


**BEROCYD 401 B COMPONENT
116254**

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

- 1.1 Product identifier:** BEROCYD 401 B COMPONENT
116254
- 1.2 Relevant identified uses of the substance or mixture and uses advised against:**
Relevant uses: Catalyst for coatings. For professional user/industrial user only.
Uses advised against: All uses not specified in this section or in section 7.3
- 1.3 Details of the supplier of the safety data sheet:**
Berling S.A.
Thesi Agia Paraskevi
32011 Inofyta Viotias - Greece
Phone.: +302262031663 - Fax: +302262031293
info@berling.gr
www.berling.gr
- 1.4 Emergency telephone number:** +30 210 7793 777 (Greek Poison Info Center)

SECTION 2: HAZARDS IDENTIFICATION

- 2.1 Classification of the substance or mixture:**
CLP Regulation (EC) No 1272/2008:
Classification of this product has been carried out in accordance with CLP Regulation (EC) No 1272/2008.
Eye Dam. 1: Serious eye damage, Category 1, H318
Flam. Liq. 3: Flammable liquids, Category 3, H226
Skin Irrit. 2: Skin irritation, Category 2, H315
STOT SE 3: Respiratory tract toxicity, single exposure, Category 3, H335
STOT SE 3: Specific toxicity causing drowsiness and dizziness, single exposure, Category 3, H336
- 2.2 Label elements:**
CLP Regulation (EC) No 1272/2008:
Danger
- 
- Hazard statements:**
Eye Dam. 1: H318 - Causes serious eye damage.
Flam. Liq. 3: H226 - Flammable liquid and vapour.
Skin Irrit. 2: H315 - Causes skin irritation.
STOT SE 3: H335 - May cause respiratory irritation.
STOT SE 3: H336 - May cause drowsiness or dizziness.
- Precautionary statements:**
P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking
P280: Wear protective gloves/protective clothing/eye protection/face protection
P302+P352: IF ON SKIN: Wash with plenty of water
P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P370+P378: In case of fire: Use ABC powder extinguisher to extinguish
P403+P233: Store in a well-ventilated place. Keep container tightly closed
P501: Dispose of the contents/containers in accordance with the current legislation on waste treatment
- Substances that contribute to the classification**
1-methoxy-2-propanol (CAS: 107-98-2); butan-1-ol (CAS: 71-36-3); 4-methylpentan-2-one (CAS: 108-10-1)
- 2.3 Other hazards:**
Product fails to meet PBT/vPvB criteria

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS **

** Changes with regards to the previous version

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SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS ** (continued)

3.1 Substance:






Non-applicable

3.2 Mixture:

Chemical description: Mixture of substances

Components:

In accordance with Annex II of Regulation (EC) No 1907/2006 (point 3), the product contains:

| Identification | Chemical name/Classification | | Concentration |
|--|---|--|-------------------------|
| CAS: 1330-20-7 EC: 215-535-7 Index: 601-022-00-9 REACH: 01-2119488216-32-XXXX | Xylene⁽¹⁾ | ATP CLP00 | 24 - <50 % |
| | Regulation 1272/2008 | Acute Tox. 4: H312+H332; Flam. Liq. 3: H226; Skin Irrit. 2: H315 - Warning  | |
| CAS: 107-98-2 EC: 203-539-1 Index: 603-064-00-3 REACH: 01-2119457435-35-XXXX | 1-methoxy-2-propanol⁽¹⁾ | ATP ATP01 | 9,9 - <19 % |
| | Regulation 1272/2008 | Flam. Liq. 3: H226; STOT SE 3: H336 - Warning  | |
| CAS: 71-36-3 EC: 200-751-6 Index: 603-004-00-6 REACH: 01-2119484630-38-XXXX | butan-1-ol⁽¹⁾ | ATP CLP00 | 9,9 - <19 % |
| | Regulation 1272/2008 | Acute Tox. 4: H302; Eye Dam. 1: H318; Flam. Liq. 3: H226; Skin Irrit. 2: H315; STOT SE 3: H335; STOT SE 3: H336 - Danger  | |
| CAS: 108-10-1 EC: 203-550-1 Index: 606-004-00-4 REACH: 01-2119473980-30-XXXX | 4-methylpentan-2-one⁽¹⁾ | ATP CLP00 | 9,9 - <19 % |
| | Regulation 1272/2008 | Acute Tox. 4: H332; Eye Irrit. 2: H319; Flam. Liq. 2: H225; STOT SE 3: H335; EUH066 - Danger  | |
| CAS: 123-86-4 EC: 204-658-1 Index: 607-025-00-1 REACH: 01-2119485493-29-XXXX | N-butyl acetate⁽²⁾ | ATP CLP00 | 0,24 - <0,9 % |
| | Regulation 1272/2008 | Flam. Liq. 3: H226; STOT SE 3: H336; EUH066 - Warning  | |

⁽¹⁾ Substances presenting a health or environmental hazard which meet criteria laid down in Regulation (EU) No. 2015/830

⁽²⁾ Substance with a Union workplace exposure limit

To obtain more information on the hazards of the substances consult sections 11, 12 and 16.

**** Changes with regards to the previous version**

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures:

The symptoms resulting from intoxication can appear after exposure, therefore, in case of doubt, seek medical attention for direct exposure to the chemical product or persistent discomfort, showing the SDS of this product.

By inhalation:

Remove the person affected from the area of exposure, provide with fresh air and keep at rest. In serious cases such as cardiorespiratory failure, artificial resuscitation techniques will be necessary (mouth to mouth resuscitation, cardiac massage, oxygen supply, etc.) requiring immediate medical assistance.

By skin contact:

Remove contaminated clothing and footwear, rinse skin or shower the person affected if appropriate with plenty of cold water and neutral soap. In serious cases see a doctor. If the product causes burns or freezing, clothing should not be removed as this could worsen the injury caused if it is stuck to the skin. If blisters form on the skin, these should never be burst as this will increase the risk of infection.

By eye contact:

Rinse eyes thoroughly with water for at least 15 minutes. If the injured person uses contact lenses, these should be removed unless they are stuck to the eyes, in which case removal could cause further damage. In all cases, after cleaning, a doctor should be consulted as quickly as possible with the SDS for the product.

By ingestion/aspiration:

Do not induce vomiting, but if it does happen keep the head down to avoid aspiration. Keep the person affected at rest. Rinse out the mouth and throat, as they may have been affected during ingestion.

4.2 Most important symptoms and effects, both acute and delayed:

Acute and delayed effects are indicated in sections 2 and 11.

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SECTION 4: FIRST AID MEASURES (continued)

4.3 Indication of any immediate medical attention and special treatment needed:

Non-applicable

SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media:

If possible use polyvalent powder fire extinguishers (ABC powder), alternatively use foam or carbon dioxide extinguishers (CO₂). IT IS RECOMMENDED NOT to use full jet water as an extinguishing agent.

5.2 Special hazards arising from the substance or mixture:

As a result of combustion or thermal decomposition reactive sub-products are created that can become highly toxic and, consequently, can present a serious health risk.

5.3 Advice for firefighters:

Depending on the magnitude of the fire it may be necessary to use full protective clothing and self-contained breathing apparatus (SCBA). Minimum emergency facilities and equipment should be available (fire blankets, portable first aid kit,...) in accordance with Directive 89/654/EC.

Additional provisions:

Act in accordance with the Internal Emergency Plan and the Information Sheets on actions to take after an accident or other emergencies. Eliminate all sources of ignition. In case of fire, cool the storage containers and tanks for products susceptible to combustion, explosion or BLEVE as a result of high temperatures. Avoid spillage of the products used to extinguish the fire into an aqueous medium.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures:

Isolate leaks provided that there is no additional risk for the people performing this task. Evacuate the area and keep out those without protection. Personal protection equipment must be used against potential contact with the spilt product (See section 8). Above all prevent the formation of any vapour-air flammable mixtures, through either ventilation or the use of an inert medium. Destroy any source of ignition. Eliminate electrostatic charges by interconnecting all the conductive surfaces on which static electricity could form, and also ensuring that all surfaces are connected to the ground.

6.2 Environmental precautions:

This product is not classified as hazardous to the environment. Keep product away from drains, surface and underground water.

6.3 Methods and material for containment and cleaning up:

It is recommended:

Absorb the spillage using sand or inert absorbent and move it to a safe place. Do not absorb in sawdust or other combustible absorbents. For any concern related to disposal consult section 13.

6.4 Reference to other sections:

See sections 8 and 13.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling:

A.- Precautions for safe manipulation

Comply with the current legislation concerning the prevention of industrial risks. Keep containers hermetically sealed. Control spills and residues, destroying them with safe methods (section 6). Avoid leakages from the container. Maintain order and cleanliness where dangerous products are used.

B.- Technical recommendations for the prevention of fires and explosions

Transfer in well ventilated areas, preferably through localized extraction. Fully control sources of ignition (mobile phones, sparks,...) and ventilate during cleaning operations. Avoid the existence of dangerous atmospheres inside containers, applying inertization systems where possible. Transfer at a slow speed to avoid the creation of electrostatic charges. Against the possibility of electrostatic charges: ensure a perfect equipotential connection, always use groundings, do not wear work clothes made of acrylic fibres, preferably wearing cotton clothing and conductive footwear. Comply with the essential security requirements for equipment and systems defined in Directive 2014/34/EC (ATEX 100) and with the minimum requirements for protecting the security and health of workers under the selection criteria of Directive 1999/92/EC (ATEX 137). Consult section 10 for conditions and materials that should be avoided.

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SECTION 7: HANDLING AND STORAGE (continued)

C.- Technical recommendations to prevent ergonomic and toxicological risks

Do not eat or drink during the process, washing hands afterwards with suitable cleaning products.

D.- Technical recommendations to prevent environmental risks

It is recommended to have absorbent material available at close proximity to the product (See subsection 6.3)

7.2 Conditions for safe storage, including any incompatibilities:

A.- Technical measures for storage

Minimum Temp.: 5 °C

Maximum Temp.: 35 °C

Maximum time: 0 Months

B.- General conditions for storage

Avoid sources of heat, radiation, static electricity and contact with food. For additional information see subsection 10.5

7.3 Specific end use(s):

Except for the instructions already specified it is not necessary to provide any special recommendation regarding the uses of this product.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters:

Substances whose occupational exposure limits have to be monitored in the workplace (European OEL, not country-specific legislation):

| Identification | | Occupational exposure limits | | |
|---|--|------------------------------|---------|-----------------------|
| Xylene CAS: 1330-20-7 EC: 215-535-7 | | IOELV (8h) | 50 ppm | 221 mg/m ³ |
| | | IOELV (STEL) | 100 ppm | 442 mg/m ³ |
| N-butyl acetate CAS: 123-86-4 EC: 204-658-1 | | IOELV (8h) | 50 ppm | 241 mg/m ³ |
| | | IOELV (STEL) | 150 ppm | 723 mg/m ³ |
| 1-methoxy-2-propanol CAS: 107-98-2 EC: 203-539-1 | | IOELV (8h) | 100 ppm | 375 mg/m ³ |
| | | IOELV (STEL) | 150 ppm | 568 mg/m ³ |
| 4-methylpentan-2-one CAS: 108-10-1 EC: 203-550-1 | | IOELV (8h) | 20 ppm | 83 mg/m ³ |
| | | IOELV (STEL) | 50 ppm | 208 mg/m ³ |

DNEL (Workers):

| Identification | | Short exposure | | Long exposure | |
|--|------------|-------------------------|-------------------------|-----------------------|-----------------------|
| | | Systemic | Local | Systemic | Local |
| Xylene CAS: 1330-20-7 EC: 215-535-7 | Oral | Non-applicable | Non-applicable | Non-applicable | Non-applicable |
| | Dermal | Non-applicable | Non-applicable | 212 mg/kg | Non-applicable |
| | Inhalation | 442 mg/m ³ | 442 mg/m ³ | 221 mg/m ³ | 221 mg/m ³ |
| 1-methoxy-2-propanol CAS: 107-98-2 EC: 203-539-1 | Oral | Non-applicable | Non-applicable | Non-applicable | Non-applicable |
| | Dermal | Non-applicable | Non-applicable | 183 mg/kg | Non-applicable |
| | Inhalation | 553,5 mg/m ³ | 553,5 mg/m ³ | 369 mg/m ³ | Non-applicable |
| 4-methylpentan-2-one CAS: 108-10-1 EC: 203-550-1 | Oral | Non-applicable | Non-applicable | Non-applicable | Non-applicable |
| | Dermal | Non-applicable | Non-applicable | 11,8 mg/kg | Non-applicable |
| | Inhalation | 208 mg/m ³ | 208 mg/m ³ | 83 mg/m ³ | 83 mg/m ³ |
| N-butyl acetate CAS: 123-86-4 EC: 204-658-1 | Oral | Non-applicable | Non-applicable | Non-applicable | Non-applicable |
| | Dermal | 11 mg/kg | Non-applicable | 11 mg/kg | Non-applicable |
| | Inhalation | 600 mg/m ³ | 600 mg/m ³ | 300 mg/m ³ | 300 mg/m ³ |

DNEL (General population):

| Identification | | Short exposure | | Long exposure | |
|---|------------|-----------------------|-----------------------|------------------------|------------------------|
| | | Systemic | Local | Systemic | Local |
| Xylene CAS: 1330-20-7 EC: 215-535-7 | Oral | Non-applicable | Non-applicable | 12,5 mg/kg | Non-applicable |
| | Dermal | Non-applicable | Non-applicable | 125 mg/kg | Non-applicable |
| | Inhalation | 260 mg/m ³ | 260 mg/m ³ | 65,3 mg/m ³ | 65,3 mg/m ³ |

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SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

| Identification | | Short exposure | | Long exposure | |
|--|------------|-------------------------|-------------------------|------------------------|------------------------|
| | | Systemic | Local | Systemic | Local |
| 1-methoxy-2-propanol CAS: 107-98-2 EC: 203-539-1 | Oral | Non-applicable | Non-applicable | 33 mg/kg | Non-applicable |
| | Dermal | Non-applicable | Non-applicable | 78 mg/kg | Non-applicable |
| | Inhalation | Non-applicable | Non-applicable | 43,9 mg/m ³ | Non-applicable |
| 4-methylpentan-2-one CAS: 108-10-1 EC: 203-550-1 | Oral | Non-applicable | Non-applicable | 4,2 mg/kg | Non-applicable |
| | Dermal | Non-applicable | Non-applicable | 4,2 mg/kg | Non-applicable |
| | Inhalation | 155,2 mg/m ³ | 155,2 mg/m ³ | 14,7 mg/m ³ | 14,7 mg/m ³ |
| N-butyl acetate CAS: 123-86-4 EC: 204-658-1 | Oral | 2 mg/kg | Non-applicable | 2 mg/kg | Non-applicable |
| | Dermal | 6 mg/kg | Non-applicable | 6 mg/kg | Non-applicable |
| | Inhalation | 300 mg/m ³ | 300 mg/m ³ | 35,7 mg/m ³ | 35,7 mg/m ³ |

PNEC:

| Identification | | | | | |
|--|--------------|----------------|-------------------------|-------------|--|
| Xylene CAS: 1330-20-7 EC: 215-535-7 | STP | 6,58 mg/L | Fresh water | 0,327 mg/L | |
| | Soil | 2,31 mg/kg | Marine water | 0,327 mg/L | |
| | Intermittent | 0,327 mg/L | Sediment (Fresh water) | 12,46 mg/kg | |
| | Oral | Non-applicable | Sediment (Marine water) | 12,46 mg/kg | |
| 1-methoxy-2-propanol CAS: 107-98-2 EC: 203-539-1 | STP | 100 mg/L | Fresh water | 10 mg/L | |
| | Soil | 4,59 mg/kg | Marine water | 1 mg/L | |
| | Intermittent | 100 mg/L | Sediment (Fresh water) | 52,3 mg/kg | |
| | Oral | Non-applicable | Sediment (Marine water) | 5,2 mg/kg | |
| 4-methylpentan-2-one CAS: 108-10-1 EC: 203-550-1 | STP | 27,5 mg/L | Fresh water | 0,6 mg/L | |
| | Soil | 1,3 mg/kg | Marine water | 0,06 mg/L | |
| | Intermittent | 1,5 mg/L | Sediment (Fresh water) | 8,27 mg/kg | |
| | Oral | Non-applicable | Sediment (Marine water) | 0,83 mg/kg | |
| N-butyl acetate CAS: 123-86-4 EC: 204-658-1 | STP | 35,6 mg/L | Fresh water | 0,18 mg/L | |
| | Soil | 0,09 mg/kg | Marine water | 0,018 mg/L | |
| | Intermittent | 0,36 mg/L | Sediment (Fresh water) | 0,981 mg/kg | |
| | Oral | Non-applicable | Sediment (Marine water) | 0,098 mg/kg | |



8.2 Exposure controls:

A.- General security and hygiene measures in the work place



As a preventative measure it is recommended to use basic Personal Protective Equipment, with the corresponding <<CE marking>> in accordance with Directive 89/686/EC. For more information on Personal Protective Equipment (storage, use, cleaning, maintenance, class of protection,...) consult the information leaflet provided by the manufacturer. For more information see subsection 7.1.

All information contained herein is a recommendation which needs some specification from the labour risk prevention services as it is not known whether the company has additional measures at its disposal.

B.- Respiratory protection

| Pictogram | PPE | Labelling | CEN Standard | Remarks |
|---|-----------------------------------|---|---------------------|--|
|  Mandatory respiratory tract protection | Filter mask for gases and vapours |  | EN 405:2002+A1:2010 | Replace when there is a taste or smell of the contaminant inside the face mask. If the contaminant comes with warnings it is recommended to use isolation equipment. |

C.- Specific protection for the hands

| Pictogram | PPE | Labelling | CEN Standard | Remarks |
|--|---------------------------------------|---|--------------|--|
|  Mandatory hand protection | Protective gloves against minor risks |  | | Replace gloves in case of any sign of damage. For prolonged periods of exposure to the product for professional users/industrials, we recommend using CE III gloves in line with standards EN 420:2004+A1:2010 and EN ISO 374-1:2016+A1:2018 |



"As the product is a mixture of several substances, the resistance of the glove material can not be predicted in advance with total reliability and has therefore to be checked prior to the application"

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SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)



D.- Ocular and facial protection

| Pictogram | PPE | Labelling | CEN Standard | Remarks |
|--|---|---|---------------------------------|---|
|  Mandatory face protection | Panoramic glasses against splash/projections. |  | EN 166:2002 EN ISO 4007:2018 | Clean daily and disinfect periodically according to the manufacturer's instructions. Use if there is a risk of splashing. |

E.- Body protection

| Pictogram | PPE | Labelling | CEN Standard | Remarks |
|---|---|---|--|---|
|  Mandatory complete body protection | Antistatic and fireproof protective clothing |  | EN 1149-1:2006 EN 1149-2:1997 EN 1149-3:2004 EN 168:2002 EN ISO 14116:2015 EN 1149-5:2018 | Limited protection against flames. |
|  Mandatory foot protection | Safety footwear with antistatic and heat resistant properties |  | EN ISO 13287:2013 EN ISO 20345:2011 | Replace boots at any sign of deterioration. |

F.- Additional emergency measures

| Emergency measure | Standards | Emergency measure | Standards |
|--|---|---|--|
|  Emergency shower | ANSI Z358-1 ISO 3864-1:2011, ISO 3864-4:2011 |  Eyewash stations | DIN 12 899 ISO 3864-1:2011, ISO 3864-4:2011 |

Environmental exposure controls:

In accordance with the community legislation for the protection of the environment it is recommended to avoid environmental spillage of both the product and its container. For additional information see subsection 7.1.D

Volatile organic compounds:

With regard to Directive 2010/75/EU, this product has the following characteristics:

| | |
|---------------------------|---------------------------------------|
| V.O.C. (Supply): | 62,95 % weight |
| V.O.C. density at 25 °C: | 579,14 kg/m ³ (579,14 g/L) |
| Average carbon number: | 5,92 |
| Average molecular weight: | 95,22 g/mol |

With regard to Directive 2004/42/EC, this product which is ready to use has the following characteristics:

| | |
|--------------------------------------|---------------------------------|
| V.O.C. density at 25 °C: | 500 kg/m ³ (500 g/L) |
| EU limit for the product (Cat. A.J): | 500 g/L (2010) |
| Components: | Non-applicable |

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties:

For complete information see the product datasheet.

Appearance:

| | |
|--------------------------|------------------|
| Physical state at 20 °C: | Liquid |
| Appearance: | Not available |
| Colour: | Not available |
| Odour: | Characteristic |
| Odour threshold: | Non-applicable * |

Volatility:

*Not relevant due to the nature of the product, not providing information property of its hazards.

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SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES (continued)

| | |
|--|-----------------------|
| Boiling point at atmospheric pressure: | 126 °C |
| Vapour pressure at 25 °C: | 1413 Pa |
| Vapour pressure at 50 °C: | 5573,79 Pa (5,57 kPa) |
| Evaporation rate at 25 °C: | Non-applicable * |

Product description:

| | |
|--|-----------------------------|
| Density at 25 °C: | 900 - 940 kg/m ³ |
| Relative density at 25 °C: | 0,9 - 0,94 |
| Dynamic viscosity at 25 °C: | Non-applicable * |
| Kinematic viscosity at 25 °C: | Non-applicable * |
| Kinematic viscosity at 40 °C: | Non-applicable * |
| Concentration: | Non-applicable * |
| pH: | Non-applicable * |
| Vapour density at 25 °C: | Non-applicable * |
| Partition coefficient n-octanol/water 25 °C: | Non-applicable * |
| Solubility in water at 25 °C: | Non-applicable * |
| Solubility properties: | Non-applicable * |
| Decomposition temperature: | Non-applicable * |
| Melting point/freezing point: | Non-applicable * |
| Explosive properties: | Non-applicable * |
| Oxidising properties: | Non-applicable * |

Flammability:

| | |
|----------------------------|------------------|
| Flash Point: | 26 °C |
| Flammability (solid, gas): | Non-applicable * |
| Autoignition temperature: | 270 °C |
| Lower flammability limit: | Not available |
| Upper flammability limit: | Not available |

Explosive:

| | |
|------------------------|------------------|
| Lower explosive limit: | Non-applicable * |
| Upper explosive limit: | Non-applicable * |

9.2 Other information:

| | |
|---------------------------|------------------|
| Surface tension at 25 °C: | Non-applicable * |
| Refraction index: | Non-applicable * |

*Not relevant due to the nature of the product, not providing information property of its hazards.

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity:

No hazardous reactions are expected because the product is stable under recommended storage conditions. See section 7.

10.2 Chemical stability:

Chemically stable under the conditions of storage, handling and use.

10.3 Possibility of hazardous reactions:

Under the specified conditions, hazardous reactions that lead to excessive temperatures or pressure are not expected.

10.4 Conditions to avoid:

Applicable for handling and storage at room temperature:

| Shock and friction | Contact with air | Increase in temperature | Sunlight | Humidity |
|--------------------|------------------|-------------------------|---------------------|----------------|
| Not applicable | Not applicable | Risk of combustion | Avoid direct impact | Not applicable |

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SECTION 10: STABILITY AND REACTIVITY (continued)

10.5 Incompatible materials:

| Acids | Water | Oxidising materials | Combustible materials | Others |
|--------------------|----------------|---------------------|-----------------------|-------------------------------|
| Avoid strong acids | Not applicable | Avoid direct impact | Not applicable | Avoid alkalis or strong bases |

10.6 Hazardous decomposition products:

See subsection 10.3, 10.4 and 10.5 to find out the specific decomposition products. Depending on the decomposition conditions, complex mixtures of chemical substances can be released: carbon dioxide (CO₂), carbon monoxide and other organic compounds.

SECTION 11: TOXICOLOGICAL INFORMATION **

11.1 Information on toxicological effects:

The experimental information related to the toxicological properties of the product itself is not available

Contains glycols. It is recommended not to breathe the vapours for prolonged periods of time due to the possibility of effects that are hazardous to the health.

Dangerous health implications:

In case of exposure that is repetitive, prolonged or at concentrations higher than the recommended occupational exposure limits, adverse effects on health may result, depending on the means of exposure:

A- Ingestion (acute effect):

- Acute toxicity : Based on available data, the classification criteria are not met, however, it contains substances classified as dangerous for consumption. For more information see section 3.
- Corrosivity/Irritability: The consumption of a considerable dose can cause irritation in the throat, abdominal pain, nausea and vomiting.

B- Inhalation (acute effect):

- Acute toxicity : Based on available data, the classification criteria are not met. However, it contains substances classified as dangerous for inhalation. For more information see section 3.
- Corrosivity/Irritability: Causes irritation in respiratory passages, which is normally reversible and limited to the upper respiratory passages.

C- Contact with the skin and the eyes (acute effect):

- Contact with the skin: Produces skin inflammation.
- Contact with the eyes: Produces serious eye damage after contact.

D- CMR effects (carcinogenicity, mutagenicity and toxicity to reproduction):

- Carcinogenicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for the effects mentioned. For more information see section 3.
IARC: Xylene (3); 4-methylpentan-2-one (2B)
- Mutagenicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.
- Reproductive toxicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.

E- Sensitizing effects:

- Respiratory: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous with sensitising effects. For more information see section 3.
- Cutaneous: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.

F- Specific target organ toxicity (STOT) - single exposure:

Causes irritation in respiratory passages, which is normally reversible and limited to the upper respiratory passages.

G- Specific target organ toxicity (STOT)-repeated exposure:

- Specific target organ toxicity (STOT)-repeated exposure: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.
- Skin: Remove contaminated clothing and footwear, rinse skin or shower the person affected if appropriate with plenty of cold water and neutral soap. In serious cases see a doctor. If the product causes burns or freezing, clothing should not be removed as this could worsen the injury caused if it is stuck to the skin. If blisters form on the skin, these should never be burst as this will increase the risk of infection.

** Changes with regards to the previous version

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SECTION 11: TOXICOLOGICAL INFORMATION ** (continued)

H- Aspiration hazard:

Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.

Other information:

Non-applicable

Specific toxicology information on the substances:

| Identification | Acute toxicity | | Genus |
|--|-----------------|----------------------|--------|
| Xylene CAS: 1330-20-7 EC: 215-535-7 | LD50 oral | 2100 mg/kg | Rat |
| | LD50 dermal | 1100 mg/kg | Rat |
| | LC50 inhalation | 11 mg/L (4 h) (ATEi) | |
| butan-1-ol CAS: 71-36-3 EC: 200-751-6 | LD50 oral | 2292 mg/kg | Rat |
| | LD50 dermal | 3400 mg/kg | Rabbit |
| | LC50 inhalation | 24,66 mg/L (4 h) | Rat |
| 1-methoxy-2-propanol CAS: 107-98-2 EC: 203-539-1 | LD50 oral | >2000 mg/kg | |
| | LD50 dermal | >2000 mg/kg | |
| | LC50 inhalation | >20 mg/L (4 h) | |
| 4-methylpentan-2-one CAS: 108-10-1 EC: 203-550-1 | LD50 oral | 2080 mg/kg | |
| | LD50 dermal | >2000 mg/kg | |
| | LC50 inhalation | 11 mg/L (4 h) (ATEi) | |
| N-butyl acetate CAS: 123-86-4 EC: 204-658-1 | LD50 oral | 12789 mg/kg | Rat |
| | LD50 dermal | 14112 mg/kg | Rabbit |
| | LC50 inhalation | 23,4 mg/L (4 h) | Rat |

**** Changes with regards to the previous version**

SECTION 12: ECOLOGICAL INFORMATION **

The experimental information related to the eco-toxicological properties of the product itself is not available

12.1 Toxicity:

| Identification | Acute toxicity | | Species | Genus |
|--|----------------|-------------------|---------------------------|------------|
| Xylene CAS: 1330-20-7 EC: 215-535-7 | LC50 | 13.5 mg/L (96 h) | Oncorhynchus mykiss | Fish |
| | EC50 | 3.4 mg/L (48 h) | Ceriodaphnia dubia | Crustacean |
| | EC50 | 10 mg/L (72 h) | Skeletonema costatum | Algae |
| 1-methoxy-2-propanol CAS: 107-98-2 EC: 203-539-1 | LC50 | 20800 mg/L (96 h) | Pimephales promelas | Fish |
| | EC50 | 23300 mg/L (48 h) | Daphnia magna | Crustacean |
| | EC50 | 1000 mg/L (168 h) | Selenastrum capricornutum | Algae |
| butan-1-ol CAS: 71-36-3 EC: 200-751-6 | LC50 | 1740 mg/L (96 h) | Pimephales promelas | Fish |
| | EC50 | 1983 mg/L (48 h) | Daphnia magna | Crustacean |
| | EC50 | 500 mg/L (96 h) | Scenedesmus subspicatus | Algae |
| 4-methylpentan-2-one CAS: 108-10-1 EC: 203-550-1 | LC50 | 900 mg/L (48 h) | Leuciscus idus | Fish |
| | EC50 | 862 mg/L (24 h) | Daphnia magna | Crustacean |
| | EC50 | 980 mg/L (48 h) | Scenedesmus subspicatus | Algae |
| N-butyl acetate CAS: 123-86-4 EC: 204-658-1 | LC50 | 62 mg/L (96 h) | Leuciscus idus | Fish |
| | EC50 | 73 mg/L (24 h) | Daphnia magna | Crustacean |
| | EC50 | 675 mg/L (72 h) | Scenedesmus subspicatus | Algae |

12.2 Persistence and degradability:

| Identification | Degradability | | Biodegradability | |
|---|---------------|----------------|------------------|----------------|
| Xylene CAS: 1330-20-7 EC: 215-535-7 | BOD5 | Non-applicable | Concentration | Non-applicable |
| | COD | Non-applicable | Period | 28 days |
| | BOD5/COD | Non-applicable | % Biodegradable | 88 % |

**** Changes with regards to the previous version**

- CONTINUED ON NEXT PAGE -

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SECTION 12: ECOLOGICAL INFORMATION ** (continued)

| Identification | Degradability | | Biodegradability | |
|----------------------|---------------|----------------|------------------|----------------|
| 1-methoxy-2-propanol | BOD5 | Non-applicable | Concentration | 100 mg/L |
| CAS: 107-98-2 | COD | Non-applicable | Period | 28 days |
| EC: 203-539-1 | BOD5/COD | Non-applicable | % Biodegradable | 90 % |
| butan-1-ol | BOD5 | 1.71 g O2/g | Concentration | Non-applicable |
| CAS: 71-36-3 | COD | 2.46 g O2/g | Period | 19 days |
| EC: 200-751-6 | BOD5/COD | 0.69 | % Biodegradable | 98 % |
| 4-methylpentan-2-one | BOD5 | 2.06 g O2/g | Concentration | 100 mg/L |
| CAS: 108-10-1 | COD | 2.16 g O2/g | Period | 14 days |
| EC: 203-550-1 | BOD5/COD | 0.95 | % Biodegradable | 84 % |
| N-butyl acetate | BOD5 | Non-applicable | Concentration | Non-applicable |
| CAS: 123-86-4 | COD | Non-applicable | Period | 5 days |
| EC: 204-658-1 | BOD5/COD | 0.79 | % Biodegradable | 84 % |

12.3 Bioaccumulative potential:

| Identification | Bioaccumulation potential | |
|----------------------|---------------------------|-------|
| Xylene | BCF | 9 |
| CAS: 1330-20-7 | Pow Log | 2.77 |
| EC: 215-535-7 | Potential | Low |
| 1-methoxy-2-propanol | BCF | 3 |
| CAS: 107-98-2 | Pow Log | -0.44 |
| EC: 203-539-1 | Potential | Low |
| butan-1-ol | BCF | 1 |
| CAS: 71-36-3 | Pow Log | 0.88 |
| EC: 200-751-6 | Potential | Low |
| 4-methylpentan-2-one | BCF | 2 |
| CAS: 108-10-1 | Pow Log | 1.31 |
| EC: 203-550-1 | Potential | Low |
| N-butyl acetate | BCF | 4 |
| CAS: 123-86-4 | Pow Log | 1.78 |
| EC: 204-658-1 | Potential | Low |

12.4 Mobility in soil:

| Identification | Absorption/desorption | | Volatility | |
|----------------------|-----------------------|----------------------|------------|-------------------|
| Xylene | Koc | 202 | Henry | 524,86 Pa·m³/mol |
| CAS: 1330-20-7 | Conclusion | Moderate | Dry soil | Yes |
| EC: 215-535-7 | Surface tension | Non-applicable | Moist soil | Yes |
| butan-1-ol | Koc | 2.44 | Henry | 5,39E-2 Pa·m³/mol |
| CAS: 71-36-3 | Conclusion | Very High | Dry soil | Yes |
| EC: 200-751-6 | Surface tension | 2,567E-2 N/m (25 °C) | Moist soil | Yes |
| 4-methylpentan-2-one | Koc | Non-applicable | Henry | Non-applicable |
| CAS: 108-10-1 | Conclusion | Non-applicable | Dry soil | Non-applicable |
| EC: 203-550-1 | Surface tension | 2,35E-2 N/m (25 °C) | Moist soil | Non-applicable |
| N-butyl acetate | Koc | Non-applicable | Henry | Non-applicable |
| CAS: 123-86-4 | Conclusion | Non-applicable | Dry soil | Non-applicable |
| EC: 204-658-1 | Surface tension | 2,478E-2 N/m (25 °C) | Moist soil | Non-applicable |

12.5 Results of PBT and vPvB assessment:

Product fails to meet PBT/vPvB criteria

12.6 Other adverse effects:

Not described

*** Changes with regards to the previous version*

SECTION 13: DISPOSAL CONSIDERATIONS

- CONTINUED ON NEXT PAGE -

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SECTION 13: DISPOSAL CONSIDERATIONS (continued)

13.1 Waste treatment methods:

| Code | Description | Waste class (Regulation (EU) No 1357/2014) |
|-----------|---|--|
| 08 01 11* | waste paint and varnish containing organic solvents or other hazardous substances | Dangerous |

Type of waste (Regulation (EU) No 1357/2014):

HP3 Flammable, HP6 Acute Toxicity, HP4 Irritant — skin irritation and eye damage

Waste management (disposal and evaluation):

Consult the authorized waste service manager on the assessment and disposal operations in accordance with Annex 1 and Annex 2 (Directive 2008/98/EC). As under 15 01 (2014/955/EC) of the code and in case the container has been in direct contact with the product, it will be processed the same way as the actual product. Otherwise, it will be processed as non-dangerous residue. We do not recommended disposal down the drain. See paragraph 6.2.

Regulations related to waste management:

In accordance with Annex II of Regulation (EC) No 1907/2006 (REACH) the community or state provisions related to waste management are stated

Community legislation: Directive 2008/98/EC, 2014/955/EU, Regulation (EU) No 1357/2014

SECTION 14: TRANSPORT INFORMATION

Transport of dangerous goods by land:

With regard to ADR 2019 and RID 2019:



- 14.1 UN number:** UN1263
14.2 UN proper shipping name: PAINT RELATED MATERIAL
14.3 Transport hazard class(es): 3
Labels: 3
14.4 Packing group: III
14.5 Environmental hazards: No
14.6 Special precautions for user
Special regulations: 163, 367, 650
Tunnel restriction code: D/E
Physico-Chemical properties: see section 9
Limited quantities: 5 L
14.7 Transport in bulk according to Annex II of Marpol and the IBC Code: Non-applicable

Transport of dangerous goods by sea:

With regard to IMDG 39-18:



- 14.1 UN number:** UN1263
14.2 UN proper shipping name: PAINT RELATED MATERIAL
14.3 Transport hazard class(es): 3
Labels: 3
14.4 Packing group: III
14.5 Marine pollutant: No
14.6 Special precautions for user
Special regulations: 163, 223, 955, 367
EmS Codes: F-E, S-E
Physico-Chemical properties: see section 9
Limited quantities: 5 L
Segregation group: Non-applicable
14.7 Transport in bulk according to Annex II of Marpol and the IBC Code: Non-applicable

Transport of dangerous goods by air:

With regard to IATA/ICAO 2020:

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SECTION 14: TRANSPORT INFORMATION (continued)



- 14.1 UN number:** UN1263
14.2 UN proper shipping name: PAINT RELATED MATERIAL
14.3 Transport hazard class(es): 3
Labels: 3
14.4 Packing group: III
14.5 Environmental hazards: No
14.6 Special precautions for user
 Physico-Chemical properties: see section 9
14.7 Transport in bulk according to Annex II of Marpol and the IBC Code: Non-applicable

SECTION 15: REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture:

Candidate substances for authorisation under the Regulation (EC) No 1907/2006 (REACH): Non-applicable
 Substances included in Annex XIV of REACH ("Authorisation List") and sunset date: Non-applicable
 Regulation (EC) No 1005/2009, about substances that deplete the ozone layer: Non-applicable
 Article 95, REGULATION (EU) No 528/2012: Non-applicable
 REGULATION (EU) No 649/2012, in relation to the import and export of hazardous chemical products: Non-applicable

Seveso III:

| Section | Description | Lower-tier requirements | Upper-tier requirements |
|---------|-------------------|-------------------------|-------------------------|
| P5c | FLAMMABLE LIQUIDS | 5000 | 50000 |

Limitations to commercialisation and the use of certain dangerous substances and mixtures (Annex XVII REACH, etc):

Shall not be used, as substance or as mixtures in aerosol dispensers where these aerosol dispensers are intended for supply to the general public for entertainment and decorative purposes such as the following:

- metallic glitter intended mainly for decoration,
- artificial snow and frost,
- "whoopie" cushions,
- silly string aerosols,
- imitation excrement,
- horns for parties,
- decorative flakes and foams,
- artificial cobwebs,
- stink bombs.

Without prejudice to the application of other Community provisions on the classification, packaging and labelling of substances, suppliers shall ensure before the placing on the market that the packaging of aerosol dispensers referred to above is marked visibly, legibly and indelibly with:

'For professional users only'.

Shall not be used in:

- ornamental articles intended to produce light or colour effects by means of different phases, for example in ornamental lamps and ashtrays,
- tricks and jokes,
- games for one or more participants, or any article intended to be used as such, even with ornamental aspects.

Specific provisions in terms of protecting people or the environment:

It is recommended to use the information included in this safety data sheet as a basis for conducting workplace-specific risk assessments in order to establish the necessary risk prevention measures for the handling, use, storage and disposal of this product.

Other legislation:

The product could be affected by sectorial legislation

15.2 Chemical safety assessment:

The supplier has not carried out evaluation of chemical safety.

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SECTION 16: OTHER INFORMATION

Legislation related to safety data sheets:

The SDS shall be supplied in an official language of the country where the product is placed on the market. This safety data sheet has been designed in accordance with ANNEX II-Guide to the compilation of safety data sheets of Regulation (EC) No 1907/2006 (Regulation (EC) No 2015/830).

Modifications related to the previous Safety Data Sheet which concerns the ways of managing risks.:

COMPOSITION/INFORMATION ON INGREDIENTS (SECTION 3, SECTION 11, SECTION 12):

- New declared substances
N-butyl acetate (123-86-4)

Texts of the legislative phrases mentioned in section 2:

H315: Causes skin irritation
H318: Causes serious eye damage
H335: May cause respiratory irritation
H336: May cause drowsiness or dizziness
H226: Flammable liquid and vapour

Texts of the legislative phrases mentioned in section 3:

The phrases indicated do not refer to the product itself; they are present merely for informative purposes and refer to the individual components which appear in section 3

CLP Regulation (EC) No 1272/2008:

Acute Tox. 4: H302 - Harmful if swallowed
Acute Tox. 4: H312+H332 - Harmful in contact with skin or if inhaled
Acute Tox. 4: H332 - Harmful if inhaled
Eye Dam. 1: H318 - Causes serious eye damage
Eye Irrit. 2: H319 - Causes serious eye irritation
Flam. Liq. 2: H225 - Highly flammable liquid and vapour
Flam. Liq. 3: H226 - Flammable liquid and vapour
Skin Irrit. 2: H315 - Causes skin irritation
STOT SE 3: H335 - May cause respiratory irritation
STOT SE 3: H336 - May cause drowsiness or dizziness

Classification procedure:

Skin Irrit. 2: Calculation method
Eye Dam. 1: Calculation method
STOT SE 3: Calculation method
STOT SE 3: Calculation method
Flam. Liq. 3: Calculation method (2.6.4.3)

Advice related to training:

Minimal training is recommended in order to prevent industrial risks for staff using this product and to facilitate their comprehension and interpretation of this safety data sheet, as well as the label on the product.

Principal bibliographical sources:

<http://echa.europa.eu>
<http://eur-lex.europa.eu>

Abbreviations and acronyms:

ADR: European agreement concerning the international carriage of dangerous goods by road
IMDG: International maritime dangerous goods code
IATA: International Air Transport Association
ICAO: International Civil Aviation Organisation
COD: Chemical Oxygen Demand
BOD5: 5-day biochemical oxygen demand
BCF: Bioconcentration factor
LD50: Lethal Dose 50
LC50: Lethal Concentration 50
EC50: Effective concentration 50
Log-POW: Octanol-water partition coefficient
Koc: Partition coefficient of organic carbon

The information contained in this safety data sheet is based on sources, technical knowledge and current legislation at European and state level, without being able to guarantee its accuracy. This information cannot be considered a guarantee of the properties of the product, it is simply a description of the security requirements. The occupational methodology and conditions for users of this product are not within our awareness or control, and it is ultimately the responsibility of the user to take the necessary measures to obtain the legal requirements concerning the manipulation, storage, use and disposal of chemical products. The information on this safety data sheet only refers to this product, which should not be used for needs other than those specified.

- END OF SAFETY DATA SHEET -