# SAFETY DATA SHEET
(in accordance with Regulation (EU) 2015/830)

# KCS-CV -KCS CHARM VIOLET



## SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING.

**1.1 Product identifier.**

Product Name: KCS CHARM VIOLET
Product Code: KCS-CV

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

Solvent-based colors for airbrush painting

**Uses advised against:**
Uses other than those recommended.

**1.3 Details of the supplier of the safety data sheet.**

Company: **CUSTOM CREATIVE SL**
Address: C/ SEVILLA 43
City: JEREZ DE LA FRONTERA
Province: CADIZ
Telephone: (+34) 956045939
E-mail: info@customcreative.es
Web: customcreative.es

**1.4 Emergency telephone number:** (+34) 956045939 (Only available during office hours; Monday-Friday; 08:00-18:00)

## SECTION 2: HAZARDS IDENTIFICATION.

**2.1 Classification of the substance or mixture.**
In accordance with Regulation (EU) No 1272/2008:
Aquatic Chronic 2 : Toxic to aquatic life with long lasting effects.
Eye Irrit. 2 : Causes serious eye irritation.
Flam. Liq. 3 : Flammable liquid and vapour.
STOT SE 3 : May cause respiratory irritation.

**2.2 Label elements.**
**Labelling in accordance with Regulation (EU) No 1272/2008:**
Pictograms:

Signal Word:
**Warning**
H statements:

| | |
|---|---|
| H226 | Flammable liquid and vapour. |
| H319 | Causes serious eye irritation. |
| H335 | May cause respiratory irritation. |
| H411 | Toxic to aquatic life with long lasting effects. |

P statements:

| | |
|---|---|
| P210 | Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. |
| P261 | Avoid breathing dust/fume/gas/mist/vapours/spray. |
| P273 | Avoid release to the environment. |

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P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection/…
P370+P378 In case of fire: Use... to extinguish.
P403+P233 Store in a well-ventilated place. Keep container tightly closed.
P403+P235 Store in a well-ventilated place. Keep cool.

EUH statements:
EUH066 Repeated exposure may cause skin dryness or cracking.

Contains:
propan-2-ol, isopropyl alcohol, isopropanol
4-methylpentan-2-one, isobutyl methyl ketone
n-butyl acetate

**2.3 Other hazards.**
In normal use conditions and in its original form, the product itself does not involve any other risk for health and the environment.

## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS.

**3.1 Substances.**
Not Applicable.

**3.2 Mixtures.**
Substances posing a danger to health or the environment in accordance with the Regulation (EC) No. 1272/2008, assigned a Community exposure limit in the workplace, and classified as PBT/vPvB or included in the Candidate List:

| Identifiers | Name | Concentrate | (*)Classification - Regulation (EC) No 1272/2008 | |
|---|---|---|---|---|
| | | | Classification | specific concentration limit |
| Index No: 607-195-00-7<br>CAS No: 108-65-6<br>EC No: 203-603-9<br>Registration No: 01-2119475791-29-XXXX | [1] 2-methoxy-1-methylethyl acetate | 25 - 50 % | Flam. Liq. 3, H226 | - |
| Index No: 606-004-00-4<br>CAS No: 108-10-1<br>EC No: 203-550-1<br>Registration No: 01-2119473980-30-XXXX | [1] 4-methylpentan-2-one, isobutyl methyl ketone | 20 - 50 % | Acute Tox. 4 *, H332 - Eye Irrit. 2, H319 - Flam. Liq. 2, H225 - STOT SE 3, H335 | - |
| CAS No: 85029-58-9<br>EC No: 285-083-3 | Amines, C10-14-branched and linear alkyl, bis[2-[(4,5-dihydro-3-methyl-5-oxo-1-phenyl-1H-pyrazol-4-yl)azo]benzoato(2-)]chromate(1-) | 2.5 - 25 % | Aquatic Acute 1, H400 - Aquatic Chronic 1, H410 | - |
| Index No: 607-025-00-1<br>CAS No: 123-86-4<br>EC No: 204-658-1<br>Registration No: 01-2119485493-29-XXXX | [1] n-butyl acetate | 1 - 20 % | Flam. Liq. 3, H226 - STOT SE 3, H336 | - |
| Index No: 606-024-00-3<br>CAS No: 110-43-0<br>EC No: 203-767-1<br>Registration No: 01-2119902391-49-XXXX | [1] heptan-2-one, methyl amyl ketone | 1 - 10 % | Acute Tox. 4 *, H332 - Acute Tox. 4 *, H302 - Flam. Liq. 3, H226 | - |

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| | | | | |
|---|---|---|---|---|
| Index No: 601-022-00-9<br>CAS No: 1330-20-7<br>EC No: 215-535-7<br>Registration No: 01-2119488216-32-XXXX | [1] xylene | 1 - 10 % | Acute Tox. 4 *, H312 - Acute Tox. 4 *, H332 - Flam. Liq. 3, H226 - Skin Irrit. 2, H315 | - |
| Index No: 603-117-00-0<br>CAS No: 67-63-0<br>EC No: 200-661-7<br>Registration No: 01-2119457558-25-XXXX | [1] propan-2-ol, isopropyl alcohol, isopropanol | 1 - 10 % | Eye Irrit. 2, H319 - Flam. Liq. 2, H225 - STOT SE 3, H336 | - |
| Index No: 603-004-00-6<br>CAS No: 71-36-3<br>EC No: 200-751-6<br>Registration No: 01-2119484630-38-XXXX | [1] butan-1-ol | 0 - 1 % | Acute Tox. 4 *, H302 - Eye Dam. 1, H318 - Flam. Liq. 3, H226 - STOT SE 3, H335 - STOT SE 3, H336 - Skin Irrit. 2, H315 | - |
| Index No: 601-023-00-4<br>CAS No: 100-41-4<br>EC No: 202-849-4<br>Registration No: 01-2119489370-35-XXXX | [1] ethylbenzene | 0 - 10 % | Acute Tox. 4 *, H332 - Asp. Tox. 1, H304 - Flam. Liq. 2, H225 - STOT RE 2, H373(órganos de audición) | - |
| Index No: 607-038-00-2<br>CAS No: 112-07-2<br>EC No: 203-933-3<br>Registration No: 01-2119475112-47-XXXX | [1] 2-butoxyethyl acetate, butylglycol acetate | 0 - 2.5 % | Acute Tox. 4 *, H312 - Acute Tox. 4 *, H332 | - |
| Index No: 607-035-00-6<br>CAS No: 80-62-6<br>EC No: 201-297-1<br>Registration No: 01-2119452498-28-XXXX | [1] methyl methacrylate, methyl 2-methylprop-2-enoate, methyl 2-methylpropenoate | 0 - 1 % | Flam. Liq. 2, H225 - STOT SE 3, H335 - Skin Irrit. 2, H315 - Skin Sens. 1, H317 | - |
| Index No: 601-021-00-3<br>CAS No: 108-88-3<br>EC No: 203-625-9<br>Registration No: 01-2119471310-51-XXXX | [1] toluene | 0 - 3 % | Asp. Tox. 1, H304 - Flam. Liq. 2, H225 - Repr. 2, H361d *** - STOT RE 2 *, H373 ** - STOT SE 3, H336 - Skin Irrit. 2, H315 | - |
| Index No: 603-108-00-1<br>CAS No: 78-83-1<br>EC No: 201-148-0<br>Registration No: 01-2119484609-23-XXXX | [1] 2-methylpropan-1-ol, iso-butanol | 0 - 1 % | Eye Dam. 1, H318 - Flam. Liq. 3, H226 - STOT SE 3, H335 - STOT SE 3, H336 - Skin Irrit. 2, H315 | - |

(*) *The complete text of the H phrases is given in section 16 of this Safety Data Sheet.*
**,**,*** See Regulation (EC) No. 1272/2008, Annex VI, section 1.2.*
*[1] Substance with a Community workplace exposure limit (see section 8.1).*

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## SECTION 4: FIRST AID MEASURES.

**4.1 Description of first aid measures.**
In case of doubt or when symptoms of feeling unwell persist, get medical attention. Never administer anything orally to persons who are unconscious.

**Inhalation.**
Take the victim into open air; keep them warm and calm. If breathing is irregular or stops, perform artificial respiration. Do not administer anything orally. If unconscious, place them in a suitable position and seek medical assistance.

**Eye contact.**
Remove contact lenses, if present and if it is easy to do. Wash eyes with plenty of clean and cool water for at least 10 minutes while pulling eyelids up, and seek medical assistance. Dont let the person to rub the affected eye.

**Skin contact.**
Remove contaminated clothing. Wash skin vigorously with water and soap or a suitable skin cleaner. NEVER use solvents or thinners.

**Ingestion.**
If accidentally ingested, seek immediate medical attention. Keep calm. NEVER induce vomiting.

**4.2 Most important symptoms and effects, both acute and delayed.**
Irritant Product, repeated or prolonged contact with skin or mucous membranes can cause redness, blisters or dermatitis, inhalation of spray mist or particles in suspension may cause irritation of the respiratory tract, some symptoms may not be immediate.

**4.3 Indication of any immediate medical attention and special treatment needed.**
In case of doubt or when symptoms of feeling unwell persist, get medical attention. Never administer anything orally to persons who are unconscious. Cover the affected area with a dry sterile bandage. Protect the affected area from pressure or friction.

## SECTION 5: FIREFIGHTING MEASURES.

Flammable product, the necessary prevention measures should be taken in order to avoid risks, In case of fire, the following measures are recommended:

**5.1 Extinguishing media.**
**Suitable extinguishing media:**
Extinguisher powder or CO2. In case of more serious fires, also alcohol-resistant foam and water spray.

**Unsuitable extinguishing media:**
Do not use a direct stream of water to extinguish. In the presence of electrical voltage, you cannot use water or foam as extinguishing media.

**5.2 Special hazards arising from the substance or mixture.**
**Special risks.**
Fire can cause thick, black smoke. As a result of thermal decomposition, dangerous products can form: carbon monoxide, carbon dioxide. Exposure to combustion or decomposition products can be harmful to your health.

During a fire and depending on its magnitude the following may occur:
- Flammable vapors or gases.

**5.3 Advice for firefighters.**
Use water to cool tanks, cisterns, or containers close to the heat source or fire. Take wind direction into account. Prevent the products used to fight the fire from going into drains, sewers, or waterways. Product residues and extinguishing media may contaminate the aquatic environment. Follow the instructions given in the emergency or fire evacuation plan or plans if available.

**Fire protection equipment.**

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According to the size of the fire, it may be necessary to use protective suits against the heat, individual breathing equipment, gloves, protective goggles or facemasks, and boots. During extinction and depending on the magnitude and proximity to the fire, additional protective equipment such as chemical protection gloves, heat-reflecting suits or gas-tight suits may be required.

## SECTION 6: ACCIDENTAL RELEASE MEASURES.

**6.1 Personal precautions, protective equipment and emergency procedures.**
Eliminate possible ignition points and ventilate the area. No smoking. Avoid breathing fumes. For exposure control and individual protection measures, see section 8.

**6.2 Environmental precautions.**
Product dangerous for the environment, in case of large spills or if the product contaminates lakes, rivers, or sewers, inform the responsible authorities according to local legislation. Prevent the contamination of drains, surface or subterranean waters, and the ground.

**6.3 Methods and material for containment and cleaning up.**
Contain and collect spillage with inert absorbent material (earth, sand, vermiculite, Kieselguhr...) and clean the area immediately with a suitable decontaminant.
Deposit waste in closed and suitable containers for disposal, in compliance with local and national regulations

**6.4 Reference to other sections.**
For exposure control and individual protection measures, see section 8.
For later elimination of waste, follow the recommendations under section 13.

## SECTION 7: HANDLING AND STORAGE.

**7.1 Precautions for safe handling.**
The fumes are heavier than air and can spread across the ground. They can form explosive mixtures with air. Prevent the creation of flammable or explosive fume concentrations in the air; prevent fume concentrations above work exposure limits. The product must only be used in areas where all unprotected flames and other ignition points have been eliminated. Electrical equipment has to be protected according to applicable standards.
The product can be electrostatically charged: always use earth grounds when transferring the product. Operators must use anti-static footwear and clothing, and floors must be conductors.
Keep the container tightly closed and isolated from heat sources, sparks, and fire. Do not use tools that can cause sparks.For personal protection, see section 8.
In the application area, smoking, eating, and drinking must be prohibited.
Follow legislation on occupational health and safety.
Never use pressure to empty the containers. They are not pressure-resistant containers. Keep the product in containers made of a material identical to the original.

**7.2 Conditions for safe storage, including any incompatibilities.**
Store according to local legislation. Observe indications on the label. Store the containers between 5 and 25º C, in a dry and well-ventilated place, far from sources of heat and direct solar light. Keep far away from ignition points. Keep away from oxidising agents and from highly acidic or alkaline materials. Do not smoke. Prevent the entry of non-authorised persons. Once the containers are open, they must be carefully closed and placed vertically to prevent spills.
The product is not affected by Directive 2012/18/EU (SEVESO III).

**7.3 Specific end use(s).**
Not available.

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION.

**8.1 Control parameters.**

Work exposure limit for:

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| Name | CAS No. | Country | Limit value | ppm | mg/m³ |
|---|---|---|---|---|---|
| 2-methoxy-1-methylethyl acetate | 108-65-6 | European Union [1] | **Eight hours** | 50 (skin) | 275 (skin) |
| | | | **Short term** | 100 (skin) | 550 (skin) |
| | | United Kingdom [2] | **Eight hours** | 50 | 274 |
| | | | **Short term** | 100 | 548 |
| | | Éire [3] | **Eight hours** | 50 | 275 |
| | | | **Short term** | 100 | 550 |
| 4-methylpentan-2-one, isobutyl methyl ketone | 108-10-1 | European Union [1] | **Eight hours** | 20 | 83 |
| | | | **Short term** | 50 | 208 |
| | | United Kingdom [2] | **Eight hours** | 50 | 208 |
| | | | **Short term** | 100 | 416 |
| | | Éire [3] | **Eight hours** | 20 | 83 |
| | | | **Short term** | 50 | 208 |
| | | United States [4] (Cal/OSHA) | **Eight hours** | 50 | |
| | | | **Short term** | 75 | |
| | | United States [5] (NIOSH) | **Eight hours** | 50 | |
| | | | **Short term** | 75 | |
| | | United States [6] (OSHA) | **Eight hours** | 100 | 410 |
| | | | **Short term** | | |
| n-butyl acetate | 123-86-4 | United Kingdom [2] | **Eight hours** | 150 | 724 |
| | | | **Short term** | 200 | 966 |
| | | Éire [3] | **Eight hours** | 150 | 710 |
| | | | **Short term** | 200 | 950 |
| | | United States [4] (Cal/OSHA) | **Eight hours** | 150 | |
| | | | **Short term** | 200 | |
| | | United States [5] (NIOSH) | **Eight hours** | 150 | |
| | | | **Short term** | 200 | |
| | | United States [6] (OSHA) | **Eight hours** | 150 | 710 |
| | | | **Short term** | | |
| heptan-2-one, methyl amyl ketone | 110-43-0 | European Union [1] | **Eight hours** | 50 (skin) | 238 (skin) |
| | | | **Short term** | 100 (skin) | 475 (skin) |
| | | United Kingdom [2] | **Eight hours** | 50 | 237 |
| | | | **Short term** | 100 | 475 |
| | | Éire [3] | **Eight hours** | 50 | 238 |
| | | | **Short term** | 100 | 475 |
| | | United States [4] (Cal/OSHA) | **Eight hours** | 50 | |
| | | | **Short term** | | |
| | | United States [5] (NIOSH) | **Eight hours** | 100 | |
| | | | **Short term** | | |
| | | United States [6] (OSHA) | **Eight hours** | 100 | 465 |
| | | | **Short term** | | |
| xylene | 1330-20-7 | European Union [1] | **Eight hours** | 50 (skin) | 221 (skin) |
| | | | **Short term** | 100 (skin) | 442 (skin) |
| | | United Kingdom [2] | **Eight hours** | 50 | 220 |
| | | | **Short term** | 100 | 441 |
| | | Éire [3] | **Eight hours** | 50 | 221 |
| | | | **Short term** | 100 | 442 |
| | | United States [4] (Cal/OSHA) | **Eight hours** | 100 | |
| | | | **Short term** | 150 (Ceiling) 300 | |
| | | United States [5] (NIOSH) | **Eight hours** | 100 | |
| | | | **Short term** | 150 | |
| | | United States [6] (OSHA) | **Eight hours** | 100 | 435 |
| | | | **Short term** | | |
| propan-2-ol, isopropyl alcohol, isopropanol | 67-63-0 | United Kingdom [2] | **Eight hours** | 400 | 999 |
| | | | **Short term** | 500 | 1250 |
| | | Éire [3] | **Eight hours** | 200 | |
| | | | **Short term** | 400 | |

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| | | | | | |
|---|---|---|---|---|---|
| | | United States [4] (Cal/OSHA) | **Eight hours** | 400 | |
| | | | **Short term** | 500 | |
| | | United States [5] (NIOSH) | **Eight hours** | 400 | |
| | | | **Short term** | 500 | |
| | | United States [6] (OSHA) | **Eight hours** | 400 | 980 |
| | | | **Short term** | | |
| butan-1-ol | 71-36-3 | United Kingdom [2] | **Eight hours** | | |
| | | | **Short term** | 50 | 154 |
| | | Éire [3] | **Eight hours** | 20 | |
| | | | **Short term** | | |
| | | United States [4] (Cal/OSHA) | **Eight hours** | (Ceiling) 50 | |
| | | | **Short term** | | |
| | | United States [5] (NIOSH) | **Eight hours** | (Ceiling) 50 | |
| | | | **Short term** | | |
| | | United States [6] (OSHA) | **Eight hours** | 100 | 300 |
| | | | **Short term** | | |
| ethylbenzene | 100-41-4 | European Union [1] | **Eight hours** | 100 (skin) | 442 (skin) |
| | | | **Short term** | 200 (skin) | 884 (skin) |
| | | United Kingdom [2] | **Eight hours** | 100 | 441 |
| | | | **Short term** | 125 | 552 |
| | | Éire [3] | **Eight hours** | 100 | 442 |
| | | | **Short term** | 200 | 884 |
| | | United States [4] (Cal/OSHA) | **Eight hours** | 5 | |
| | | | **Short term** | 30 | |
| | | United States [5] (NIOSH) | **Eight hours** | 100 | |
| | | | **Short term** | 125 | |
| | | United States [6] (OSHA) | **Eight hours** | 100 | 435 |
| | | | **Short term** | | |
| 2-butoxyethyl acetate, butylglycol acetate | 112-07-2 | European Union [1] | **Eight hours** | 20 (skin) | 133 (skin) |
| | | | **Short term** | 50 (skin) | 333 (skin) |
| | | United Kingdom [2] | **Eight hours** | 20 | 133 |
| | | | **Short term** | 50 | 332 |
| | | Éire [3] | **Eight hours** | 20 | 133 |
| | | | **Short term** | 50 | 333 |
| methyl methacrylate, methyl 2-methylprop-2-enoate, methyl 2-methylpropenoate | 80-62-6 | European Union [1] | **Eight hours** | 50 | |
| | | | **Short term** | 100 | |
| | | United Kingdom [2] | **Eight hours** | 50 | 208 |
| | | | **Short term** | 100 | 416 |
| | | Éire [3] | **Eight hours** | 50 | |
| | | | **Short term** | 100 | |
| | | United States [4] (Cal/OSHA) | **Eight hours** | 50 | |
| | | | **Short term** | 100 | |
| | | United States [5] (NIOSH) | **Eight hours** | 100 | |
| | | | **Short term** | | |
| | | United States [6] (OSHA) | **Eight hours** | 100 | 410 |
| | | | **Short term** | | |
| toluene | 108-88-3 | European Union [1] | **Eight hours** | 50 (skin) | 192 (skin) |
| | | | **Short term** | 100 (skin) | 384 (skin) |
| | | United Kingdom [2] | **Eight hours** | 50 | 191 |
| | | | **Short term** | 100 | 384 |
| | | Éire [3] | **Eight hours** | 50 | 192 |
| | | | **Short term** | 100 | 384 |
| | | United States [4] (Cal/OSHA) | **Eight hours** | 10 | |
| | | | **Short term** | 150 (Ceiling) 500 | |
| | | United States [5] (NIOSH) | **Eight hours** | 100 | |
| | | | **Short term** | 150 | |
| | | United States | **Eight hours** | 200 | |

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|---|---|---|---|---|---|
| | | [6] (OSHA) | **Short term** | 300 Acceptable maximum peak above the acceptable ceiling concentration for an 8-hr shift: 500 [10 min] | |
| 2-methylpropan-1-ol, iso-butanol | 78-83-1 | United Kingdom [2] | **Eight hours** | 50 | 154 |
| | | | **Short term** | 75 | 231 |
| | | Éire [3] | **Eight hours** | 50 | 150 |
| | | | **Short term** | 75 | 225 |
| | | United States [4] (Cal/OSHA) | **Eight hours** | 50 | |
| | | | **Short term** | | |
| | | United States [5] (NIOSH) | **Eight hours** | 50 | |
| | | | **Short term** | | |
| | | United States [6] (OSHA) | **Eight hours** | 100 | 300 |
| | | | **Short term** | | |

*[1] According both Binding Occupational Esposure Limits (BOELVs) and Indicative Occupational Exposure Limits (IOELVs) adopted by Scientific Committee for Occupational Exposure Limits to Chemical Agents (SCOEL).*
*[2] According Limit Value (IOELV) list in 2nd Indicative Occupational Exposure adobted by Health and Safety Executive.*
*[3] According Code of Practice for the Safety, Health and Welfare at Work (Chemicals Agents) Regulations adopted by Health and Safety Authority (HSA).*
*[4] California Division of Occupational Safety and Health (Cal/OSHA) Permissible Exposure Limits (PELs).*
*[5] National Institute for Occupational Safety and Health. NIOSH Recommendations for occupational safety and health, Compendium of Policy Documents and Statements, January, 1992, DHHS (NIOSH) Publication No. 92-100.*
*[6] Occupational Safety and Health Administration, United States Department of Labor. Permissible Exposure limits (PELs), California Division of Occupational Safety and Health (Cal/OSHA) Permissible Exposure Limits (PELs).*
The product does NOT contain substances with Biological Limit Values.
Concentration levels DNEL/DMEL:

| Name | DNEL/DMEL | Type | Value |
|---|---|---|---|
| 2-methoxy-1-methylethyl acetate<br>CAS No: 108-65-6<br>EC No: 203-603-9 | DNEL (Workers) | Inhalation, Long-term, Systemic effects | 275 (mg/m³) |
| | DNEL (General population) | Inhalation, Long-term, Systemic effects | 33 (mg/m³) |
| | DNEL (Workers) | Dermal, Long-term, Systemic effects | 153,5 (mg/kg bw/day) |
| | DNEL (General population) | Dermal, Long-term, Systemic effects | 54,8 (mg/kg bw/day) |
| | DNEL (General population) | Oral, Long-term, Systemic effects | 1,67 (mg/kg bw/day) |
| 4-methylpentan-2-one, isobutyl methyl ketone<br>CAS No: 108-10-1<br>EC No: 203-550-1 | DNEL (Workers) | Inhalation, Long-term, Local effects | 83 (mg/m³) |
| | DNEL (General population) | Inhalation, Long-term, Local effects | 14,7 (mg/m³) |
| | DNEL (Workers) | Inhalation, Long-term, Systemic effects | 83 (mg/m³) |
| | DNEL (General population) | Inhalation, Long-term, Systemic effects | 14,7 (mg/m³) |
| | DNEL (Workers) | Inhalation, Acute, Systemic effects | 208 (mg/m³) |
| | DNEL (General population) | Inhalation, Acute, Systemic effects | 155,2 (mg/m³) |
| | DNEL (Workers) | Inhalation, Acute, Local effects | 208 (mg/m³) |
| | DNEL (General population) | Inhalation, Acute, Local effects | 155,2 (mg/m³) |

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|---|---|---|---|
| | DNEL (Workers) | Dermal, Long-term, Systemic effects | 11,8 (mg/kg bw/day) |
| | DNEL (General population) | Dermal, Long-term, Systemic effects | 4,2 (mg/kg bw/day) |
| | DNEL (General population) | Oral, Long-term, Systemic effects | 4,2 (mg/kg bw/day) |
| n-butyl acetate<br>CAS No: 123-86-4<br>EC No: 204-658-1 | DNEL (Workers) | Inhalation, Long-term, Systemic effects | 480 (mg/m³) |
| | DNEL (General population) | Inhalation, Long-term, Systemic effects | 102,34 (mg/m³) |
| | DNEL (Workers) | Inhalation, Acute, Systemic effects | 960 (mg/m³) |
| | DNEL (General population) | Inhalation, Acute, Systemic effects | 859,7 (mg/m³) |
| | DNEL (Workers) | Inhalation, Long-term, Local effects | 480 (mg/m³) |
| | DNEL (General population) | Inhalation, Long-term, Local effects | 102,34 (mg/m³) |
| | DNEL (Workers) | Inhalation, Acute, Local effects | 960 (mg/m³) |
| | DNEL (General population) | Inhalation, Acute, Local effects | 859,7 (mg/m³) |
| | DNEL (General population) | Oral, Long-term, Systemic effects | 3,4 (mg/kg bw/day) |
| | DNEL (General population) | Dermal, Long-term, Systemic effects | 3,4 (mg/kg bw/day) |
| heptan-2-one, methyl amyl ketone<br>CAS No: 110-43-0<br>EC No: 203-767-1 | DNEL (Workers) | Inhalation, Long-term, Systemic effects | 394,25 (mg/m³) |
| xylene<br>CAS No: 1330-20-7<br>EC No: 215-535-7 | DNEL (Workers) | Inhalation, Long-term, Systemic effects | 77 (mg/m³) |
| propan-2-ol, isopropyl alcohol, isopropanol<br>CAS No: 67-63-0<br>EC No: 200-661-7 | DNEL (Workers) | Inhalation, Long-term, Systemic effects | 500 (mg/m³) |
| | DNEL (General population) | Inhalation, Long-term, Systemic effects | 89 (mg/m³) |
| | DNEL (Workers) | Dermal, Long-term, Systemic effects | 888 (mg/kg bw/day) |
| | DNEL (General population) | Dermal, Long-term, Systemic effects | 319 (mg/kg bw/day) |
| | DNEL (General population) | Oral, Long-term, Systemic effects | 26 (mg/kg bw/day) |
| butan-1-ol<br>CAS No: 71-36-3<br>EC No: 200-751-6 | DNEL (Workers) | Inhalation, Long-term, Local effects | 310 (mg/m³) |
| | DNEL (General population) | Inhalation, Long-term, Local effects | 55 (mg/m³) |
| | DNEL (General population) | Oral, Long-term, Systemic effects | 3,125 (mg/kg bw/day) |
| ethylbenzene<br>CAS No: 100-41-4<br>EC No: 202-849-4 | DNEL (Workers) | Inhalation, Long-term, Systemic effects | 77 (mg/m³) |
| 2-butoxyethyl acetate, butylglycol acetate<br>CAS No: 112-07-2<br>EC No: 203-933-3 | DNEL (Workers) | Inhalation, Long-term, Systemic effects | 133 (mg/m³) |
| methyl methacrylate, methyl 2-methylprop-2-enoate, methyl 2-methylpropenoate | DNEL (Workers) | Inhalation, Long-term, Local effects | 208 (mg/m³) |

*-Continued on next page.-*

| | | | |
|---|---|---|---|
| CAS No: 80-62-6<br>EC No: 201-297-1 | DNEL (Workers) | Inhalation, Long-term, Systemic effects | 208 (mg/m³) |
| toluene<br>CAS No: 108-88-3<br>EC No: 203-625-9 | DNEL (Workers) | Inhalation, Long-term, Local effects | 192 (mg/m³) |
| | DNEL (General population) | Inhalation, Long-term, Local effects | 56,5 (mg/m³) |
| | DNEL (Workers) | Inhalation, Long-term, Systemic effects | 192 (mg/m³) |
| | DNEL (General population) | Inhalation, Long-term, Systemic effects | 56,5 (mg/m³) |
| | DNEL (Workers) | Inhalation, Acute, Systemic effects | 384 (mg/m³) |
| | DNEL (General population) | Inhalation, Acute, Systemic effects | 226 (mg/m³) |
| | DNEL (Workers) | Inhalation, Acute, Local effects | 384 (mg/m³) |
| | DNEL (General population) | Inhalation, Acute, Local effects | 226 (mg/m³) |
| | DNEL (Workers) | Dermal, Long-term, Systemic effects | 384 (mg/kg bw/day) |
| | DNEL (General population) | Dermal, Long-term, Systemic effects | 226 (mg/kg bw/day) |
| | DNEL (General population) | Oral, Long-term, Systemic effects | 8,13 (mg/kg bw/day) |
| 2-methylpropan-1-ol, iso-butanol<br>CAS No: 78-83-1<br>EC No: 201-148-0 | DNEL (Workers) | Inhalation, Long-term, Local effects | 310 (mg/m³) |
| | DNEL (General population) | Inhalation, Long-term, Local effects | 55 (mg/m³) |

DNEL: Derived No Effect Level, level of exposure to the substance below which adverse effects are not anticipated.
DMEL: Derived Minimal Effect Level, exposure level corresponding to a low risk, that risk should be considered a tolerable minimum.
Concentration levels PNEC:

| Name | Details | Value |
|---|---|---|
| 2-methoxy-1-methylethyl acetate<br>CAS No: 108-65-6<br>EC No: 203-603-9 | aqua (freshwater) | 0,635 (mg/L) |
| | aqua (marine water) | 0,0635 (mg/L) |
| | aqua (intermittent releases) | 6,35 (mg/L) |
| | STP | 100 (mg/L) |
| | sediment (freshwater) | 3,29 (mg/kg sediment dw) |
| | sediment (marine water) | 0,329 (mg/kg sediment dw) |
| | soil | 0,29 (mg/kg soil dw) |
| 4-methylpentan-2-one, isobutyl methyl ketone<br>CAS No: 108-10-1<br>EC No: 203-550-1 | aqua (freshwater) | 0,6 (mg/L) |
| | aqua (marine water) | 0,06 (mg/L) |
| | aqua (intermittent releases) | 1,5 (mg/L) |
| | STP | 27,5 (mg/L) |
| | sediment (freshwater) | 8,27 (mg/kg sediment dw) |
| | sediment (marine water) | 0,83 (mg/kg sediment dw) |
| | soil | 1,3 (mg/kg soil dw) |
| n-butyl acetate<br>CAS No: 123-86-4 | aqua (freshwater) | 0,18 (mg/l) |
| | aqua (marine water) | 0,018 (mg/l) |

*-Continued on next page.-*

| | | |
|---|---|---|
| EC No: 204-658-1 | aqua (intermittent releases) | 0,36 (mg/l) |
| | STP | 35,6 (mg/l) |
| | sediment (freshwater) | 0,981 (mg/kg sediment dw) |
| | sediment (marine water) | 0,0981 (mg/kg sediment dw) |
| propan-2-ol, isopropyl alcohol, isopropanol<br>CAS No: 67-63-0<br>EC No: 200-661-7 | aqua (freshwater) | 140,9 (mg/L) |
| | aqua (marine water) | 140,9 (mg/L) |
| | aqua (intermittent releases) | 140,9 (mg/L) |
| | sediment (freshwater) | 552 (mg/kg sediment dw) |
| | sediment (marine water) | 552 (mg/kg sediment dw) |
| | Soil | 28 (mg/kg soil dw) |
| | STP | 2251 (mg/L) |
| | oral (Hazard for predators) | 160 (mg/kg food) |
| butan-1-ol<br>CAS No: 71-36-3<br>EC No: 200-751-6 | aqua (freshwater) | 0,082 (mg/L) |
| | aqua (marine water) | 0,0082 (mg/L) |
| | aqua (intermittent releases) | 2,25 (mg/L) |
| | STP | 2476 (mg/L) |
| | sediment (freshwater) | 0,178 (mg/kg sediment dw) |
| | sediment (marine water) | 0,0178 (mg/kg sediment dw) |
| | soil | 0,015 (mg/kg soil dw) |
| toluene<br>CAS No: 108-88-3<br>EC No: 203-625-9 | aqua (freshwater) | 0,68 (mg/L) |
| | aqua (marine water) | 0,68 (mg/L) |
| | aqua (intermittent releases) | 0,68 (mg/L) |
| | STP | 13,61 (mg/L) |
| | sediment (freshwater) | 16,39 (mg/kg sediment dw) |
| | sediment (marine water) | 16,39 (mg/kg sediment dw) |
| 2-methylpropan-1-ol, iso-butanol<br>CAS No: 78-83-1<br>EC No: 201-148-0 | aqua (freshwater) | 0,4 (mg/L) |
| | aqua (marine water) | 0,04 (mg/L) |
| | aqua (intermittent releases) | 11 (mg/L) |
| | STP | 10 (mg/L) |
| | sediment (freshwater) | 1,52 (mg/kg sediment dw) |
| | sediment (marine water) | 0,152 (mg/kg sediment dw) |
| | soil | 0,0699 (mg/kg soil dw) |

PNEC: Predicted No Effect Concentration, concentration of the substance below which adverse effects are not expected in the environmental compartment.

**8.2 Exposure controls.**

**Measures of a technical nature:**
Provide adequate ventilation, which can be achieved by using good local exhaust-ventilation and a good general exhaust system.

| | |
|---|---|
| **Concentration:** | **100 %** |
| **Uses:** | **Solvent-based colors for airbrush painting** |

*-Continued on next page.-*

| | |
|---|---|
| **Breathing protection:** | |
| PPE: | Filter mask for protection against gases and particles. |
| Characteristics: | «CE» marking, category III. The mask must have a wide field of vision and an anatomically designed form in order to be sealed and watertight. |
| CEN standards: | EN 136, EN 140, EN 405 |
| Maintenance: | Should not be stored in places exposed to high temperatures and damp environments before use. Special attention should be paid to the state of the inhalation and exhalation valves in the face adaptor. |
| Observations: | Read carefully the manufacturer's instructions regarding the equipment's use and maintenance. Attach the necessary filters to the equipment according to the specific nature of the risk (Particles and aerosols: P1-P2-P3, Gases and vapours: A-B-E-K-AX), changing them as advised by the manufacturer. |
| Filter Type needed: | A2 |
| **Hand protection:** | |
| PPE: | Work gloves. |
| Characteristics: | «CE» marking, category I. |
| CEN standards: | EN 374-1, En 374-2, EN 374-3, EN 420 |
| Maintenance: | Keep in a dry place, away from any sources of heat, and avoid exposure to sunlight as much as possible. Do not make any changes to the gloves that may alter their resistance, or apply paints, solvents or adhesives. |
| Observations: | Gloves should be of the appropriate size and fit the user's hand well, not being too loose or too tight. Always use with clean, dry hands. |

| | | | | | |
|---|---|---|---|---|---|
| Material: | PVC (polyvinyl chloride) | Breakthrough time (min.): | > 480 | Material thickness (mm): | 0,35 |

| | |
|---|---|
| **Eye protection:** | |
| PPE: | Face shield. |
| Characteristics: | «CE» marking, category II. Face and eye protector against splashing liquid. |
| CEN standards: | EN 165, EN 166, EN 167, EN 168 |
| Maintenance: | Visibility through lenses should be ideal. Therefore, these parts should be cleaned daily. Protectors should be disinfected periodically following the manufacturer's instructions. Make sure that mobile parts move smoothly. |
| Observations: | Face shields should offer a field of vision with a dimension in the central line of, at least, 150 mm vertically once attached to the frame. |
| **Skin protection:** | |
| PPE: | Anti-static protective clothing. |
| Characteristics: | «CE» marking, category II. Protective clothing should not be too tight or loose in order not to obstruct the user's movements. |
| CEN standards: | EN 340, EN 1149-1, EN 1149-2, EN 1149-3, EN 1149-5 |
| Maintenance: | In order to guarantee uniform protection, follow the washing and maintenance instructions provided by the manufacturer. |
| Observations: | The protective clothing should offer a level of comfort in line with the level of protection provided in terms of the hazard against which it protects, bearing in mind environmental conditions, the user's level of activity and the expected time of use. |
| PPE: | Anti-static safety footwear. |
| Characteristics: | «CE» marking, category II. |
| CEN standards: | EN ISO 13287, EN ISO 20344, EN ISO 20346 |
| Maintenance: | The footwear should be checked regularly |
| Observations: | The level of comfort during use and acceptability are factors that are assessed very differently depending on the user. Therefore, it is advisable to try on different footwear models and, if possible, different widths. |

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES.

**9.1 Information on basic physical and chemical properties.**
Appearance:Liquid with characteristic odour
Colour: verde
Odour:N.A./N.A.
Odour threshold:N.A./N.A.
pH:N.A./N.A.

*-Continued on next page.-*

Melting point:N.A./N.A.
Boiling Point: 112 ºC
Flash point: 25 ºC
Evaporation rate: N.A./N.A.
Inflammability (solid, gas): N.A./N.A.
Lower Explosive Limit: N.A./N.A.
Upper Explosive Limit: N.A./N.A.
Vapour pressure: 12,43
Vapour density:N.A./N.A.
Relative density:0,917
Solubility:N.A./N.A.
Liposolubility: N.A./N.A.
Hydrosolubility: N.A./N.A.
Partition coefficient (n-octanol/water): N.A./N.A.
Auto-ignition temperature: N.A./N.A.
Decomposition temperature: N.A./N.A.
Viscosity: N.A./N.A.
Explosive properties: N.A./N.A.
Oxidizing properties: N.A./N.A.
N.A./N.A.= Not Available/Not Applicable due to the nature of the product

**9.2 Other information.**
Dropping point: N.A./N.A.
Blink: N.A./N.A.
Kinematic viscosity: N.A./N.A.
N.A./N.A.= Not Available/Not Applicable due to the nature of the product

## SECTION 10: STABILITY AND REACTIVITY.

**10.1 Reactivity.**
If the storage conditions are satisfied, does not produce dangerous reactions.

**10.2 Chemical stability.**
Stable under the recommended handling and storage conditions (see section 7).

**10.3 Possibility of hazardous reactions.**
Flammable liquid and vapour.

**10.4 Conditions to avoid.**
Avoid the following conditions:
- High temperature.
- Static discharge.
- Contact with incompatible materials.
- Avoid temperatures near or above the flash point. Do not heat closed containers. Avoid direct sunlight and heat, as these may cause a risk of fire.

**10.5 Incompatible materials.**
Avoid the following materials:
- Explosives materials.
- Toxic materials.
- Oxidizing materials.

**10.6 Hazardous decomposition products.**
In case of fire, dangerous decomposition products can be generated, such as carbon monoxide and dioxide and nitrogen fumes and oxides.

## SECTION 11: TOXICOLOGICAL INFORMATION.

2-butoxyethanol and its acetate are easily absorbed by the skin and can cause noxious effects to the kidneys.

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IRRITANT MIXTURE. Splashes in the eyes can cause irritation.
IRRITANT MIXTURE. The inhalation of spray mist or suspended particulates can irritate the respiratory tract. It can also cause serious respiratory difficulties, central nervous system disorders, and in extreme cases, unconsciousness.

**11.1 Information on toxicological effects.**

Repeated or prolonged contact with the product can cause the elimination of oil from the skin, giving rise to non-allergic contact dermatitis and absorption of the product through the skin.

**Toxicological information about the substances present in the composition.**

| Name | Acute toxicity | | | |
|---|---|---|---|---|
| | Type | Test | Kind | Value |
| 2-methoxy-1-methylethyl acetate<br>CAS No: 108-65-6 EC No: 203-603-9 | Oral | LD50 | Rat | 6190 mg/kg bw [1]<br>[1] Study report, 1985. OECD Guideline 401 (Acute Oral Toxicity). |
| | Dermal | LD50 | Rabbit | >5000 mg/kg bw [1]<br>[1] Dow Chemical Company Reports. Vol. MSD-1582 |
| | Inhalation | LC0 | Rat | >4345 ppm (6 h) [1]<br>[1] Study report, 1980. OECD Guideline 403 (Acute Inhalation Toxicity). |
| 4-methylpentan-2-one, isobutyl methyl ketone<br>CAS No: 108-10-1 EC No: 203-550-1 | Oral | LD50 | Rat | 2080 mg/kg bw [1]<br>[1] Union Carbide Data Sheet. Vol. 4/25/1958 |
| | Dermal | LD0 | Rat | >=2000 mg/kg bw [1]<br>[1] OECD Guideline 402 (Acute Dermal Toxicity) 1987, experimental result, 1996. |
| | Inhalation | LC50 | Rat | >2000 <4000 ppm (4 h) [1]<br>[1] RANGE-FINDING TOXICITY DATA: LIST IV, Smyth HF, Carpenter CP & Weil CS, 1951. |
| n-butyl acetate<br>CAS No: 123-86-4 EC No: 204-658-1 | Oral | LD50 | Rat | 10800 mg/kg bw [1]<br>[1] Acute Toxicity Data. Journal of the American College of Toxicology, Part B. Vol. 1, Pg. 196, 1992 |
| | Dermal | LD50 | Rabbit | >17600 mg/kg bw [1]<br>[1] Raw Material Data Handbook, Vol.1: Organic Solvents, 1974. Vol. 1, Pg. 7, 1974 |
| | Inhalation | LC50 | Rat | 1.85 mg/l/4 h [1]<br>[1] Inhalation Toxicology. Vol. 9, Pg. 623, 1997 |
| xylene<br>CAS No: 1330-20-7 EC No: 215-535-7 | Oral | LD50 | Rat | 4300 mg/kg bw [1]<br>[1] AMA Archives of Industrial Health. Vol. 14, Pg. 387, 1956 |
| | Dermal | LD50 | Rabbit | > 1700 mg/kg bw [1]<br>[1] Raw Material Data Handbook, Vol.1: Organic Solvents, 1974. Vol. 1, Pg. 123, 1974 |
| | Inhalation | LC50 | Rat | 21,7 mg/l/4 h [1]<br>[1] Raw Material Data Handbook, Vol.1: Organic Solvents, 1974. Vol. 1, Pg. 123, 1974 |
| propan-2-ol, isopropyl alcohol, isopropanol | Oral | LD50 | Rat | 5050 mg/kg bw [1]<br>[1] Gigiena i Sanitariya. For English translation, see HYSAAV. Vol. 43(1), Pg. 8, 1978 |
| | Dermal | LD50 | Rabbit | 12800 mg/kg bw [1] |

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| | | |
|---|---|---|
| | | [1] Raw Material Data Handbook, Vol.1: Organic Solvents, 1974. Vol. 1, Pg. 100, 1974 |
| CAS No: 67-63-0 EC No: 200-661-7 | Inhalation | LC50 Rat >10000 ppm (6 h) [1]<br>[1] OECD Guideline 403 (Acute Inhalation Toxicity), study report, 1991 |
| butan-1-ol | Oral | LD50 Rat 4360 mg/kg bw [1]<br>[1] Union Carbide Corp. Bushy Run Research Center,\|Project Report No.14-73. Export, PA. 1951. |
| | Dermal | LD50 Rabbit 3402 mg/kg bw [1]<br>[1] Union Carbide Corp. Bushy Run Research Center,\|Project Report No.14-73. Export, PA. 1951. |
| CAS No: 71-36-3 EC No: 200-751-6 | Inhalation | LC50 Rat 7500 ppm (8 h) [1]<br>[1] Union Carbide Corp. Bushy Run Research Center,\|Project Report No.14-73. Export, PA. 1951. |
| ethylbenzene | Oral | LD50 Rat 3500 mg/kg bw [1]<br>[1] AMA Archives of Industrial Health. Vol. 14, Pg. 387, 1956 |
| | Dermal | LD50 Rabbit 15400 mg/kg bw [1]<br>[1] Food and Cosmetics Toxicology. Vol. 13, Pg. 803, 1975 |
| CAS No: 100-41-4 EC No: 202-849-4 | Inhalation | |
| 2-methylpropan-1-ol, iso-butanol | Oral | LD50 Rat 2830 mg/kg bw [1]<br>[1] Christopher, S.M. November 30, 1993. "Isobutanol: Acute toxicity and irritancy testing using the rat (peroral and inhalation toxicity) and the rabbit (cutaneous and ocular tests)". Bushy Run Research Center, Union Carbide Corp. Lab. Proj. ID 92U1166 |
| | Dermal | LD50 Rabbit 4240 mg/kg bw [1]<br>[1] Smyth H.F. Jr. et al.: AMA Arch. Ind. Hyg. Occup. Med., 10, 61-68, (1954) as cited in IUCLID. |
| CAS No: 78-83-1 EC No: 201-148-0 | Inhalation | |

a) acute toxicity;
Not conclusive data for classification.

Acute Toxicity Estimate (ATE):
Mixtures:
ATE (Dermal) = 38.849 mg/kg
ATE (Oral) = 13.939 mg/kg

b) skin corrosion/irritation;
Based on available data, the classification criteria are not met.

c) serious eye damage/irritation;
Product classified:
Eye irritation, Category 2: Causes serious eye irritation.

d) respiratory or skin sensitisation;
Based on available data, the classification criteria are not met.

e) germ cell mutagenicity;
Not conclusive data for classification.

f) carcinogenicity;

*-Continued on next page.-*

Not conclusive data for classification.

g) reproductive toxicity;
Based on available data, the classification criteria are not met.

h) STOT-single exposure;
Product classified:
Specific target organ toxicity following a single exposure, Category 3:

i) STOT-repeated exposure;
Based on available data, the classification criteria are not met.

j) aspiration hazard;
Based on available data, the classification criteria are not met.

## SECTION 12: ECOLOGICAL INFORMATION.

**12.1 Toxicity.**

| Name | Ecotoxicity | | | |
|---|---|---|---|---|
| | Type | Test | Kind | Value |
| 2-methoxy-1-methylethyl acetate<br>CAS No: 108-65-6 EC No: 203-603-9 | Fish | LC50 | Oryzias latipes | 100 mg/L (96 h) [1]<br>[1] Environment Agency of Japan (1998) |
| | Aquatic invertebrates | EC50 | Daphnia magna | 407 mg/L (48 h) [1]<br>[1] Environment Agency of Japan (1998) |
| | Aquatic plants | EC50 | Selenastrum capricornutum (Pseudokirchnerella subcapitata) | >1000 mg/L (72 h) [1]<br>[1] Environment Agency of Japan (1998) |
| 4-methylpentan-2-one, isobutyl methyl ketone<br>CAS No: 108-10-1 EC No: 203-550-1 | Fish | LC50 | Danio rerio | >179 mg/l (96 h) [1]<br>[1] Experimental result, April 29 to May 03, 2010. |
| | Aquatic invertebrates | EC50 | Daphnia magna | 1550 mg/l (24 h) [1]<br>[1] OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test) |
| | Aquatic plants | EC50 | Lemna gibba | >146 mg/l (7 d) [1]<br>[1] Study report, 2010. OECD Guideline 221 (Lemna sp. Growth Inhibition test) |
| n-butyl acetate | Fish | LC50 | Fish | 81 mg/l (96 h) [1]<br>[1] Wellens, H. 1982. Comparison of the Sensitivity of Brachydanio rerio and Leuciscus idus by Testing the Fish Toxicity of Chemicals and Wastewaters. Z.Wasser-Abwasser-Forsch. 51(2):49-52 (GER) (ENG ABS). Dawson, G.W., A.L. Jennings, D. Drozdowski, and E. Rider 1977. The Acute Toxicity of 47 Industrial Chemicals to Fresh and Saltwater Fishes. J.Hazard.Mater. 1(4):303-318 (OECDG Data File) |
| | Aquatic invertebrates | EC50 | Daphnia sp. | 44 mg/l (48 h) [1]<br>[1] publication, 1959 |

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| | | | |
|---|---|---|---|
| CAS No: 123-86-4 EC No: 204-658-1 | Aquatic plants | EC50 | Desmodesmus subspicatus (reported as Scenedesmus subspicatus) 674.7 mg/l (72 h) [1]<br><br>[1] Method: other: algae growth inhibition test, according to Umweltbundesamt (German Federal Environment Agency) (proposal/draft, version February 1984) |
| xylene<br><br>CAS No: 1330-20-7 EC No: 215-535-7 | Fish | LC50 | Fish 15,7 mg/l (96 h) [1]<br><br>[1] Bailey, H.C., D.H.W. Liu, and H.A. Javitz 1985. Time/Toxicity Relationships in Short-Term Static, Dynamic, and Plug-Flow Bioassays. In: R.C.Bahner and D.J.Hansen (Eds.), Aquatic Toxicology and Hazard Assessment, 8th Symposium, ASTM STP 891, Philadelphia, PA :193-212 |
| | Aquatic invertebrates | LC50 | Crustacean 8,5 mg/l (48 h) [1]<br><br>[1] Tatem, H.E., B.A. Cox, and J.W. Anderson 1978. The Toxicity of Oils and Petroleum Hydrocarbons to Estuarine Crustaceans. Estuar.Coast.Mar.Sci. 6(4):365-373. Tatem, H.E. 1975. The Toxicity and Physiological Effects of Oil and Petroleum Hydrocarbons on Estuarine Grass Shrimp Palaemonetes pugio (Holthuis). Ph.D.Thesis, Texas A&M University, College Station, TX :133 p |
| | Aquatic plants | | |
| propan-2-ol, isopropyl alcohol, isopropanol<br><br>CAS No: 67-63-0 EC No: 200-661-7 | Fish | LC50 | Fish 9640 mg/l (96 h) [1]<br><br>[1] Brooke, L.T., D.J. Call, D.L. Geiger, and C.E. Northcott 1984. Acute Toxicities of Organic Chemicals to Fathead Minnows (Pimephales promelas), Vol. 1. Center for Lake Superior Environmental Stud., Univ.of Wisconsin-Superior, Superior, WI :414 |
| | Aquatic invertebrates | LC50 | Crustacean 1400 mg/l (48 h) [1]<br><br>[1] Blackman, R.A.A. 1974. Toxicity of Oil-Sinking Agents. Mar.Pollut.Bull. 5:116-118 |
| | Aquatic plants | Toxicity threshold | Scenedesmus quadricauda 1800 mg/L (7 d) [1]<br><br>[1] Comparison of the Toxicity Thresholds of Water Pollutants to Bacteria, Algae, and Protozoa in the Cell Multiplication Inhibition Test, Water Research Vol. 14. pp. 231 to 241 |
| butan-1-ol | Fish | LC50 | Pimephales promelas 1376 mg/L (96 h) [1]<br><br>[1] Wong, D.C.L, P.B. Dorn, and J.P. Salanitro. 1998. Aquatic\|Toxicity of Four Oxy-Solvents. Equilon Enterprises, LLC\|Technical Information Record WTC-3520. |
| | Aquatic invertebrates | EC50 | Daphnia magna 1328 mg/L (48 h) [1]<br><br>[1] Wong, D.C.L, P.B. Dorn, and J.P. Salanitro. 1998. Aquatic\|Toxicity of Four Oxy-Solvents. Equilon Enterprises, LLC\|Technical Information Record WTC-3520. |
| | Aquatic plants | EC90 | Selenastrum capricornutum (Pseudokirchnerella subcapitata) 717 mg/L (96 h) [1] |

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| | | |
|---|---|---|
| CAS No: 71-36-3 EC No: 200-751-6 | | [1] Wong, D.C.L, P.B. Dorn, and J.P. Salanitro. 1998. Aquatic\|Toxicity of Four Oxy-Solvents. Equilon Enterprises, LLC\|Technical Information Record WTC-3520. |
| ethylbenzene<br>CAS No: 100-41-4 EC No: 202-849-4 | Fish | LC50 Fish 80 mg/l (96 h) [1]<br><br>[1] Mayer, F.L.Jr., and M.R. Ellersieck 1986. Manual of Acute Toxicity: Interpretation and Data Base for 410 Chemicals and 66 Species of Freshwater Animals. Resour.Publ.No.160, U.S.Dep.Interior, Fish Wildl.Serv., Washington, DC :505 p. (USGS Data File) |
| | Aquatic invertebrates | LC50 Crustacean 16,2 mg/l (48 h) [1]<br><br>[1] MacLean, M.M., and K.G. Doe 1989. The Comparative Toxicity of Crude and Refined Oils to Daphnia magna and Artemia. Environment Canada, EE-111, Dartmouth, Nova Scotia :64 p |
| | Aquatic plants | EC50 Algae 5 mg/l (72 h) [1]<br><br>[1] Galassi, S., M. Mingazzini, L. Vigano, D. Cesareo, and M.L. Tosato 1988. Approaches to Modeling Toxic Responses of Aquatic Organisms to Aromatic Hydrocarbons. Ecotoxicol.Environ.Saf. 16(2):158-169. Masten, L.W., R.L. Boeri, and J.D. Walker 1994. Stategies Employed to Determine the Acute Aquatic Toxicity of Ethyl Benzene, a Highly Volatile, Poorly Water-Soluble Chemical. Ecotoxicol.Environ.Saf. 27(3):335-348 |
| toluene<br>CAS No: 108-88-3 EC No: 203-625-9 | Fish | LC50 Fish 31,7 mg/l (96 h) [1]<br><br>[1] Geiger, D.L., L.T. Brooke, and D.J. Call 1990. Acute Toxicities of Organic Chemicals to Fathead Minnows (Pimephales promelas), Volume 5. Ctr.for Lake Superior Environ.Stud., Univ.of Wisconsin-Superior, Superior, WI :332 p |
| | Aquatic invertebrates | LC50 Crustacean 92 mg/l (48 h) [1]<br><br>[1] MacLean, M.M., and K.G. Doe 1989. The Comparative Toxicity of Crude and Refined Oils to Daphnia magna and Artemia. Environment Canada, EE-111, Dartmouth, Nova Scotia :64 p |
| | Aquatic plants | EC50 Algae 12,5 mg/l (72 h) [1]<br><br>[1] Galassi, S., M. Mingazzini, L. Vigano, D. Cesareo, and M.L.Tosato 1988. Approaches to Modeling Toxic Responses of Aquatic Organisms to Aromatic Hydrocarbons. Ecotoxicol.Environ.Saf. 16(2):158-169 |
| 2-methylpropan-1-ol, iso-butanol | Fish | EC50 Pimephales promelas 1430 mg/L (96 h h) [1]<br><br>[1] Brooke, L.T. et al., 1984. Acute Toxicities of Organic\|Chemicals to Fathead Minnows (Pimephales promelas). Vol. I.\|Center for Lake Superior Environmental Studies. University\|of Wisconsin-Superior. |
| | Aquatic invertebrates | EC50 Daphnia magna 1300 mg/L (48 h) [1]<br><br>[1] Elnabarawy MT, Welter AN, Robideau RR. 1986. relative\|sensitivity of three daphnid species to selected organic and\|inorganic chemicals. Environ Toxicol Chem 5: 393-398. |

*-Continued on next page.-*

| | | | | |
|---|---|---|---|---|
| CAS No: 78-83-1 EC No: 201-148-0 | Aquatic plants | EC90 | Selenastrum capricornutum (Pseudokirchnerella subcapitata) | 717 mg/L (96 h) [1] |
| | | [1] Wong, D.C.L, P.B. Dorn, and J.P. Salanitro. 1998. Aquatic\|Toxicity of Four Oxy-Solvents. Equilon Enterprises, LLC\|Technical Information Record WTC-3520. | | |

**12.2 Persistence and degradability.**

No information is available regarding the biodegradability of the substances present.
No information is available on the degradability of the substances present.No information is available about persistence and degradability of the product.

**12.3 Bioaccumulative potential.**
**Information about the bioaccumulation of the substances present.**

| Name | Bioaccumulation | | | |
|---|---|---|---|---|
| | Log Pow | BCF | NOECs | Level |
| 4-methylpentan-2-one, isobutyl methyl ketone<br>CAS No: 108-10-1 EC No: 203-550-1 | 1,31 | - | - | Very low |
| n-butyl acetate<br>CAS No: 123-86-4 EC No: 204-658-1 | 1,78 | - | - | Very low |
| heptan-2-one, methyl amyl ketone<br>CAS No: 110-43-0 EC No: 203-767-1 | 1,98 | - | - | Very low |
| propan-2-ol, isopropyl alcohol, isopropanol<br>CAS No: 67-63-0 EC No: 200-661-7 | 0,05 | - | - | Very low |
| butan-1-ol<br>CAS No: 71-36-3 EC No: 200-751-6 | 0,84 | - | - | Very low |
| ethylbenzene<br>CAS No: 100-41-4 EC No: 202-849-4 | 3,15 | - | - | Moderate |
| toluene<br>CAS No: 108-88-3 EC No: 203-625-9 | 2,73 | - | - | Low |
| 2-methylpropan-1-ol, iso-butanol<br>CAS No: 78-83-1 EC No: 201-148-0 | 0,76 | - | - | Very low |

**12.4 Mobility in soil.**
No information is available about the mobility in soil.
The product must not be allowed to go into sewers or waterways.
Prevent penetration into the ground.

*-Continued on next page.-*

**12.5 Results of PBT and vPvB assessment.**
No information is available about the results of PBT and vPvB assessment of the product.

**12.6 Other adverse effects.**
No information is available about other adverse effects for the environment.

## SECTION 13: DISPOSAL CONSIDERATIONS.

**13.1 Waste treatment methods.**
Do not dump into sewers or waterways. Waste and empty containers must be handled and eliminated according to current, local/national legislation.
Follow the provisions of Directive 2008/98/EC regarding waste management.

## SECTION 14: TRANSPORT INFORMATION.

Transport following ADR rules for road transport, RID rules for railway, ADN for inner waterways, IMDG for sea, and ICAO/IATA for air transport.
**Land:** Transport by road: ADR, Transport by rail: RID.
Transport documentation: Consignment note and written instructions
**Sea:** Transport by ship: IMDG.
Transport documentation: Bill of lading
**Air:** Transport by plane: ICAO/IATA.
Transport document: Airway bill.

**14.1 UN number.**
UN No: UN1263

**14.2 UN proper shipping name.**
Description:
ADR: UN 1263, PAINT, 3, PG III, (D/E)
IMDG: UN 1263, PAINT (AMINES, C10-14-BRANCHED AND LINEAR ALKYL, BIS[2-[(4,5-DIHYDRO-3-METHYL-5-OXO-1-PHENYL-1H-PYRAZOL-4-YL)AZO]BENZOATO(2-)]CHROMATE(1-)), 3, PG III, MARINE POLLUTANT
ICAO/IATA: UN 1263, PAINT, 3, PG III

**14.3 Transport hazard class(es).**
Class(es): 3

**14.4 Packing group.**
Packing group: III

**14.5 Environmental hazards.**
Marine pollutant: Yes

Dangerous for the environment

**14.6 Special precautions for user.**
Labels: 3

*-Continued on next page.-*


Hazard number: 30
ADR LQ: 5 L
IMDG LQ: 5 L
ICAO LQ: 10 L

Provisions concerning carriage in bulk ADR: Not authorized carriage in bulk in accordance with ADR.
Transport by ship, FEm – Emergency sheets (F – Fire, S - Spills): F-E,S-E
Proceed in accordance with point 6.

**14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code.**
The product is not transported in bulk.

## SECTION 15: REGULATORY INFORMATION.

**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture.**
The product is not affected by the Regulation (EC) No 1005/2009 of the European Parliament and of the Council of 16 September 2009 on substances that deplete the ozone layer.

Volatile organic compound (VOC)
Product Subcategory (Directive 2004/42/EC): E - Special finishes (All types)
Phase I* (from 01/01/2007): 840 g/l
Phase II* (from 01/01/2010): 840 g/l
(*) g/l ready to use

VOC content (p/p): 82,089 %
VOC content: 752,572 g/l

The provisions of Directive 2004/42/EC on VOC apply to this product. Refer to the product label and/or technical data sheet for further information.
Product classification according to Annex I of Directive 2012/18/EU (SEVESO III): N/A
The product is not affected by Regulation (EU) No 528/2012 concerning the making available on the market and use of biocidal products.
The product is not affected by the procedure established Regulation (EU) No 649/2012, concerning the export and import of dangerous chemicals.
Restrictions on the manufacturing, placing on the market and use of certain dangerous substances, mixtures and articles:

| Designation of the substance, of the group of substances or of the mixture | Conditions of restriction |
|---|---|
| 48. Toluene<br>CAS No 108-88-3<br>EC No 203-625-9 | Shall not be placed on the market, or used, as a substance or in mixtures in a concentration equal to or greater than 0,1 % by weight where the substance or mixture is used in adhesives or spray paints intended for supply to the general public. |

Kind of pollutant to water (Germany): WGK 2: Hazardous to water. (Autoclassified according to the AwSV Regulations)

**15.2 Chemical safety assessment.**
No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

## SECTION 16: OTHER INFORMATION.

*-Continued on next page.-*

Complete text of the H phrases that appear in section 3:

H225 Highly flammable liquid and vapour.
H226 Flammable liquid and vapour.
H302 Harmful if swallowed.
H304 May be fatal if swallowed and enters airways.
H312 Harmful in contact with skin.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H318 Causes serious eye damage.
H319 Causes serious eye irritation.
H332 Harmful if inhaled.
H335 May cause respiratory irritation.
H336 May cause drowsiness or dizziness.
H361d Suspected of damaging the unborn child.
H373 May cause damage to organs through prolonged or repeated exposure.
H373 May cause damage to organs <or state all organs affected, if known> through prolonged or repeated exposure <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>.(órganos de audición)
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.

Classification codes:

Acute Tox. 4 : Acute toxicity (Dermal), Category 4
Acute Tox. 4 : Acute toxicity (Inhalation), Category 4
Acute Tox. 4 : Acute toxicity (Oral), Category 4
Aquatic Acute 1 : Acute toxicity to the aquatic environment, Category 1
Aquatic Chronic 1 : Chronic effect to the aquatic environment, Category 1
Aquatic Chronic 2 : Chronic effect to the aquatic environment, Category 2
Asp. Tox. 1 : Aspiration toxicity, Category 1
Eye Dam. 1 : Serious eye damage, Category 1
Eye Irrit. 2 : Eye irritation, Category 2
Flam. Liq. 2 : Flammable liquid, Category 2
Flam. Liq. 3 : Flammable liquid, Category 3
Repr. 2 : Reproductive toxicant, Category 2
STOT RE 2 : Specific target organ toxicity following a repeated exposure, Category 2
STOT SE 3 : Specific target organ toxicity following a single exposure, Category 3
Skin Irrit. 2 : Skin irritant, Category 2
Skin Sens. 1 : Skin sensitiser, Category 1

Changes regarding to the previous version:

- Change in the emergency number (SECTION 1.4).

**Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:**

| | |
|---|---|
| Physical hazards | On basis of test data |
| Health hazards | Calculation method |
| Environmental hazards | Calculation method |

It is advisable to carry out basic training with regard to health and safety at work in order to handle this product correctly.

Abbreviations and acronyms used:
ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.
AwSV: Facility Regulations for handling substances that are hazardous for the water.
BCF: Bioconcentration factor.

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CEN: European Committee for Standardization.
DMEL: Derived Minimal Effect Level, exposure level corresponding to a low risk, that risk should be considered a tolerable minimum.
DNEL: Derived No Effect Level, level of exposure to the substance below which adverse effects are not anticipated.
EC50: Half maximal effective concentration.
PPE: Personal protection equipment.
IATA: International Air Transport Association.
ICAO: International Civil Aviation Organization.
IMDG: International Maritime Code for Dangerous Goods.
LC50: Lethal concentration, 50%.
LD50: Lethal dose, 50%.
Log Pow: Logarithm of the partition octanol-water.
NOEC: No observed effect concentration.
PNEC: Predicted No Effect Concentration, concentration of the substance below which adverse effects are not expected in the environmental compartment.
RID: Regulations Concerning the International Transport of Dangerous Goods by Rail.
WGK: Water hazard classes.

Key literature references and sources for data:
http://eur-lex.europa.eu/homepage.html
http://echa.europa.eu/
Regulation (EU) 2015/830.
Regulation (EC) No 1907/2006.
Regulation (EU) No 1272/2008.

The information given in this Safety Data Sheet has been drafted in accordance with COMMISSION REGULATION (EU) 2015/830 of 28 May 2015 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC.

The information in this Safety Data Sheet on the Preparation is based on current knowledge and on current EC and national laws, as far as the working conditions of the users is beyond our knowledge and control. The product must not be used for purposes other than those that are specified without first having written instructions on how to handle. It is always the responsibility of the user to take the appropriate measures in order to comply with the requirements established by current legislation. The information contained in this Safety Sheet only states a description of the safety requirements for the preparation, and it must not be considered as a guarantee of its properties.

*-End of safety data sheet.-*