

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878 Issue date: 16-7-2024 Version: 1.0

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1. Product identifier

Product form : Mixture

 Trade name
 : KORTHO INK K8 BLACK

 UFI
 : VUC0-E0P4-800U-YJD4

 Product code
 : 053801 / 083087

 Product group
 : Trade product

Other means of identification : 053801 - Kortho Ink K8 Black, 1 L

083087 - Kortho Ink K8 Black, 5 L

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

#### Relevant identified uses

Main use category : Industrial use, Professional use

Use of the substance/mixture : Ink

| Title                         | Life cycle stage         | Use descriptors  |
|-------------------------------|--------------------------|------------------|
| KORTHO INK K8 BLACK, 1 L, 5 L | Industrial, Professional | SU0, PC18, PROC0 |

Full text of use descriptors: see section 16

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

#### Distributor

Korthofah B.V. Lageweg 39 2222 AG Katwijk ZH The Netherlands

T +31 714 060 480

export@kortho.nl, https://www.kortho.com

#### 1.4. Emergency telephone number

| Country/Area | Organisation/Company                                  | Address  | Emergency number | Comment  |
|--------------|---|--|------------------|--|
| Netherlands  | Nationaal Vergiftigingen Informatie<br>Centrum (NVIC) | Huispostnummer Q03.2.315<br>Postbus 85500<br>3508 GA Utrecht | +31 88 755 80 00 | Only for the purpose<br>of informing medical<br>personnel in cases of<br>acute intoxications<br>(24 hours a day, 7<br>days a week) |

#### **SECTION 2: Hazards identification**

## 2.1. Classification of the substance or mixture

### Classification according to Regulation (EC) No. 1272/2008 [CLP]

Flammable liquids, Category 2

Serious eye damage/eye irritation, Category 1

H318

Specific target organ toxicity – Single exposure, Category 3,

H336

Narcosis

Full text of H- and EUH-statements: see section 16

### Adverse physicochemical, human health and environmental effects

No additional information available

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#### 2.2. Label elements

#### Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP)







GHS02

GHS05

GHS07

Signal word (CLP)

: Danger

Contains

: ethyl acetate; propan-1-ol; 1-Ethoxypropan-2-ol; 1-methoxypropan-2-ol; n-butyl acetate

Hazard statements (CLP)

: H225 - Highly flammable liquid and vapour. H318 - Causes serious eye damage.

H336 - May cause drowsiness or dizziness.

Precautionary statements (CLP)

: P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources.

No smoking.

P233 - Keep container tightly closed.

P235 - Keep cool.

P280 - Wear protective gloves/protective clothing/eye protection/face protection/hearing

protection.

P305+P351+P338+P310 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a

POISON CENTER or doctor.

P403+P235 - Store in a well-ventilated place. Keep cool.

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

#### 2.3. Other hazards

Other hazards which do not result in classification : Contains: Nitrocellulose. In use may form flammable/explosive vapour-air mixture.

Contains no PBT and/or vPvB substances ≥ 0.1% assessed in accordance with REACH Annex XIII

|     | Component   |                       |  |
|-----|---|-----------------------|--|
| - 1 | Substance(s) not meeting the PBT criteria of REACH regulation, in accordance with Annex XIII  | propan-1-ol (71-23-8) |  |
| П   | Substance(s) not meeting the vPvB criteria of REACH regulation, in accordance with Annex XIII | propan-1-ol (71-23-8) |  |

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or substance(s) are not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %

## **SECTION 3: Composition/information on ingredients**

## 3.2. Mixtures

| Product name   | Product identifier   | % w/w<br>(% w/w) | Classification according to<br>Regulation (EC) No. 1272/2008<br>[CLP] |
|--|--|------------------|---|
| ethanol; ethyl alcohol substance with national workplace exposure limit(s) (NL)  | CAS-No.: 64-17-5<br>EC-No.: 200-578-6<br>EC Index-No.: 603-002-00-5<br>REACH-no: 01-2119457610-        | 30 – 50          | Flam. Liq. 2, H225<br>Eye Irrit. 2, H319                              |
| 1-methoxypropan-2-ol substance with national workplace exposure limit(s) (NL); substance with a Community workplace exposure limit | CAS-No.: 107-98-2<br>EC-No.: 203-539-1<br>EC Index-No.: 603-064-00-3<br>REACH-no: 01-2119457435-<br>35 | 10 – 20          | Flam. Liq. 3, H226<br>STOT SE 3, H336                                 |

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| Product name   | Product identifier  | % w/w<br>(% w/w) | Classification according to Regulation (EC) No. 1272/2008 [CLP] |
|--|---|------------------|---|
| propan-1-ol  | CAS-No.: 71-23-8<br>EC-No.: 200-746-9<br>EC Index-No.: 603-003-00-0<br>REACH-no: 01-2119486761-         | 5 – 10           | Flam. Liq. 2, H225<br>Eye Dam. 1, H318<br>STOT SE 3, H336       |
| 1-Ethoxypropan-2-ol  | CAS-No.: 1569-02-4<br>EC-No.: 216-374-5<br>EC Index-No.: 603-177-00-8<br>REACH-no: 01-2119462792-<br>32 | 5 – 10           | Flam. Liq. 3, H226<br>Eye Irrit. 2, H319<br>STOT SE 3, H336     |
| ethyl acetate substance with national workplace exposure limit(s) (NL); substance with a Community workplace exposure limit            | CAS-No.: 141-78-6<br>EC-No.: 205-500-4<br>EC Index-No.: 607-022-00-5<br>REACH-no: 01-2119475103-        | 5 – 10           | Flam. Liq. 2, H225<br>Eye Irrit. 2, H319<br>STOT SE 3, H336     |
| n-butyl acetate<br>substance with national workplace exposure limit(s)<br>(NL); substance with a Community workplace<br>exposure limit | CAS-No.: 123-86-4<br>EC-No.: 204-658-1<br>EC Index-No.: 607-025-00-1<br>REACH-no: 01-2119485493-<br>29  | 1 – 5            | Flam. Liq. 3, H226<br>STOT SE 3, H336                           |

Full text of H- and EUH-statements: see section 16

## **SECTION 4: First aid measures**

#### 4.1. Description of first aid measures

First-aid measures general : Never give anything by mouth to an unconscious person. IF exposed or concerned: Get

medical advice/attention.

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. Call a POISON

CENTER/doctor if you feel unwell.

First-aid measures after skin contact : Rinse skin with water/shower. Take off immediately all contaminated clothing. Repeated

exposure may cause skin dryness or cracking.

First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy

to do. Continue rinsing. Immediately call a POISON CENTER/doctor.

First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

## 4.2. Most important symptoms and effects, both acute and delayed

Symptoms/effects after inhalation : May cause respiratory irritation. Symptoms/effects after eye contact : Causes serious eye damage.

## 4.3. Indication of any immediate medical attention and special treatment needed

When in doubt or if symptoms are observed, get medical advice.

#### **SECTION 5: Firefighting measures**

#### 5.1. Extinguishing media

Suitable extinguishing media : Alcohol resistant foam. Dry powder. Carbon dioxide. Water spray. Sand.

Unsuitable extinguishing media : Do not use a heavy water stream.

#### 5.2. Special hazards arising from the substance or mixture

Fire hazard : Highly flammable liquid and vapour. The vapours are denser than air and may travel along

the ground. Distance ignition possible.

Explosion hazard : May form flammable/explosive vapour-air mixture.

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Hazardous decomposition products in case of fire : Carbon dioxide. Carbon monoxide. Nitrogen oxides (NOx).

## 5.3. Advice for firefighters

Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any

chemical fire. Prevent fire fighting water from entering the environment.

Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

Self-contained breathing apparatus when in close proximity to fire.

#### **SECTION 6: Accidental release measures**

#### 6.1. Personal precautions, protective equipment and emergency procedures

General measures : Remove ignition sources. Use special care to avoid static electric charges. No open flames.

No smoking.

For non-emergency personnel

Emergency procedures : Evacuate unnecessary personnel.

For emergency responders

Protective equipment : Use self-contained breathing apparatus and chemically protective clothing.

Emergency procedures : Ventilate area.

#### 6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

#### 6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible.

Collect spillage. Store away from other materials.

#### 6.4. Reference to other sections

See Section 8. Exposure controls and personal protection. Concerning disposal elimination after cleaning, see section 13.

#### **SECTION 7: Handling and storage**

## 7.1. Precautions for safe handling

Additional hazards when processed : Handle empty containers with care because residual vapours are flammable.

Precautions for safe handling

: Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapour. No open flames. No smoking. Use only non-sparking tools. Obtain special instructions before use. Do not handle until all safety precautions have been read

and understood. Avoid breathing vapours.

#### 7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Proper grounding procedures to avoid static electricity should be followed. Ground/bond

container and receiving equipment. Use explosion-proof electrical/ventilating/lighting

equipment.

Storage conditions : Keep only in the original container in a cool well ventilated place. Keep in fireproof place.

Keep container tightly closed.

Incompatible products : Strong bases. Strong acids. Oxidizing agent.

Incompatible materials : Sources of ignition. Direct sunlight. Heat sources.

#### 7.3. Specific end use(s)

No additional information available

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## SECTION 8: Exposure controls/personal protection

## 8.1. Control parameters

National occupational exposure and biological limit values

| ethyl acetate (141-78-6)                           |   |  |  |  |
|--|---|--|--|--|
| EU - Indicative Occupational Exposure Limit (IOEL) |   |  |  |  |
| Local name   | Ethyl acetate   |  |  |  |
| IOEL TWA   | 734 mg/m³   |  |  |  |
|  | 200 ppm   |  |  |  |
| IOEL STEL  | 1468 mg/m³  |  |  |  |
|  | 400 ppm   |  |  |  |
| Regulatory reference                               | COMMISSION DIRECTIVE (EU) 2017/164  |  |  |  |
| Netherlands - Occupational Exposure Limits         |   |  |  |  |
| Local name   | Ethylacetaat  |  |  |  |
| TGG-8u (OEL TWA)                                   | 734 mg/m³   |  |  |  |
|  | 200 ppm   |  |  |  |
| TGG-15min (OEL STEL)                               | 1468 mg/m³  |  |  |  |
|  | 400 ppm   |  |  |  |
| Regulatory reference                               | Arbeidsomstandighedenregeling 2024  |  |  |  |
| ethanol; ethyl alcohol (64-17-5)                   |   |  |  |  |
| Netherlands - Occupational Exposure Limits         |   |  |  |  |
| Local name   | Ethanol   |  |  |  |
| TGG-8u (OEL TWA)                                   | 260 mg/m³   |  |  |  |
|  | 137 ppm   |  |  |  |
| TGG-15min (OEL STEL)                               | 1900 mg/m³  |  |  |  |
|  | 1000 ppm  |  |  |  |
| Remark   | Kankerverwekkende stof. H (Huidopname) Stoffen die relatief gemakkelijk door de huid kunnen worden opgenomen, hetgeen een substantiële bijdrage kan betekenen aan de totale inwendige blootstelling, hebben in de lijst een H-aanduiding. Bij deze stoffen moeten naast maatregelen tegen inademing ook adequate maatregelen ter voorkoming van huidcontact worden genomen. |  |  |  |
| MAC chemical category                              | Skin notation   |  |  |  |
| Regulatory reference                               | Arbeidsomstandighedenregeling 2020  |  |  |  |
| 1-methoxypropan-2-ol (107-98-2)                    |   |  |  |  |
| EU - Indicative Occupational Exposure Limit (IOEL) |   |  |  |  |
| Local name   | 1-Methoxypropanol-2   |  |  |  |
| IOEL TWA   | 375 mg/m³   |  |  |  |
|  | 100 ppm   |  |  |  |
| IOEL STEL  | 568 mg/m³   |  |  |  |
|  | 150 ppm   |  |  |  |
| Remark   | Skin  |  |  |  |
|  |   |  |  |  |

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| 1-methoxypropan-2-ol (107-98-2)                    |   |
|--|---|
| Regulatory reference                               | COMMISSION DIRECTIVE 2000/39/EC   |
| Netherlands - Occupational Exposure Limits         | CONTINUESTON DIRECTIVE 2000/39/EC   |
|  | 4 Mathews O present   |
| Local name   | 1-Methoxy-2-propanol  |
| TGG-8u (OEL TWA)                                   | 375 mg/m³   |
|  | 100 ppm   |
| TGG-15min (OEL STEL)                               | 563 mg/m³   |
|  | 150 ppm   |
| Remark   | H (Huidopname) Stoffen die relatief gemakkelijk door de huid kunnen worden opgenomen, hetgeen een substantiële bijdrage kan betekenen aan de totale inwendige blootstelling, hebben in de lijst een H-aanduiding. Bij deze stoffen moeten naast maatregelen tegen inademing ook adequate maatregelen ter voorkoming van huidcontact worden genomen. |
| Regulatory reference                               | Arbeidsomstandighedenregeling 2024  |
| n-butyl acetate (123-86-4)                         |   |
| EU - Indicative Occupational Exposure Limit (IOEL) |   |
| Local name   | n-Butyl acetate   |
| IOEL TWA   | 241 mg/m³   |
|  | 50 ppm  |
| IOEL STEL  | 723 mg/m³   |
|  | 150 ppm   |
| Regulatory reference                               | COMMISSION DIRECTIVE (EU) 2019/1831   |
| Netherlands - Occupational Exposure Limits         |   |
| Local name   | n-Butylacetaat  |
| TGG-8u (OEL TWA)                                   | 150 mg/m³   |
|  | 50 ppm  |
| TGG-15min (OEL STEL)                               | 0,25 mg/m³  |
|  | 150 ppm   |
| Regulatory reference                               | Arbeidsomstandighedenregeling 2024  |

## **DNEL** and **PNEC**

| ethyl acetate (141-78-6)                 |                          |  |
|--|--------------------------|--|
| DNEL/DMEL (Workers)                      |                          |  |
| Acute - systemic effects, inhalation     | 1468 mg/m³               |  |
| Acute - local effects, inhalation        | 1468 mg/m³               |  |
| Long-term - systemic effects, dermal     | 63 mg/kg bodyweight/day  |  |
| Long-term - systemic effects, inhalation | 734 mg/m³                |  |
| Long-term - local effects, inhalation    | 734 mg/m³                |  |
| DNEL/DMEL (General population)           |                          |  |
| Acute - systemic effects, inhalation     | 734 mg/m³                |  |
| Acute - local effects, inhalation        | 734 mg/m³                |  |
| Long-term - systemic effects,oral        | 4,5 mg/kg bodyweight/day |  |

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| ethyl acetate (141-78-6)                 |                          |
|--|--------------------------|
| Long-term - systemic effects, inhalation | 367 mg/m³                |
| Long-term - systemic effects, dermal     | 37 mg/kg bodyweight/day  |
| Long-term - local effects, inhalation    | 367 mg/m³                |
| PNEC (Water)                             |                          |
| PNEC aqua (freshwater)                   | 0,24 mg/l                |
| PNEC aqua (marine water)                 | 0,024 mg/l               |
| PNEC aqua (intermittent, freshwater)     | 1,65 mg/l                |
| PNEC (Sediment)                          |                          |
| PNEC sediment (freshwater)               | 1,15 mg/kg dwt           |
| PNEC sediment (marine water)             | 115 μg/kg                |
| PNEC (Soil)                              |                          |
| PNEC soil                                | 148 μg/kg                |
| PNEC (Oral)                              |                          |
| PNEC oral (secondary poisoning)          | 200 mg/kg                |
| PNEC (STP)                               |                          |
| PNEC sewage treatment plant              | 650 mg/l                 |
| ethanol; ethyl alcohol (64-17-5)         |                          |
| DNEL/DMEL (Workers)                      |                          |
| Acute - local effects, inhalation        | 1900 mg/m³               |
| Long-term - systemic effects, dermal     | 343 mg/kg bodyweight/day |
| Long-term - systemic effects, inhalation | 380 mg/m³                |
| DNEL/DMEL (General population)           |                          |
| Acute - local effects, inhalation        | 950 mg/m³                |
| Long-term - systemic effects,oral        | 87 mg/kg bodyweight/day  |
| Long-term - systemic effects, inhalation | 114 mg/m³                |
| Long-term - systemic effects, dermal     | 206 mg/kg bodyweight/day |
| PNEC (Water)                             |                          |
| PNEC aqua (freshwater)                   | 0,96 mg/l                |
| PNEC aqua (marine water)                 | 0,79 mg/l                |
| PNEC aqua (intermittent, freshwater)     | 2,75 mg/l                |
| PNEC (Sediment)                          |                          |
| PNEC sediment (freshwater)               | 3,6 mg/kg dwt            |
| PNEC sediment (marine water)             | 2,9 mg/kg dwt            |
| PNEC (Soil)                              |                          |
| PNEC soil                                | 0,63 mg/kg dwt           |
| PNEC (Oral)                              |                          |
| PNEC oral (secondary poisoning)          | 0,72 g/kg food           |
| PNEC (STP)                               |                          |
| PNEC sewage treatment plant              | 580 mg/l                 |
|  |                          |

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| propan-1-ol (71-23-8)                    |                           |  |
|--|---------------------------|--|
| NEL/DMEL (Workers)                       |                           |  |
| Acute - systemic effects, inhalation     | 1037 mg/m³                |  |
| DNEL/DMEL (General population)           |                           |  |
| Acute - systemic effects, inhalation     | 518 mg/m³                 |  |
| 1-Ethoxypropan-2-ol (1569-02-4)          |                           |  |
| DNEL/DMEL (Workers)                      |                           |  |
| Acute - systemic effects, inhalation     | 500 mg/m³                 |  |
| Long-term - systemic effects, dermal     | 74 mg/kg bodyweight/day   |  |
| Long-term - systemic effects, inhalation | 211 mg/m³                 |  |
| DNEL/DMEL (General population)           |                           |  |
| Acute - systemic effects, inhalation     | 300 mg/m³                 |  |
| Long-term - systemic effects,oral        | 14 mg/kg bodyweight/day   |  |
| Long-term - systemic effects, inhalation | 127 mg/m³                 |  |
| Long-term - systemic effects, dermal     | 44,3 mg/kg bodyweight/day |  |
| PNEC (Water)                             |                           |  |
| PNEC aqua (freshwater)                   | 10 mg/l                   |  |
| PNEC aqua (marine water)                 | 1 mg/l                    |  |
| PNEC aqua (intermittent, freshwater)     | 19 mg/l                   |  |
| PNEC (Sediment)                          |                           |  |
| PNEC sediment (freshwater)               | 37,6 mg/kg dwt            |  |
| PNEC sediment (marine water)             | 3,76 mg/kg dwt            |  |
| PNEC (Soil)                              |                           |  |
| PNEC soil                                | 1,97 mg/kg dwt            |  |
| PNEC (Oral)                              |                           |  |
| PNEC oral (secondary poisoning)          | 142 mg/kg food            |  |
| PNEC (STP)                               |                           |  |
| PNEC sewage treatment plant              | 1250 mg/l                 |  |
| 1-methoxypropan-2-ol (107-98-2)          |                           |  |
| DNEL/DMEL (Workers)                      |                           |  |
| Acute - systemic effects, inhalation     | 553,5 mg/m³               |  |
| Acute - local effects, inhalation        | 553,5 mg/m³               |  |
| Long-term - systemic effects, dermal     | 183 mg/kg bodyweight/day  |  |
| Long-term - systemic effects, inhalation | 369 mg/m³                 |  |
| DNEL/DMEL (General population)           |                           |  |
| Long-term - systemic effects,oral        | 33 mg/kg bodyweight/day   |  |
| Long-term - systemic effects, inhalation | 43,9 mg/m³                |  |
| Long-term - systemic effects, dermal     | 78 mg/kg bodyweight/day   |  |

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| 1-methoxypropan-2-ol (107-98-2)          |                          |  |
|--|--------------------------|--|
| PNEC (Water)                             |                          |  |
| PNEC aqua (freshwater)                   | 10 mg/l                  |  |
| PNEC aqua (marine water)                 | 1 mg/l                   |  |
| PNEC aqua (intermittent, freshwater)     | 100 mg/l                 |  |
| PNEC (Sediment)                          |                          |  |
| PNEC sediment (freshwater)               | 52,3 mg/kg dwt           |  |
| PNEC sediment (marine water)             | 5,2 mg/kg dwt            |  |
| PNEC (Soil)                              |                          |  |
| PNEC soil                                | 4,59 mg/kg dwt           |  |
| PNEC (STP)                               |                          |  |
| PNEC sewage treatment plant              | 100 mg/l                 |  |
| n-butyl acetate (123-86-4)               |                          |  |
| DNEL/DMEL (Workers)                      |                          |  |
| Acute - systemic effects, dermal         | 11 mg/kg bodyweight/day  |  |
| Acute - systemic effects, inhalation     | 600 mg/m³                |  |
| Acute - local effects, inhalation        | 600 mg/m³                |  |
| Long-term - systemic effects, dermal     | 7 mg/kg bodyweight/day   |  |
| Long-term - systemic effects, inhalation | 48 mg/m³                 |  |
| Long-term - local effects, inhalation    | 300 mg/m³                |  |
| DNEL/DMEL (General population)           |                          |  |
| Acute - systemic effects, dermal         | 6 mg/kg bodyweight       |  |
| Acute - systemic effects, inhalation     | 300 mg/m³                |  |
| Acute - systemic effects, oral           | 2 mg/kg bodyweight       |  |
| Acute - local effects, inhalation        | 300 mg/m³                |  |
| Long-term - systemic effects,oral        | 2 mg/kg bodyweight/day   |  |
| Long-term - systemic effects, inhalation | 12 mg/m³                 |  |
| Long-term - systemic effects, dermal     | 3,4 mg/kg bodyweight/day |  |
| Long-term - local effects, inhalation    | 35,7 mg/m³               |  |
| PNEC (Water)                             |                          |  |
| PNEC aqua (freshwater)                   | 0,18 mg/l                |  |
| PNEC aqua (marine water)                 | 0,018 mg/l               |  |
| PNEC aqua (intermittent, freshwater)     | 0,36 mg/l                |  |
| PNEC (Sediment)                          |                          |  |
| PNEC sediment (freshwater)               | 0,981 mg/kg dwt          |  |
| PNEC sediment (marine water)             | 0,0981 mg/kg dwt         |  |
| PNEC (Soil)                              | ·                        |  |
| PNEC soil                                | 0,0903 mg/kg dwt         |  |
| PNEC (STP)                               |                          |  |
| PNEC sewage treatment plant              | 35,6 mg/l                |  |

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#### 8.2. Exposure controls

#### Personal protection equipment

#### Personal protective equipment:

Avoid all unnecessary exposure. Gloves. Protective clothing. Safety glasses.

#### Personal protective equipment symbol(s):







#### Eye and face protection

#### Eye protection:

Wear eye glasses with side protection according to EN 166.

| Eye protection |                      |                   |          |  |
|----------------|----------------------|-------------------|----------|--|
| Туре           | Field of application | Characteristics   | Standard |  |
| Safety glasses | Droplet              | With side shields | EN 166   |  |

#### **Skin protection**

#### Skin and body protection:

Wear suitable protective clothing

| Skin and body protection |           |
|--------------------------|-----------|
| Туре                     | Standard  |
| Overall, Lab coat        | EN 1149-1 |

#### Hand protection:

Wear suitable gloves resistant to chemical penetration. Choosing the proper glove is a decision that depends not only on the type of material, but also on other quality features, which differ for each manufacturer. The protective gloves to be used must comply with the specifications of the regulation 2016/425 and the resultant standard ISO 374-1

| Hand protection |              |                  |                |             |            |
|-----------------|--------------|------------------|----------------|-------------|------------|
| Туре            | Material     | Permeation       | Thickness (mm) | Penetration | Standard   |
| Reusable gloves | Butyl rubber | 3 (> 60 minutes) | > 0.4          | 3 (> 0.65)  | EN ISO 374 |

## **Respiratory protection**

#### Respiratory protection:

Not necessary with sufficient ventilation. In case of insufficient ventilation, wear suitable respiratory equipment. An approved organic vapour respirator/supplied air or self-contained breathing apparatus must be used when vapour concentration exceeds applicable exposure limits

| Respiratory protection |  |                                  |          |
|------------------------|--|----------------------------------|----------|
| Device                 | Filter type                                      | Condition                        | Standard |
| Full face mask         | Type A - High-boiling (>65 °C) organic compounds | If conc. in air > exposure limit | EN 14387 |

#### **Environmental exposure controls**

### Other information:

Do not eat, drink or smoke during use.

## **SECTION 9: Physical and chemical properties**

#### 9.1. Information on basic physical and chemical properties

Physical state : Liquid

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Colour : Black. Odour : alcohol odour. Odour threshold : Not available Melting point : Not available Freezing point : Not available Boiling point : > 64.7 °C Flammability : Not available Lower explosion limit : 0,4 vol % Upper explosion limit : 13,5 vol %

Flash point : ≤ 11 °C Closed cup Auto-ignition temperature : Not available Decomposition temperature : Not available pH : Not available Viscosity, kinematic : Not available

Viscosity, dynamic : ≥ 15 – ≤ 30 Seconds DinCup 4

Solubility : Insoluble in water. Partition coefficient n-octanol/water (Log Kow) : Not available Vapour pressure : Not available Vapour pressure at 50°C : Not available : 0,9 g/cm<sup>3</sup> Density : Not available Relative density Relative vapour density at 20°C : Not available Particle characteristics : Not applicable

#### 9.2. Other information

No additional information available

#### **SECTION 10: Stability and reactivity**

## 10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

#### 10.2. Chemical stability

Stable in use and storage conditions as recommended in item 7.

## 10.3. Possibility of hazardous reactions

No dangerous reactions known.

#### 10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

## 10.5. Incompatible materials

No additional information available.

## 10.6. Hazardous decomposition products

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

#### **SECTION 11: Toxicological information**

## 11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

#### ethyl acetate (141-78-6)

LD50 oral rat 11,3 ml/kg

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| ethyl acetate (141-78-6)         |  |
|----------------------------------|--|
| LD50 oral                        | 4934 mg/kg (rabbit)  |
| LD50 dermal rat                  | 20000 mg/kg  |
| LD50 dermal rabbit               | > 20000 mg/kg bodyweight Animal: rabbit, Animal sex: male  |
| LC50 Inhalation - Rat [ppm]      | 6000 ppm (6 h)   |
| ATE oral                         | 5620 mg/kg bodyweight  |
| ATE dermal                       | 20000 mg/kg bodyweight   |
| ethanol; ethyl alcohol (64-17-5) |  |
| LD50 oral rat                    | 1187 – 15010 mg/kg bodyweight Guideline: OECD Guideline 401 (Acute Oral Toxicity), 95% CL: 9720 - 11380  |
| LD50 oral                        | 8300 mg/kg bodyweight Animal: mouse  |
| LD50 dermal rabbit               | > 20000 mg/kg (Symptoms: Redness, pain)  |
| LD50 dermal                      | 15800 mg/kg bodyweight   |
| LC50 Inhalation - Rat            | 124,7 mg/l/4h (Symptoms include headache, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness)       |
| ATE vapours                      | 124,7 mg/l/4h  |
| ATE dust/mist                    | 124,7 mg/l/4h  |
| propan-1-ol (71-23-8)            |  |
| LD50 oral rat                    | 8000 mg/kg bodyweight  |
| LD50 dermal rabbit               | 4032 mg/kg bodyweight Animal: rabbit, Animal sex: male, Guideline: OECD Guideline 402 (Acute Dermal Toxicity), 95% CL: 2720 - 5968             |
| ATE oral                         | 8000 mg/kg bodyweight  |
| ATE dermal                       | 4032 mg/kg bodyweight  |
| 1-Ethoxypropan-2-ol (1569-02-4)  |  |
| LD50 dermal rat                  | > 2000 mg/kg bodyweight Animal: rat, Guideline: EU Method B.3 (Acute Toxicity (Dermal))  |
| LC50 Inhalation - Rat            | > 9,59 mg/l air Animal: rat, Guideline: OECD Guideline 403 (Acute Inhalation Toxicity), Guideline: EU Method B.2 (Acute Toxicity (Inhalation)) |
| 1-methoxypropan-2-ol (107-98-2)  |  |
| LD50 oral rat                    | 4277 mg/kg   |
| LD50 dermal rat                  | > 2000 mg/kg   |
| ATE oral                         | 4277 mg/kg bodyweight  |
| n-butyl acetate (123-86-4)       |  |
| LD50 oral rat                    | 10760 mg/kg bodyweight   |
| LD50 dermal rabbit               | 16 ml/kg   |
| LC50 Inhalation - Rat            | 740 – 71500 mg/m³  |
| LC50 Inhalation - Rat [ppm]      | 1087 – 1109 ppm  |
| Skin corrosion/irritation        | Not classified   |
| n-butyl acetate (123-86-4)       |  |
| рН                               | 6,2 Temp.: 20 °C Concentration: 5,3 g/L  |
| Serious eye damage/irritation    | Causes serious eye damage.   |

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| n-butyl acetate (123-86-4)                       |  |
|--|--|
| рН   | 6,2 Temp.: 20 °C Concentration: 5,3 g/L  |
| Respiratory or skin sensitisation :              | Not classified   |
| Germ cell mutagenicity :  Carcinogenicity :      | Not classified  Not classified   |
| ethanol; ethyl alcohol (64-17-5)                 | Not classified   |
| IARC group                                       | 1 - Carcinogenic to humans   |
|  | Not classified   |
| ethanol; ethyl alcohol (64-17-5)                 |  |
| NOAEL (animal/male, F0/P)                        | 13800 mg/kg bodyweight   |
| STOT-single exposure :                           | May cause drowsiness or dizziness.   |
| ethyl acetate (141-78-6)                         |  |
| LOAEL (oral, rat)                                | 3600 mg/kg bodyweight  |
| NOAEL (oral, rat)                                | 900 mg/kg bodyweight   |
| STOT-single exposure                             | May cause drowsiness or dizziness.   |
| propan-1-ol (71-23-8)                            |  |
| STOT-single exposure                             | May cause drowsiness or dizziness.   |
| 1-Ethoxypropan-2-ol (1569-02-4)                  |  |
| STOT-single exposure                             | May cause drowsiness or dizziness.   |
| 1-methoxypropan-2-ol (107-98-2)                  |  |
| STOT-single exposure                             | May cause drowsiness or dizziness.   |
| n-butyl acetate (123-86-4)                       |  |
| STOT-single exposure                             | May cause drowsiness or dizziness.   |
| STOT-repeated exposure :                         | Not classified   |
| ethyl acetate (141-78-6)                         |  |
| LOAEL (oral, rat, 90 days)                       | 3600 mg/kg bodyweight Animal: rat, Guideline: EPA OTS 795.2600 (Subchronic Oral Toxicity Test)                             |
| NOAEL (oral, rat, 90 days)                       | 900 mg/kg bodyweight Animal: rat, Guideline: EPA OTS 795.2600 (Subchronic Oral Toxicity Test)                              |
| ethanol; ethyl alcohol (64-17-5)                 |  |
| LOAEL (oral, rat, 90 days)                       | 3200 mg/kg bodyweight  |
| NOAEL (oral, rat, 28 days)                       | 1730 mg/kg bodyweight/day  |
| NOAEC (inhalation, rat, 28 days)                 | 6,66 mg/l  |
| NOAEL (oral, rat, 90 days)                       | < 1730 mg/kg bodyweight  |
| NOAEL (subchronic, oral, animal/male, 90 days)   | < 9700 mg/kg bodyweight Animal: mouse, Animal sex: male, Guideline: EPA OPPTS 870.3100 (90-Day Oral Toxicity in Rodents)   |
| NOAEL (subchronic, oral, animal/female, 90 days) | > 9400 mg/kg bodyweight Animal: mouse, Animal sex: female, Guideline: EPA OPPTS 870.3100 (90-Day Oral Toxicity in Rodents) |
| propan-1-ol (71-23-8)                            |  |
| NOAEC (inhalation, rat, dust/mist/fume, 90 days) | 8 mg/l   |

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| 1-Ethoxypropan-2-ol (1569-02-4)          |  |  |
|--|--|--|
| LOAEL (dermal, rat/rabbit, 90 days)      | Animal: rabbit, Animal sex: male, Guideline: OECD Guideline 411 (Subchronic Dermal Toxicity: 90-Day Study)                               |  |
| LOAEC (inhalation, rat, vapour, 90 days) | 8,36 mg/l air Animal: rat, Guideline: OECD Guideline 413 (Subchronic Inhalation Toxicity: 90-Day Study)                                  |  |
| NOAEL (oral, rat, 90 days)               | 1000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents)                         |  |
| NOAEL (dermal, rat/rabbit, 90 days)      | 1800 mg/kg bodyweight Animal: rabbit, Animal sex: male, Guideline: OECD Guideline 411 (Subchronic Dermal Toxicity: 90-Day Study)         |  |
| NOAEC (inhalation, rat, vapour, 90 days) | 1,266 mg/l air Animal: rat, Guideline: OECD Guideline 413 (Subchronic Inhalation Toxicity: 90-Day Study)                                 |  |
| 1-methoxypropan-2-ol (107-98-2)          |  |  |
| LOAEL (oral, rat, 90 days)               | 2757 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: OECD Guideline 407 (Repeated Dose 28-Day Oral Toxicity Study in Rodents) |  |
| NOAEL (oral, rat, 90 days)               | 919 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: OECD Guideline 407 (Repeated Dose 28-Day Oral Toxicity Study in Rodents)  |  |
| NOAEL (dermal, rat/rabbit, 90 days)      | > 1000 mg/kg bodyweight Animal: rabbit, Guideline: OECD Guideline 410 (Repeated Dose Dermal Toxicity: 21/28-Day Study)                   |  |
| n-butyl acetate (123-86-4)               |  |  |
| LOAEL (oral, rat, 90 days)               | 500 mg/kg bodyweight Animal: rat, Guideline: EPA OTS 798.2650 (90-Day Oral Toxicity in Rodents)  |  |
| NOAEL (oral, rat, 90 days)               | 125 mg/kg bodyweight Animal: rat, Guideline: EPA OTS 798.2650 (90-Day Oral Toxicity in Rodents)  |  |
| Aspiration hazard                        | : Not classified   |  |
| propan-1-ol (71-23-8)                    |  |  |
| Viscosity, kinematic                     | 2,875 mm²/s  |  |
| 1-Ethoxypropan-2-ol (1569-02-4)          |  |  |
| Viscosity, kinematic                     | 2,456 mm²/s  |  |
| 1-methoxypropan-2-ol (107-98-2)          |  |  |
| Viscosity, kinematic                     | 1,848 mm²/s  |  |
| n-butyl acetate (123-86-4)               |  |  |
| Viscosity, kinematic                     | 0,83 mm²/s Temp.: '20°C' Parameter: 'kinematic viscosity (in mm²/s)'   |  |

## 11.2. Information on other hazards

No additional information available

## **SECTION 12: Ecological information**

## 12.1. Toxicity

Hazardous to the aquatic environment, short-term

(acute)

: Not classified

Hazardous to the aquatic environment, long-term

: Not classified

(chronic)

| ethyl acetate (141-78-6) |                 |          |
|--------------------------|-----------------|----------|
|                          | LC50 - Fish [1] | 230 mg/l |

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| ethyl acetate (141-78-6)           |  |
|------------------------------------|--|
| NOEC (acute)                       | > 9,65 mg/l (32d)  |
| NOEC (chronic)                     | 2,4 mg/l Test organisms (species): Daphnia magna Duration: '21 d'  |
| NOEC chronic crustacea             | 2,4 mg/l (21d)   |
| ethanol; ethyl alcohol (64-17-5)   |  |
| LC50 - Fish [1]                    | 14,2 g/l Test organisms (species): Pimephales promelas   |
| LC50 - Fish [2]                    | 13000 mg/l (Oncorhynchus mykiss (Rainbow trout))   |
| EC50 - Crustacea [1]               | > 10000 mg/l Test organisms (species): Daphnia magna   |
| EC50 - Other aquatic organisms [1] | 5012 mg/l Test organisms (species): Waterflea  |
| EC50 - Other aquatic organisms [2] | 275 mg/l   |
| EC50 72h - Algae [1]               | 275 mg/l Chlorella vulgaris  |
| EC50 72h - Algae [2]               | 1450 Test organisms (species): Microcystis aeruginosa  |
| EC50 96h - Algae [1]               | ≈ 22000 mg/l   |
| NOEC (chronic)                     | 9,6 mg/l Test organisms (species): Daphnia magna Duration: '9 d'   |
| NOEC chronic fish                  | 250 mg/l Danio rerio   |
| propan-1-ol (71-23-8)              |  |
| LC50 - Fish [1]                    | 4555 mg/l Test organisms (species): Pimephales promelas  |
| EC50 - Crustacea [1]               | 3644 mg/l Test organisms (species): Daphnia magna  |
| EC50 72h - Algae [1]               | 9,17 g/l   |
| NOEC (chronic)                     | > 100 mg/l Test organisms (species): Daphnia magna Duration: '21 d'  |
| NOEC chronic crustacea             | 68,3 mg/l (21 d)   |
| NOEC chronic algae                 | 1150 mg/l 48 h   |
| 1-Ethoxypropan-2-ol (1569-02-4)    |  |
| LC50 - Fish [1]                    | 5300 mg/l QSAR   |
| EC50 - Crustacea [1]               | > 1000 mg/l Test organisms (species): Daphnia magna  |
| NOEC (chronic)                     | > 180 mg/l Test organisms (species): Daphnia magna Duration: '21 d'  |
| NOEC chronic fish                  | > 260 mg/l Test organisms (species): Oncorhynchus mykiss (previous name: Salmo gairdneri) Duration: '21 d'                               |
| 1-methoxypropan-2-ol (107-98-2)    |  |
| LC50 - Fish [1]                    | 20800 mg/l   |
| EC50 - Other aquatic organisms [1] | 2954 mg/l Test organisms (species): other aquatic crustacea:   |
| n-butyl acetate (123-86-4)         |  |
| LC50 - Fish [1]                    | 18 mg/l Test organisms (species): Pimephales promelas  |
| EC50 - Crustacea [1]               | 44 mg/l Test organisms (species): Daphnia sp.  |
| EC50 72h - Algae [1]               | 397 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum) |
| EC50 72h - Algae [2]               | 246 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum) |
| LOEC (chronic)                     | 47,6 mg/l Test organisms (species): Daphnia magna Duration: '21 d'   |
| NOEC (chronic)                     | 23,2 mg/l Test organisms (species): Daphnia magna Duration: '21 d'   |

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## 12.2. Persistence and degradability

| KORTHO INK K8 BLACK              |                         |
|----------------------------------|-------------------------|
| Persistence and degradability    | Rapidly degradable      |
| ethyl acetate (141-78-6)         |                         |
| Persistence and degradability    | Rapidly degradable      |
| ethanol; ethyl alcohol (64-17-5) |                         |
| Persistence and degradability    | Readily biodegradable.  |
| propan-1-ol (71-23-8)            |                         |
| Persistence and degradability    | Rapidly degradable      |
| Biodegradation                   | 75 % 20 d               |
| 1-Ethoxypropan-2-ol (1569-02-4)  |                         |
| Persistence and degradability    | Rapidly degradable      |
| Biodegradation                   | 68 % (OECD 301D method) |
| 1-methoxypropan-2-ol (107-98-2)  |                         |
| Persistence and degradability    | Rapidly degradable      |
| n-butyl acetate (123-86-4)       |                         |
| Persistence and degradability    | Rapidly degradable      |

## 12.3. Bioaccumulative potential

| ethyl acetate (141-78-6)                        |                       |  |
|---|-----------------------|--|
| Partition coefficient n-octanol/water (Log Pow) | 0,68 – 0,73 @ 20-25°C |  |
| ethanol; ethyl alcohol (64-17-5)                |                       |  |
| BCF - Fish [1]                                  | 3                     |  |
| Partition coefficient n-octanol/water (Log Pow) | -0,32                 |  |
| Bioaccumulative potential                       | No bioaccumulation.   |  |
| propan-1-ol (71-23-8)                           |                       |  |
| Partition coefficient n-octanol/water (Log Pow) | 0,2 @ 25 °C and pH 7  |  |
| Partition coefficient n-octanol/water (Log Kow) | 0,2 @ 25 °C and pH 7  |  |
| 1-Ethoxypropan-2-ol (1569-02-4)                 |                       |  |
| Partition coefficient n-octanol/water (Log Pow) | < 3                   |  |
| 1-methoxypropan-2-ol (107-98-2)                 |                       |  |
| Partition coefficient n-octanol/water (Log Kow) | 0,37                  |  |
| n-butyl acetate (123-86-4)                      |                       |  |
| Partition coefficient n-octanol/water (Log Pow) | 1,81 – 2,3 @ 25 °C    |  |

## 12.4. Mobility in soil

| ethanol; ethyl alcohol (64-17-5) |                     |
|----------------------------------|---------------------|
| Surface tension                  | 0,02339 N/m @ 25 °C |

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| ethanol; ethyl alcohol (64-17-5)                           |   |
|--|---|
| Organic Carbon Normalized Adsorption Coefficient (Log Koc) | 1 |

#### 12.5. Results of PBT and vPvB assessment

| Component   |                       |
|---|-----------------------|
| Substance(s) not meeting the PBT criteria of REACH regulation, in accordance with Annex XIII  | propan-1-ol (71-23-8) |
| Substance(s) not meeting the vPvB criteria of REACH regulation, in accordance with Annex XIII | propan-1-ol (71-23-8) |

#### 12.6. Endocrine disrupting properties

No additional information available

#### 12.7. Other adverse effects

Additional information : Avoid release to the environment.

## **SECTION 13: Disposal considerations**

#### 13.1. Waste treatment methods

Regional waste regulation

Product/Packaging disposal recommendations

Additional information Ecological waste information HP Code

- : Waste disposal according to official state regulations.
- : Dispose in a safe manner in accordance with local/national regulations. Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.
- : Handle empty containers with care because residual vapours are flammable.
- : Avoid release to the environment.
- : HP3 "Flammable:"
  - flammable liquid waste: liquid waste having a flash point below 60 °C or waste gas oil, diesel and light heating oils having a flash point > 55 °C and ≤ 75 °C;
  - flammable pyrophoric liquid and solid waste: solid or liquid waste which, even in small quantities, is liable to ignite within five minutes after coming into contact with air;
  - flammable solid waste: solid waste which is readily combustible or may cause or contribute to fire through friction;
  - flammable gaseous waste: gaseous waste which is flammable in air at 20 °C and a standard pressure of 101.3 kPa;
  - water reactive waste: waste which, in contact with water, emits flammable gases in dangerous quantities;
  - other flammable waste: flammable aerosols, flammable self-heating waste, flammable organic peroxides and flammable self-reactive waste.

HP4 - "Irritant – skin irritation and eye damage:" waste which on application can cause skin irritation or damage to the eye.

## **SECTION 14: Transport information**

In accordance with ADR / IMDG / IATA / ADN / RID

| ADR  | IMDG                             | IATA                          | ADN                              | RID                              |
|--|----------------------------------|-------------------------------|----------------------------------|----------------------------------|
| 14.1. UN number or ID number                 |                                  |                               |                                  |                                  |
| UN 1210                                      | UN 1210                          | UN 1210                       | UN 1210                          | UN 1210                          |
| 14.2. UN proper shipping name                |                                  |                               |                                  |                                  |
| PRINTING INK / PRINTING INK RELATED MATERIAL | PRINTING INK RELATED<br>MATERIAL | Printing ink related material | PRINTING INK RELATED<br>MATERIAL | PRINTING INK RELATED<br>MATERIAL |

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| ADR  | IMDG   | IATA   | ADN   | RID   |
|--|--|--|---|---|
| Transport document descr   | iption   |  |   |   |
| UN 1210 PRINTING INK /<br>PRINTING INK RELATED<br>MATERIAL, 3, II, (D/E) | UN 1210 PRINTING INK<br>RELATED MATERIAL, 3, II  | UN 1210 Printing ink related material, 3, II | UN 1210 PRINTING INK<br>RELATED MATERIAL, 3, II | UN 1210 PRINTING INK<br>RELATED MATERIAL, 3, II |
| 14.3. Transport hazard   | class(es)  |  |   |   |
| 3  | 3  | 3  | 3   | 3   |
| 3  | 3  | 3  | 3   | 3   |
| 14.4. Packing group  | 14.4. Packing group  |  |   |   |
| II   | II   | II   | II  | II  |
| 14.5. Environmental hazards  |  |  |   |   |
| Dangerous for the environment: No  | Dangerous for the<br>environment: No<br>Marine pollutant: No<br>EmS-No. (Fire): F-E<br>EmS-No. (Spillage): S-D | Dangerous for the environment: No            | Dangerous for the environment: No               | Dangerous for the environment: No               |
| No supplementary information available.                                  |  |  |   |   |

#### 14.6. Special precautions for user

#### **Overland transport**

Classification code (ADR) : F1

Special provisions (ADR) : 163, 367, 640C

Limited quantities (ADR) : 5I
Excepted quantities (ADR) : E2
Packing instructions (ADR) : P001
Special packing provisions (ADR) : PP1
Mixed packing provisions (ADR) : MP19
Portable tank and bulk container instructions (ADR) : T4
Portable tank and bulk container special provisions : TP1, TP8

(ADR)

Tank code (ADR) : L1.5BN

Vehicle for tank carriage : FL

Transport category (ADR) : 2

Special provisions for carriage - Operation (ADR) : S2, S20

Hazard identification number (Kemler No.) : 33

Hazard identification number (Kemler No.) : 33
Orange plates :

33 1210

Tunnel restriction code (ADR) : D/E

#### Transport by sea

: 163, 367 Special provisions (IMDG) Limited quantities (IMDG) : 5 L Excepted quantities (IMDG) E2 Packing instructions (IMDG) : P001 : PP1 Special packing provisions (IMDG) IBC packing instructions (IMDG) : IBC02 Tank instructions (IMDG) : T4 Tank special provisions (IMDG) : TP1, TP8 Stowage category (IMDG) : B

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Properties and observations (IMDG) : Fluid or viscous liquid containing colouring matter in solution or suspension. Miscibility with

water depends upon the solvent.

#### Air transport

PCA Excepted quantities (IATA) : E2
PCA Limited quantities (IATA) : Y341
PCA limited quantity max net quantity (IATA) : 1L
PCA packing instructions (IATA) : 353
PCA max net quantity (IATA) : 5L
CAO packing instructions (IATA) : 364
CAO max net quantity (IATA) : 60L

Special provisions (IATA) : A3, A72, A192

ERG code (IATA) : 3L

#### **Inland waterway transport**

Classification code (ADN) : F1

Special provisions (ADN) : 163, 367, 640C

Limited quantities (ADN) : 5 L

Excepted quantities (ADN) : E2

Equipment required (ADN) : PP, EX, A

Ventilation (ADN) : VE01

Number of blue cones/lights (ADN) : 1

#### Rail transport

Classification code (RID) : F1

Special provisions (RID) : 163, 367, 640C

Limited quantities (RID) : 5L

Excepted quantities (RID) : E2

Packing instructions (RID) : P001

Special packing provisions (RID) : PP1

Mixed packing provisions (RID) : MP19

Portable tank and bulk container instructions (RID) : T4

Portable tank and bulk container special provisions : TP1, TP8

(RID)

Tank codes for RID tanks (RID): L1.5BNTransport category (RID): 2Colis express (express parcels) (RID): CE7Hazard identification number (RID): 33

## 14.7. Maritime transport in bulk according to IMO instruments

Not applicable

#### **SECTION 15: Regulatory information**

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

#### **EU-Regulations**

### **REACH Annex XVII (Restriction List)**

| EU restriction list (REACH Annex XVII) |  |   |
|--|--|---|
| Reference code                         | Applicable on  | Entry title or description  |
| 3(b)                                   | KORTHO INK K8 BLACK<br>; ethyl acetate; ethanol;<br>ethyl alcohol; propan-1-ol<br>; 1-Ethoxypropan-2-ol; 1-<br>methoxypropan-2-ol; n-<br>butyl acetate | Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard classes 3.1 to 3.6, 3.7 adverse effects on sexual function and fertility or on development, 3.8 effects other than narcotic effects, 3.9 and 3.10 |

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| EU restriction list (REACH Annex XVII) |                            |  |
|--|----------------------------|--|
| Reference code                         | Applicable on              | Entry title or description   |
| 3(a)                                   | ethyl alcohol; propan-1-ol | Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard classes 2.1 to 2.4, 2.6 and 2.7, 2.8 types A and B, 2.9, 2.10, 2.12, 2.13 categories 1 and 2, 2.14 categories 1 and 2, 2.15 types A to F |

#### **REACH Annex XIV (Authorisation List)**

Contains no substance(s) listed on REACH Annex XIV (Authorisation List)

#### **REACH Candidate List (SVHC)**

Contains no substance(s) listed on the REACH Candidate List

#### **PIC Regulation (Prior Informed Consent)**

Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals)

#### **POP Regulation (Persistent Organic Pollutants)**

Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)

#### Ozone Regulation (1005/2009)

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 1005/2009 on substances that deplete the ozone layer)

#### **Dual-Use Regulation (428/2009)**

Contains no substance subject to the COUNCIL REGULATION (EC) No 428/2009 of 5 May 2009 setting up a Community regime for the control of exports, transfer, brokering and transit of dual-use items.

#### VOC Directive (2004/42)

Organic solvent : Yes

#### **Explosives Precursors Regulation (2019/1148)**

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

#### **Drug Precursors Regulation (273/2004)**

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

#### **National regulations**

#### **Netherlands**

ABM category : B(4) - low hazard for aquatic organisms

SZW-lijst van kankerverwekkende stoffen : ethanol; ethyl alcohol is listed SZW-lijst van mutagene stoffen : None of the components are listed SZW-lijst van reprotoxische stoffen – Borstvoeding : ethanol; ethyl alcohol is listed SZW-lijst van reprotoxische stoffen – : ethanol; ethyl alcohol is listed

Vruchtbaarheid

SZW-lijst van reprotoxische stoffen – Ontwikkeling : ethanol; ethyl alcohol is listed

### 15.2. Chemical safety assessment

No chemical safety assessment has been carried out

For the following substances of this mixture a chemical safety assessment has been carried out:

ethanol; ethyl alcohol

#### **SECTION 16: Other information**

| Abbreviations and acronyms:   |  |
|---|--|
| ADR European Agreement concerning the International Carriage of Dangerous Goods by Road |  |
| CLP Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008         |  |

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

| Abbreviations and acronyms: |   |  |
|-----------------------------|---|--|
| DNEL                        | Derived-No Effect Level   |  |
| EC50                        | Median effective concentration  |  |
| LC50                        | Median lethal concentration   |  |
| LD50                        | Median lethal dose  |  |
| PBT                         | Persistent Bioaccumulative Toxic  |  |
| PNEC                        | Predicted No-Effect Concentration   |  |
| REACH                       | Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006 |  |
| STP                         | Sewage treatment plant  |  |
| vPvB                        | Very Persistent and Very Bioaccumulative  |  |

Other information

: DISCLAIMER OF LIABILITY The information in this SDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness. The conditions or methods of handling, storage, use or disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. This SDS was prepared and is to be used only for this product. If the product is used as a component in another product, this SDS information may not be applicable.

| Full text of H- and EUH-statements: |  |  |
|-------------------------------------|--|--|
| EUH066                              | Repeated exposure may cause skin dryness or cracking.                  |  |
| Eye Dam. 1                          | Serious eye damage/eye irritation, Category 1                          |  |
| Eye Irrit. 2                        | Serious eye damage/eye irritation, Category 2                          |  |
| Flam. Liq. 2                        | Flammable liquids, Category 2  |  |
| Flam. Liq. 3                        | Flammable liquids, Category 3  |  |
| H225                                | Highly flammable liquid and vapour.                                    |  |
| H226                                | Flammable liquid and vapour.   |  |
| H318                                | Causes serious eye damage.   |  |
| H319                                | Causes serious eye irritation.   |  |
| H336                                | May cause drowsiness or dizziness.                                     |  |
| STOT SE 3                           | Specific target organ toxicity – Single exposure, Category 3, Narcosis |  |

| Full text of use descriptors |       |
|------------------------------|-------|
| PC18 Ink and Toners          |       |
| PROC0                        | Other |
| SU0                          | Other |

| Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]: |      |                       |
|---|------|-----------------------|
| Flam. Liq. 2  | H225 | On basis of test data |
| Eye Dam. 1  | H318 | Calculation method    |
| STOT SE 3   | H336 | Calculation method    |

The classification complies with : ATP 12

# Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Safety Data Sheet (SDS), EU

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.