according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



## ADITIVO PARA EL SISTEMA DE REFRIGERACIÓN 1 L

Version Revision Date: SDS Number: Date of last issue: 24.06.2024 5.0 08.11.2024 10765811-00009 Date of first issue: 17.05.2015

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

1.1 Product identifier

Trade name : ADITIVO PARA EL SISTEMA DE REFRIGERACIÓN 1 L

Product code : 08931541

Unique Formula Identifier

(UFI)

387A-C04W-X00K-1VMN

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

Use of the Sub- : Additive

stance/Mixture Professional use product

Recommended restrictions

on use

: Not applicable

1.3 Details of the supplier of the safety data sheet

Company : Würth España S.A.

Pol. Ind. Riera de Caldes, Joiers, 21-23 08184 Palau-soltà I Plegamans, Barcelona

Telephone : +34 (0)93 862 95 00

Telefax : +34 (0)93 864 62 03

E-mail address of person

responsible for the SDS

prodsafe@wuerth.com

#### 1.4 Emergency telephone number

Servicio Médico de Información Toxicológica, Tel. +34 (0)91 562 04 20. Teléfono de urgencias de la sociedad +49 (0)6132 84463

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

#### 2.1 Classification of the substance or mixture

### Classification (REGULATION (EC) No 1272/2008)

Reproductive toxicity, Category 1B H360D: May damage the unborn child.

Specific target organ toxicity - repeated

exposure, Category 2

H373: May cause damage to organs through pro-

longed or repeated exposure.

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



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#### 2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms

Signal word : Danger

Hazard statements : H360D May damage the unborn child.

H373 May cause damage to organs through prolonged

or repeated exposure.

Precautionary statements : Prevention:

P201 Obtain special instructions before use.

P280 Wear protective gloves/ protective clothing/ eye

protection/ face protection.

Response:

P308 + P313 IF exposed or concerned: Get medical advice/

attention.

Storage:

P405 Store locked up.

#### Hazardous components which must be listed on the label:

Ethylene glycol 2-Ethylhexanoic acid

### **Additional Labelling**

Restricted to professional users.

#### 2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

Ecological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Toxicological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

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

#### 3.2 Mixtures

Components

| Chemical name        | CAS-No.<br>EC-No.<br>Index-No.<br>Registration number     | Classification   | Concentration<br>(% w/w) |
|----------------------|---|--|--------------------------|
| Ethylene glycol      | 107-21-1<br>203-473-3<br>603-027-00-1<br>01-2119456816-28 | Acute Tox. 4; H302 STOT RE 2; H373 (Kidney)  Acute toxicity estimate  Acute oral toxicity: 1.330 mg/kg | >= 50 - < 70             |
| 2-Ethylhexanoic acid | 149-57-5<br>205-743-6<br>607-230-00-6<br>01-2119488942-23 | Repr. 1B; H360D  | >= 0,3 - < 1             |

For explanation of abbreviations see section 16.

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

#### 4.1 Description of first aid measures

General advice : In the case of accident or if you feel unwell, seek medical ad-

vice immediately.

When symptoms persist or in all cases of doubt seek medical

advice.

Protection of first-aiders : First Aid responders should pay attention to self-protection,

and use the recommended personal protective equipment when the potential for exposure exists (see section 8).

If inhaled : If inhaled, remove to fresh air.

Get medical attention.

In case of skin contact : In case of contact, immediately flush skin with soap and plenty

of water.

Remove contaminated clothing and shoes.

Get medical attention.

Wash clothing before reuse.

Thoroughly clean shoes before reuse.

In case of eye contact : Flush eyes with water as a precaution.

Get medical attention if irritation develops and persists.

If swallowed, DO NOT induce vomiting.

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



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Get medical attention.

Rinse mouth thoroughly with water.

4.2 Most important symptoms and effects, both acute and delayed

Risks : May damage the unborn child.

May cause damage to organs through prolonged or repeated

exposure.

4.3 Indication of any immediate medical attention and special treatment needed

Treatment : Treat symptomatically and supportively.

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

5.1 Extinguishing media

Suitable extinguishing media : Not applicable

Will not burn

Unsuitable extinguishing

media

Not applicable Will not burn

5.2 Special hazards arising from the substance or mixture

Specific hazards during fire-

fighting

Exposure to combustion products may be a hazard to health.

Hazardous combustion prod- :

ucts

Carbon oxides

5.3 Advice for firefighters

Special protective equipment :

for firefighters

In the event of fire, wear self-contained breathing apparatus.

Use personal protective equipment.

Specific extinguishing meth-

ods

Use extinguishing measures that are appropriate to local cir-

cumstances and the surrounding environment. Use water spray to cool unopened containers.

Remove undamaged containers from fire area if it is safe to do

SO.

Evacuate area.

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

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

Personal precautions : Use personal protective equipment.

Follow safe handling advice (see section 7) and personal pro-

tective equipment recommendations (see section 8).

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



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#### 6.2 Environmental precautions

Environmental precautions : Avoid release to the environment.

Prevent further leakage or spillage if safe to do so.

Prevent spreading over a wide area (e.g. by containment or oil

barriers).

Retain and dispose of contaminated wash water.

Local authorities should be advised if significant spillages

cannot be contained.

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

Methods for cleaning up : Soak up with inert absorbent material.

For large spills, provide dyking or other appropriate containment to keep material from spreading. If dyked material can be pumped, store recovered material in appropriate container. Clean up remaining materials from spill with suitable absor-

bent.

Local or national regulations may apply to releases and disposal of this material, as well as those materials and items employed in the cleanup of releases. You will need to deter-

mine which regulations are applicable.

Sections 13 and 15 of this SDS provide information regarding

certain local or national requirements.

#### 6.4 Reference to other sections

See sections: 7, 8, 11, 12 and 13.

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

#### 7.1 Precautions for safe handling

Technical measures : See Engineering measures under EXPOSURE

CONTROLS/PERSONAL PROTECTION section.

Local/Total ventilation : If sufficient ventilation is unavailable, use with local exhaust

ventilation.

Advice on safe handling : Do not get on skin or clothing.

Do not breathe mist or vapours.

Do not swallow.

Avoid contact with eyes.

Handle in accordance with good industrial hygiene and safety practice, based on the results of the workplace exposure as-

sessment

Keep container tightly closed.

Take care to prevent spills, waste and minimize release to the

environment.

Hygiene measures : If exposure to chemical is likely during typical use, provide eye

flushing systems and safety showers close to the working place. When using do not eat, drink or smoke. Wash contami-

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



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nated clothing before re-use.

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

Requirements for storage areas and containers

Keep in properly labelled containers. Store locked up. Keep tightly closed. Store in accordance with the particular national

regulations.

Do not store with the following product types: Advice on common storage

Self-reactive substances and mixtures

Organic peroxides

**Explosives** Gases

Storage period 36 Months

Recommended storage tem- : 5 - 25 °C

perature

7.3 Specific end use(s)

Specific use(s) No data available

## **SECTION 8: Exposure controls/personal protection**

### 8.1 Control parameters

#### **Occupational Exposure Limits**

| Components           | CAS-No.  | Value type (Form of exposure)                 | Control parameters  | Basis      |
|----------------------|--|---|---------------------|------------|
| Ethylene glycol      | 107-21-1   | TWA   | 20 ppm<br>52 mg/m3  | 2000/39/EC |
|                      | Further information: Identifies the possibility of significant uptake through the skin, Indicative   |   |                     |            |
|                      |  | STEL  | 40 ppm<br>104 mg/m3 | 2000/39/EC |
|                      | Further information: Identifies the possibility of significant uptake through the skin, Indicative   |   |                     |            |
|                      |  | VLA-ED  | 20 ppm<br>52 mg/m3  | ES VLA     |
|                      | Further information: Skin  |   |                     |            |
|                      |  | VLA-EC  | 40 ppm<br>104 mg/m3 | ES VLA     |
|                      | Further inform   | Further information: Skin                     |                     |            |
| 2-Ethylhexanoic acid | 149-57-5   | VLA-ED (Inhala-<br>ble fraction and<br>vapor) | 5 mg/m3             | ES VLA     |
|                      | Further information: Substances that are suspected to be toxic to human reproduction. Classification in category 1B is based primarily on the existence of data from animal studies. |   |                     |            |

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



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#### Derived No Effect Level (DNEL) according to Regulation (EC) No. 1907/2006

| Substance name       | End Use   | Exposure routes | Potential health effects     | Value               |
|----------------------|-----------|-----------------|------------------------------|---------------------|
| Ethylene glycol      | Workers   | Inhalation      | Long-term local ef-<br>fects | 35 mg/m3            |
|                      | Workers   | Skin contact    | Long-term systemic effects   | 106 mg/kg<br>bw/day |
|                      | Consumers | Inhalation      | Long-term local effects      | 7 mg/m3             |
|                      | Consumers | Skin contact    | Long-term systemic effects   | 53 mg/kg<br>bw/day  |
| 2-Ethylhexanoic acid | Workers   | Inhalation      | Long-term systemic effects   | 14 mg/m3            |
|                      | Workers   | Skin contact    | Long-term systemic effects   | 2 mg/kg<br>bw/day   |
|                      | Consumers | Inhalation      | Long-term systemic effects   | 3,5 mg/m3           |
|                      | Consumers | Skin contact    | Long-term systemic effects   | 1 mg/kg<br>bw/day   |
|                      | Consumers | Ingestion       | Long-term systemic effects   | 1 mg/kg<br>bw/day   |

### Predicted No Effect Concentration (PNEC) according to Regulation (EC) No. 1907/2006

| Substance name       | Environmental Compartment | Value       |
|----------------------|---------------------------|-------------|
| Ethylene glycol      | Fresh water               | 10 mg/l     |
|                      | Marine water              | 1 mg/l      |
|                      | Intermittent use/release  | 10 mg/l     |
|                      | Sewage treatment plant    | 199,5 mg/l  |
|                      | Fresh water sediment      | 37 mg/kg    |
|                      | Marine sediment           | 3,7 mg/kg   |
|                      | Soil                      | 1,53 mg/kg  |
| 2-Ethylhexanoic acid | Fresh water               | 0,36 mg/l   |
|                      | Marine water              | 0,036 mg/l  |
|                      | Intermittent use/release  | 0,493 mg/l  |
|                      | Sewage treatment plant    | 71,7 mg/l   |
|                      | Fresh water sediment      | 6,37 mg/kg  |
|                      | Marine sediment           | 0,637 mg/kg |
|                      | Soil                      | 1,06 mg/kg  |

## 8.2 Exposure controls

## **Engineering measures**

Minimize workplace exposure concentrations.

If sufficient ventilation is unavailable, use with local exhaust ventilation.

#### Personal protective equipment

Eye/face protection : Please follow all applicable local/national requirements when

selecting protective measures for a specific workplace.

Wear the following personal protective equipment:

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



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Safety glasses

Always wear eye protection when the potential for inadvertent

eye contact with the product cannot be excluded. Equipment should conform to UNE EN 166

Hand protection

Material : Nitrile rubber
Break through time : 480 min
Glove thickness : 0,425 mm

Directive : Equipment should conform to UNE EN 374

Remarks : Choose gloves to protect hands against chemicals depending

on the concentration and quantity of the hazardous substance and specific to place of work. For special applications, we recommend clarifying the resistance to chemicals of the aforementioned protective gloves with the glove manufacturer. Wash hands before breaks and at the end of workday.

Skin and body protection : Select appropriate protective clothing based on chemical

resistance data and an assessment of the local exposure

potential.

Skin contact must be avoided by using impervious protective

clothing (gloves, aprons, boots, etc).

Respiratory protection : If adequate local exhaust ventilation is not available or expo-

sure assessment demonstrates exposures outside the rec-

ommended guidelines, use respiratory protection. Equipment should conform to UNE EN 14387

Filter type : Organic vapour type (A)

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

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

Physical state : liquid

Colour : grey

Odour : pleasant

Odour Threshold : No data available

Melting point/freezing point : 0 °C

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



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Initial boiling point and boiling :

range

106 °C

Flammability (solid, gas) : Not applicable

Flammability (liquids) : Will not burn

Upper explosion limit / Upper

flammability limit

No data available

Lower explosion limit / Lower

flammability limit

No data available

Flash point : No data available

Auto-ignition temperature : 360 °C

Decomposition temperature : No data available

pH : 7,5 - 8,5

Concentration: 100 %

concentrate

Viscosity

Viscosity, kinematic : No data available

Solubility(ies)

Water solubility : completely soluble

Partition coefficient: n-

octanol/water

Not applicable

Vapour pressure : 2.268 Pa (20 °C)

No data available

11.949 Pa (50 °C)

Density : 1,025 - 1,035 g/cm³ (20 °C)

Relative vapour density : No data available

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



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Particle characteristics

Particle size : Not applicable

9.2 Other information

Explosives : Not explosive

Oxidizing properties : The substance or mixture is not classified as oxidizing.

Evaporation rate : No data available

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

### 10.1 Reactivity

Not classified as a reactivity hazard.

#### 10.2 Chemical stability

Stable under normal conditions.

#### 10.3 Possibility of hazardous reactions

Hazardous reactions : None known.

10.4 Conditions to avoid

Conditions to avoid : None known.

10.5 Incompatible materials

Materials to avoid : None.

### 10.6 Hazardous decomposition products

No hazardous decomposition products are known.

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

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

Information on likely routes of : Inhalation

exposure Skin contact Ingestion

Eye contact

### **Acute toxicity**

Not classified based on available information.

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



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**Product:** 

Acute oral toxicity : Acute toxicity estimate: > 2.000 mg/kg

Method: Calculation method

**Components:** 

Ethylene glycol:

Acute oral toxicity : Acute toxicity estimate: 1.330 mg/kg

Method: Expert judgement

Acute inhalation toxicity : LC50 (Rat): > 2,5 mg/l

Exposure time: 6 h

Test atmosphere: dust/mist

Acute dermal toxicity : LD50 (Rabbit): > 5.000 mg/kg

2-Ethylhexanoic acid:

Acute oral toxicity : LD50 (Rat): 2.043 mg/kg

Acute dermal toxicity : LD50 (Rat): > 2.000 mg/kg

Method: OECD Test Guideline 402

Assessment: The substance or mixture has no acute dermal

toxicity

Skin corrosion/irritation

Not classified based on available information.

**Components:** 

Ethylene glycol:

Species : Rabbit

Result : No skin irritation

2-Ethylhexanoic acid:

Species : Rabbit

Method : OECD Test Guideline 404

Result : No skin irritation

Serious eye damage/eye irritation

Not classified based on available information.

**Components:** 

Ethylene glycol:

Species : Rabbit

Result : No eye irritation

2-Ethylhexanoic acid:

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



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Species : Rabbit

Method : OECD Test Guideline 405

Result : No eye irritation

#### Respiratory or skin sensitisation

#### Skin sensitisation

Not classified based on available information.

#### Respiratory sensitisation

Not classified based on available information.

#### **Components:**

#### Ethylene glycol:

Test Type : Maximisation Test
Exposure routes : Skin contact
Species : Guinea pig
Result : negative

#### 2-Ethylhexanoic acid:

Test Type : Maximisation Test
Exposure routes : Skin contact
Species : Guinea pig
Result : negative

#### Germ cell mutagenicity

Not classified based on available information.

### **Components:**

#### **Ethylene glycol:**

Genotoxicity in vitro : Test Type: Bacterial reverse mutation assay (AMES)

Method: OECD Test Guideline 471

Result: negative

Test Type: DNA damage and repair, unscheduled DNA syn-

thesis in mammalian cells (in vitro)

Result: negative

Test Type: Chromosome aberration test in vitro

Result: negative

Genotoxicity in vivo : Test Type: Mammalian erythrocyte micronucleus test (in vivo

cytogenetic assay) Species: Mouse

Application Route: Intraperitoneal injection

Result: negative

### 2-Ethylhexanoic acid:

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



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Genotoxicity in vitro : Test Type: Bacterial reverse mutation assay (AMES)

Result: negative

Genotoxicity in vivo : Test Type: Mammalian erythrocyte micronucleus test (in vivo

cytogenetic assay) Species: Mouse

Application Route: Ingestion Method: OECD Test Guideline 474

Result: negative

Germ cell mutagenicity- As-

sessment Remarks: Based on data from similar materials

Carcinogenicity

Not classified based on available information.

**Components:** 

Ethylene glycol:

Species : Mouse
Application Route : Ingestion
Exposure time : 2 Years
Result : negative

Reproductive toxicity

May damage the unborn child.

**Components:** 

2-Ethylhexanoic acid:

Effects on fertility : Test Type: Combined repeated dose toxicity study with the

reproduction/developmental toxicity screening test

Species: Rat

Application Route: Ingestion Method: OECD Test Guideline 422

Result: negative

Effects on foetal develop-

ment

Test Type: Embryo-foetal development

Species: Rat

Application Route: Ingestion

Result: positive

Reproductive toxicity - As-

sessment

Clear evidence of adverse effects on development, based on

animal experiments.

Remarks: Based on data from similar materials

STOT - single exposure

Not classified based on available information.

STOT - repeated exposure

May cause damage to organs through prolonged or repeated exposure.

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#### **Components:**

Ethylene glycol:

Exposure routes : Ingestion Target Organs : Kidney

Assessment : Shown to produce significant health effects in animals at con-

centrations of >10 to 100 mg/kg bw.

### Repeated dose toxicity

#### **Components:**

#### Ethylene glycol:

Species: RatNOAEL: 200 mg/kgApplication Route: IngestionExposure time: 33 Days

Species : Dog

NOAEL : 2.200 - 4.400 mg/kg

Application Route : Skin contact Exposure time : 4 Weeks

Method : OECD Test Guideline 410

## 2-Ethylhexanoic acid:

Species : Rat
NOAEL : 300 mg/kg
Application Route : Ingestion
Exposure time : 91 - 93 Days

#### **Aspiration toxicity**

Not classified based on available information.

#### 11.2 Information on other hazards

#### **Endocrine disrupting properties**

#### **Product:**

Assessment : The substance/mixture does not contain components consid-

ered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at

levels of 0.1% or higher.

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### **SECTION 12: Ecological information**

#### 12.1 Toxicity

#### **Components:**

Ethylene glycol:

Toxicity to fish : LC50 (Pimephales promelas (fathead minnow)): 53.000 mg/l

Exposure time: 96 h

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): > 100 mg/l

Exposure time: 48 h

Method: OECD Test Guideline 202

Toxicity to algae/aquatic

plants

ErC50 (Raphidocelis subcapitata (freshwater green alga)):

6.500 - 13.000 mg/l Exposure time: 96 h

Toxicity to daphnia and other :

aquatic invertebrates (Chron-

ic toxicity)

NOEC: 8.590 mg/l Exposure time: 7 d

Species: Ceriodaphnia dubia (water flea)

2-Ethylhexanoic acid:

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 180 mg/l

Exposure time: 96 h

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): 106 mg/l

Exposure time: 48 h

Toxicity to algae/aquatic

plants

EC50 (Desmodesmus subspicatus (green algae)): 49,3 mg/l

Exposure time: 72 h

Toxicity to microorganisms : EC50 (Pseudomonas putida): 112,1 mg/l

Exposure time: 17 h

Toxicity to daphnia and other : aquatic invertebrates (Chron-

ic toxicity)

NOEC: 25 mg/l Exposure time: 21 d

Species: Daphnia magna (Water flea) Method: OECD Test Guideline 211

#### 12.2 Persistence and degradability

#### Components:

Ethylene glycol:

Biodegradability : Result: Readily biodegradable.

Biodegradation: 90 - 100 %

Exposure time: 10 d

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



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Method: OECD Test Guideline 301A

2-Ethylhexanoic acid:

Biodegradability : Result: Readily biodegradable.

Biodegradation: 99 % Exposure time: 28 d

Method: OECD Test Guideline 301E

#### 12.3 Bioaccumulative potential

#### **Components:**

Ethylene glycol:

Partition coefficient: n- : log Pow: -1,36

octanol/water Remarks: Calculation

2-Ethylhexanoic acid:

Partition coefficient: n-

octanol/water

log Pow: 2,7

#### 12.4 Mobility in soil

No data available

#### 12.5 Results of PBT and vPvB assessment

#### **Product:**

Assessment : This substance/mixture contains no components considered

to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of

0.1% or higher.

#### 12.6 Endocrine disrupting properties

#### **Product:**

Assessment : The substance/mixture does not contain components consid-

ered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at

levels of 0.1% or higher.

#### 12.7 Other adverse effects

No data available

## **SECTION 13: Disposal considerations**

#### 13.1 Waste treatment methods

Product : Dispose of in accordance with local regulations.

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



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According to the European Waste Catalogue, Waste Codes

are not product specific, but application specific.

Waste codes should be assigned by the user, preferably in

discussion with the waste disposal authorities.

Do not dispose of waste into sewer.

Contaminated packaging : Empty containers should be taken to an approved waste han-

dling site for recycling or disposal.

If not otherwise specified: Dispose of as unused product.

Waste Code : The following Waste Codes are only suggestions:

used product

07 02 14\*, wastes from additives containing hazardous sub-

stances

unused product

07 02 14\*, wastes from additives containing hazardous sub-

stances

uncleaned packagings

15 01 10\*, packaging containing residues of or contaminated

by hazardous substances

#### **SECTION 14: Transport information**

#### 14.1 UN number or ID number

ADN : Not regulated as a dangerous good
ADR : Not regulated as a dangerous good
RID : Not regulated as a dangerous good
IMDG : Not regulated as a dangerous good
IATA : Not regulated as a dangerous good

#### 14.2 UN proper shipping name

ADN : Not regulated as a dangerous good
ADR : Not regulated as a dangerous good
RID : Not regulated as a dangerous good
IMDG : Not regulated as a dangerous good
IATA : Not regulated as a dangerous good

## 14.3 Transport hazard class(es)

ADN : Not regulated as a dangerous good
ADR : Not regulated as a dangerous good
RID : Not regulated as a dangerous good

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



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IMDG : Not regulated as a dangerous goodIATA : Not regulated as a dangerous good

14.4 Packing group

ADN : Not regulated as a dangerous good
ADR : Not regulated as a dangerous good
RID : Not regulated as a dangerous good
IMDG : Not regulated as a dangerous good
IATA (Cargo) : Not regulated as a dangerous good
IATA (Passenger) : Not regulated as a dangerous good

14.5 Environmental hazards

Not regulated as a dangerous good

14.6 Special precautions for user

Not applicable

14.7 Maritime transport in bulk according to IMO instruments

Remarks : Not applicable for product as supplied.

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

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

REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles (Annex XVII)

REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles (Annex XVII) Conditions of restriction for the following entries should be considered: Number on list 30: 2-Ethylhexanoic acid

Number on list 3

Number on list 75: If you intend to use this product as tattoo ink, please contact your vendor.

Substance(s) or mixture(s) are listed here according to their appearance in the regulation, irrespective of their use/purpose or the conditions of the restriction. Please refer to the conditions in corresponding Regulation to determine whether an entry is applicable to the placing on the market or

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



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not.

REACH - Candidate List of Substances of Very High : Not applicable

Concern for Authorisation (Article 59).

Regulation (EC) on substances that deplete the ozone : Not applicable

layer

Regulation (EU) 2019/1021 on persistent organic pollu- : Not applicable

tants (recast)

Regulation (EU) No 649/2012 of the European Parlia: Not applicable

ment and the Council concerning the export and import

of dangerous chemicals

REACH - List of substances subject to authorisation : Not applicable

(Annex XIV)

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances.

Not applicable

Volatile organic compounds : Directive 2010/75/EU of 24 November 2010 on industrial

emissions (integrated pollution prevention and control) Volatile organic compounds (VOC) content: 0,52 %, 5,36 g/l

Remarks: VOC content excluding water

#### Other regulations:

Take note of Directive 94/33/EC on the protection of young people at work or stricter national regulations, where applicable.

Take note of Directive 92/85/EEC regarding maternity protection or stricter national regulations, where applicable.

#### 15.2 Chemical safety assessment

A Chemical Safety Assessment has not been carried out.

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

Other information : Items where changes have been made to the previous version

are highlighted in the body of this document by two vertical

lines.

**Full text of H-Statements** 

H302 : Harmful if swallowed.

H360D : May damage the unborn child.

H373 : May cause damage to organs through prolonged or repeated

exposure if swallowed.

Full text of other abbreviations

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



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Acute Tox. : Acute toxicity

Repr. : Reproductive toxicity

STOT RE : Specific target organ toxicity - repeated exposure

2000/39/EC : Europe. Commission Directive 2000/39/EC establishing a first

list of indicative occupational exposure limit values

ES VLA : Spain. Environmental Limits for exposure to Chemical agents

- Table 1: Occupational Exposure Values

2000/39/EC / TWA : Limit Value - eight hours
2000/39/EC / STEL : Short term exposure limit
ES VLA / VLA-ED : Environmental Daily Limit Value
ES VLA / VLA-EC : Environmental Short Term Value

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways: ADR - Agreement concerning the International Carriage of Dangerous Goods by Road: AIIC - Australian Inventory of Industrial Chemicals: ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA -European Chemicals Agency; EC-Number - European Community number; ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals: OECD - Organization for Economic Co-operation and Development: OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; SVHC - Substance of Very High Concern; TCSI - Taiwan Chemical Substance Inventory; TECI -Thailand Existing Chemicals Inventory; TRGS - Technical Rule for Hazardous Substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative

#### **Further information**

Sources of key data used to compile the Safety Data Sheet

Internal technical data, data from raw material SDSs, OECD eChem Portal search results and European Chemicals Agen-

cy, http://echa.europa.eu/

Classification of the mixture:

Classification procedure:

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



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Repr. 1B H360D Calculation method STOT RE 2 H373 Calculation method

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The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and shall not be considered a warranty or quality specification of any type. The information provided relates only to the specific material identified at the top of this SDS and may not be valid when the SDS material is used in combination with any other materials or in any process, unless specified in the text. Material users should review the information and recommendations in the specific context of their intended manner of handling, use, processing and storage, including an assessment of the appropriateness of the SDS material in the user's end product, if applicable.

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