hours |
| | LC50 Inhalation Vapour | Rat - Male | 29000 mg/l | 4 hours |
| | LD50 Dermal | Rabbit | 12126 mg/kg | - |
| | LD50 Oral | Rat | 4300 mg/kg | - |
| Solvent naphtha (petroleum), light arom. | LC50 Inhalation Vapour | Rat | 6193 mg/m ³ | 4 hours |
| | LD50 Dermal | Rabbit | >3160 mg/kg | - |
| | LD50 Oral | Rat | 3592 mg/kg | - |
| 2-methoxy-1-methylethyl acetate | LD50 Dermal | Rabbit | >5 g/kg | - |
| | LD50 Dermal | Rat | >5000 mg/kg | - |
| | LD50 Oral | Rat | 8532 mg/kg | - |
| ethylbenzene | LC50 Inhalation Vapour | Rat | 6350 ppm | 4 hours |
| | LD50 Dermal | Rabbit | 12126 mg/kg | - |
| | LD50 Oral | Rat | 3500 mg/kg | - |
| 2-butoxyethyl acetate | LD50 Dermal | Rabbit | 1500 mg/kg | - |
| | LD50 Oral | Rat | 1880 mg/kg | - |
| bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate | LD50 Oral | Rat | >3230 mg/kg | - |
| Naphthenic acids | LD50 Oral | Rat | 3 g/kg | - |
| toluene | LC50 Inhalation Vapour | Rat | 28.1 mg/l | 4 hours |
| | LD50 Dermal | Rabbit | >5000 mg/kg | - |
| | LD50 Oral | Rat | 636 mg/kg | - |
| methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate | LD50 Oral | Rat | >3230 mg/kg | - |

Irritation/Corrosion

| Product/ingredient name | Result | Species | Score | Exposure | Observation |
|--|--------------------------|---------|-------|--------------------|-------------|
| n-butyl acetate | Eyes - Moderate irritant | Rabbit | - | 100 mg | - |
| | Skin - Moderate irritant | Rabbit | - | 24 hours 500 mg | - |
| xylene | Eyes - Mild irritant | Rabbit | - | 87 mg | - |
| | Eyes - Severe irritant | Rabbit | - | 24 hours 5 mg | - |
| | Skin - Mild irritant | Rat | - | 8 hours 60 uL | - |
| | Skin - Moderate irritant | Rabbit | - | 100 % | - |
| | Skin - Moderate irritant | Rabbit | - | 24 hours 500 mg | - |
| Solvent naphtha (petroleum), light arom. | Eyes - Mild irritant | Rabbit | - | 24 hours 100 uL | - |
| ethylbenzene | Eyes - Severe irritant | Rabbit | - | 500 mg | - |
| | Skin - Mild irritant | Rabbit | - | 24 hours 15 mg | - |
| 2-butoxyethyl acetate | Eyes - Mild irritant | Rabbit | - | 24 hours 500 mg | - |
| | Skin - Mild irritant | Rabbit | - | 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 uL | - |

Section 11. Toxicological information

| | | | | | |
|--|--------------------------|--------|---|----------------|---|
| | Skin - Mild irritant | Rabbit | - | 435 mg | - |
| | Skin - Moderate irritant | Rabbit | - | 24 hours 20 mg | - |
| | Skin - Moderate irritant | Rabbit | - | 500 mg | - |

Sensitisation

Not available.

Mutagenicity

Not available.

Carcinogenicity

Not available.

Classification

| Product/ingredient name | IARC |
|-------------------------|------|
| xylene | 3 |
| ethylbenzene | 2B |
| toluene | 3 |

Reproductive toxicity

Not available.

Teratogenicity

Not available.

Specific target organ toxicity (single exposure)

| Product/ingredient name | Category | Route of exposure | Target organs |
|--|------------|-------------------|------------------------------|
| n-butyl acetate | Category 3 | - | Narcotic effects |
| xylene | Category 3 | - | Respiratory tract irritation |
| Solvent naphtha (petroleum), light arom. | Category 3 | - | Respiratory tract irritation |
| 2-methoxy-1-methylethyl acetate | Category 3 | - | Narcotic effects |
| toluene | Category 3 | - | Narcotic effects |
| | Category 3 | - | Narcotic effects |

Specific target organ toxicity (repeated exposure)

| Product/ingredient name | Category | Route of exposure | Target organs |
|-------------------------|------------|-------------------|----------------|
| xylene | Category 2 | - | - |
| ethylbenzene | Category 2 | - | hearing organs |
| toluene | Category 2 | - | - |

Aspiration hazard

| Product/ingredient name | Result |
|--|--------------------------------|
| xylene | ASPIRATION HAZARD - Category 1 |
| Solvent naphtha (petroleum), light arom. | ASPIRATION HAZARD - Category 1 |
| ethylbenzene | ASPIRATION HAZARD - Category 1 |
| toluene | ASPIRATION HAZARD - Category 1 |

Information on 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.

Section 11. Toxicological information

- 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

- Eye contact** : Adverse symptoms may include the following:
pain or irritation
watering
redness
- Inhalation** : Adverse symptoms may include the following:
nausea or vomiting
headache
drowsiness/fatigue
dizziness/vertigo
unconsciousness
- Skin contact** : Adverse symptoms may include the following:
irritation
redness
- Ingestion** : No specific data.

Delayed and immediate effects as well as 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. 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** : No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

| Product/ingredient name | Oral (mg/kg) | Dermal (mg/kg) | Inhalation (gases) (ppm) | Inhalation (vapours) (mg/l) | Inhalation (dusts and mists) (mg/l) |
|---------------------------------|--------------|----------------|--------------------------|-----------------------------|-------------------------------------|
| A81 Octocryl System Maroon | N/A | 8268.6 | 42176.8 | 242.1 | N/A |
| n-butyl acetate | 10760 | N/A | N/A | N/A | N/A |
| xylene | N/A | 1100 | 5000 | 29000 | N/A |
| 2-methoxy-1-methylethyl acetate | 8532 | N/A | N/A | N/A | N/A |
| ethylbenzene | N/A | 12126 | N/A | 11 | N/A |
| 2-butoxyethyl acetate | N/A | 1500 | N/A | 11 | N/A |
| toluene | N/A | N/A | N/A | 28.1 | N/A |

Section 12. Ecological information

Toxicity

| Product/ingredient name | Result | Species | Exposure |
|---|-----------------------------------|--|----------|
| n-butyl acetate | Acute EC50 397 mg/l | Algae - <i>Selenastrum capricornutum</i> | 72 hours |
| | Acute EC50 44 mg/l | Daphnia - <i>Daphnia magna</i> | 48 hours |
| | Acute LC50 32 mg/l Marine water | Crustaceans - <i>Artemia salina</i> | 48 hours |
| | Acute LC50 18 mg/l | Fish - <i>Pimephales promelas</i> | 96 hours |
| | Acute NOEC 200 mg/l | Algae | 72 hours |
| xylene | Acute EC50 1 to 10 mg/l | Algae | 72 hours |
| | Acute EC50 1 to 10 mg/l | Daphnia - <i>Daphnia magna</i> | 48 hours |
| | Acute LC50 8500 µg/l Marine water | Crustaceans - <i>Palaemonetes pugio</i> | 48 hours |
| Solvent naphtha (petroleum), light arom. | Acute LC50 13400 µg/l Fresh water | Fish - <i>Pimephales promelas</i> | 96 hours |
| | Acute EC50 2.9 mg/l | Algae - <i>Pseudokirchneriella subcapitata</i> | 72 hours |
| | Acute EC50 3.2 mg/l | Daphnia - <i>Daphnia magna</i> | 48 hours |
| | Acute LC50 9.2 mg/l | Fish - <i>Oncorhynchus mykiss</i> | 96 hours |
| | Acute NOEC >1 mg/l | Algae - <i>Pseudokirchneriella subcapitata</i> | 72 hours |
| 2-methoxy-1-methylethyl acetate | Acute EC50 >1000 mg/l | Algae - <i>Pseudokirchnerella subcapitata</i> | 96 hours |
| | Acute EC50 408 mg/l | Daphnia - <i>Daphnia magna</i> | 48 hours |
| | Acute LC50 134 mg/l | Fish - <i>Oncorhynchus mykiss</i> | 96 hours |
| ethylbenzene | Acute EC50 4900 µg/l Marine water | Algae - <i>Skeletonema costatum</i> | 72 hours |
| | Acute EC50 7700 µg/l Marine water | Algae - <i>Skeletonema costatum</i> | 96 hours |
| | Acute EC50 6.53 mg/l Marine water | Crustaceans - <i>Artemia sp.</i> - Nauplii | 48 hours |
| | Acute EC50 2.93 mg/l Fresh water | Daphnia - <i>Daphnia magna</i> - Neonate | 48 hours |
| 2-butoxyethyl acetate | Acute LC50 4200 µg/l Fresh water | Fish - <i>Oncorhynchus mykiss</i> | 96 hours |
| | Acute EC50 1570 mg/l | Algae - <i>Pseudokirchneriella subcapitata</i> | 72 hours |
| | Acute EC50 37 mg/l | Daphnia - <i>Daphnia magna</i> | 48 hours |
| | Acute LC50 22 mg/l | Fish - <i>Pimephales promelas</i> | 96 hours |
| bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate | Acute EC50 0.22 mg/l | Algae | 72 hours |
| | Acute LC50 0.9 mg/l | Fish | 96 hours |
| | Acute NOEC 6.3 mg/l | Daphnia | 21 days |
| Naphthenic acids | Acute EC50 26000 µg/l Fresh water | Algae - <i>Navicula seminulum</i> | 96 hours |
| | Acute LC50 5600 µg/l Fresh water | Fish - <i>Lepomis macrochirus</i> | 96 hours |
| toluene | Acute EC50 12.5 mg/l | Algae | 72 hours |
| | Acute EC50 >433 ppm Marine water | Algae - <i>Skeletonema costatum</i> | 96 hours |
| | Acute EC50 11600 µg/l Fresh water | Crustaceans - <i>Gammarus pseudolimnaeus</i> - Adult | 48 hours |
| | Acute EC50 3.8 mg/l | Daphnia - <i>Daphnia magna</i> | 48 hours |
| | Acute LC50 5.5 mg/l | Fish - <i>Oncorhynchus kisutch</i> | 96 hours |
| | Chronic NOEC 1 mg/l Fresh water | Daphnia - <i>Daphnia magna</i> | 21 days |
| | Acute EC50 0.22 mg/l | Algae | 72 hours |
| methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate | Acute LC50 0.9 mg/l | Fish | 96 hours |
| | Acute NOEC 6.3 mg/l | Daphnia | 21 days |

Persistence/degradability

Section 12. Ecological information

| Product/ingredient name | Test | Result | Dose | Inoculum |
|--|---|--------------------------|------|-------------|
| n-butyl acetate | OECD 301D Ready Biodegradability - Closed Bottle Test | >80 % - 5 days | - | - |
| Solvent naphtha (petroleum), light arom. | - | 78 % - Readily - 28 days | - | Fresh water |
| 2-methoxy-1-methylethyl acetate | OECD 302B Inherent Biodegradability: Zahn-Wellens/ EMPA Test | 100 % - 28 days | - | - |
| | OECD 301F Ready Biodegradability - Manometric Respirometry Test | 83 % - 28 days | - | - |

| Product/ingredient name | Aquatic half-life | Photolysis | Biodegradability |
|--|-------------------|------------------|------------------|
| n-butyl acetate | - | - | Readily |
| Solvent naphtha (petroleum), light arom. | - | - | Readily |
| 2-methoxy-1-methylethyl acetate | - | - | Readily |
| 2-butoxyethyl acetate | - | 90.4%; 28 day(s) | - |
| toluene | - | - | Readily |

Bioaccumulative potential

| Product/ingredient name | LogP _{ow} | BCF | Potential |
|--|--------------------|-------------|-----------|
| n-butyl acetate | 2.3 | - | Low |
| xylene | 3.12 | 8.1 to 25.9 | Low |
| Solvent naphtha (petroleum), light arom. | - | 10 to 2500 | High |
| 2-methoxy-1-methylethyl acetate | 1.2 | - | Low |
| ethylbenzene | 3.6 | - | Low |
| 2-butoxyethyl acetate | 1.51 | - | Low |
| toluene | 2.73 | 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 minimised 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. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or

Section 13. Disposal considerations

liners may retain some product residues. Vapour 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 spilt material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

| | Brazil | IMDG | IATA |
|----------------------------|--|--|--|
| UN number | UN1263 | UN1263 | UN1263 |
| UN proper shipping name | TINTA | PAINT | Paint |
| Transport hazard class(es) | 3  | 3  | 3  |
| Packing group | III | III | III |
| Environmental hazards | No. | No. | No. |

Additional information

| | |
|---------------|--|
| Brazil | : Special provisions 90, 163, 223 Risk number 30 |
| IMDG | : Emergency schedules F-E, _S-E_ Special provisions 163, 223, 955 |
| IATA | : Quantity limitation Passenger and Cargo Aircraft: 60 L. Packaging instructions: 355. Cargo Aircraft Only: 220 L. Packaging instructions: 366. Limited Quantities - Passenger Aircraft: 10 L. Packaging instructions: Y344. Special provisions A3, A72 |

Special precautions for user : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport in bulk according to IMO instruments : Not available.

Section 15. Regulatory information

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

Montreal Protocol

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

Inventory list

Section 15. Regulatory information

| | |
|--------------------------|--|
| Australia | : All components are listed or exempted. |
| Canada | : At least one component is not listed in DSL but all such components are listed in NDSL. |
| China | : All components are listed or exempted. |
| Europe | : |
| Japan | : Japan inventory (CSCL) : At least one component is not listed. Japan inventory (ISHL) : Not determined. |
| New Zealand | : All components are listed or exempted. |
| Philippines | : All components are listed or exempted. |
| Republic of Korea | : All components are listed or exempted. |
| Taiwan | : All components are listed or exempted. |
| Thailand | : Not determined. |
| Turkey | : Not determined. |
| United States | : All components are active or exempted. |
| Viet Nam | : Not determined. |

Section 16. Other information

History

| | |
|---------------------------------------|--|
| Date of printing | : 8/3/2023 |
| Date of issue/Date of revision | : 8/3/2023 |
| Date of previous issue | : No previous validation |
| Version | : 1 |
| 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 |

Procedure used to derive the classification

| Classification | Justification |
|--|-----------------------|
| FLAMMABLE LIQUIDS - Category 3 | On basis of test data |
| SKIN IRRITATION - Category 2 | Calculation method |
| EYE IRRITATION - Category 2A | Calculation method |
| SKIN SENSITISATION - Category 1 | Calculation method |
| SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE (Narcotic effects) - Category 3 | Calculation method |
| SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE - Category 2 | Calculation method |
| SHORT-TERM (ACUTE) AQUATIC HAZARD - Category 3 | Calculation method |
| LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 3 | Calculation method |

References : Not available.

Indicates information that has changed from previously issued version.

Notice to reader

Section 16. Other information

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.