# Safety Data Sheet MACROFAN PLUS UHS CLEARCOAT

Safety Data Sheet dated 21/12/2022 version 4



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

#### 1.1. Product identifier

Mixture identification:

Trade name: MACROFAN PLUS UHS CLEARCOAT

Trade code: L0MC0421

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

Recommended use: Coatings and paints, thinners, paint removers

Dual compound colourless clearcoat

Liquid solution

Professional uses

Uses advised against: N.A.

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

Company: Lechler SpA - Via Cecilio, 17 - 22100 Como - CO - Italy

Telephone: +39031586111 First Email: safety@lechler.eu

## 1.4. Emergency telephone number

UNITED KINGDOM: Emergency Number 0044 1606738600 - This telephone number is available during office hours only (8.45-16.45).

## **SECTION 2: Hazards identification**







## 2.1. Classification of the substance or mixture

## Regulation (EC) n. 1272/2008 (CLP)

Flam. Liq. 3 Flammable liquid and vapour.

Skin Sens. 1A May cause an allergic skin reaction.

Repr. 2 Suspected of damaging fertility or the unborn child.

Aquatic Chronic 3 Harmful to aquatic life with long lasting effects.

Adverse physicochemical, human health and environmental effects:

No other hazards

## 2.2. Label elements

## Regulation (EC) No 1272/2008 (CLP):

## Hazard pictograms and Signal Word



Warning

#### **Hazard statements**

H226 Flammable liquid and vapour.H317 May cause an allergic skin reaction.

H361 Suspected of damaging fertility or the unborn child.
H412 Harmful to aquatic life with long lasting effects.

## **Precautionary statements**

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read and understood.

Date 04/09/2024 Production Name MACROFAN PLUS UHS CLEARCOAT Page n. 1 of 17

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P370+P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.

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

#### **Contains**

reaction mass of α-3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4hydroxyphenyl)propionyl-ω-hydroxypoly (oxyethylene) and α-3- (3-(2Hbenzotriazol-2-yl)- 5-tert-butyl-4hydroxyphenyl)propionyl-ω-3-(3-(2Hbenzotriazol-2-yl)-5-tert-butyl- 4hydroxyphenyl) propionyloxypoly(oxyethylene)

5-methylhexan-2-one

Reaction mass of Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate

isobutyl methacrylate

ethylene bis(3-mercaptopropionate)

dibutyltin dilaurate

#### Special provisions according to Annex XVII of REACH and subsequent amendments:

None.

#### 2.3. Other hazards

Results of PBT and vPvB assessment Not a PBT, vPvB substance as per the criteria of the REACH Regulation. Endocrine disrupting properties-Toxicity 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. Endocrine disrupting properties-Ecotoxicity 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.

Other Hazards: No other hazards

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

#### 3.1. Substances

NΑ

## 3.2. Mixtures

Mixture identification: MACROFAN PLUS UHS CLEARCOAT

## Hazardous components within the meaning of the CLP regulation and related classification:

Qty	Name	Ident. Numb.	Classification	Registration Number
≥25 - ≤30 %	5-methylhexan-2-one	CAS:110-12-3 EC:203-737-8 Index:606-026- 00-4	Flam. Liq. 3, H226; Acute Tox. 4, H332; Repr. 2, H361d	01-2119472300-51
≥15 - ≤20 %	n-butyl acetate	CAS:123-86-4 EC:204-658-1 Index:607-025- 00-1	Flam. Liq. 3, H226; STOT SE 3, H336, EUH066	01-2119485493-29
≥1 - ≤2.5 %	reaction mass of α-3-(3-(2H-benzotriazol- 2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyl-ω-hydroxypoly (oxyethylene) and α-3- (3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyl-ω-3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl- 4-hydroxyphenyl)propionyloxypoly(oxyethylene)	1, 104810-48-2 EC:400-830-7	Skin Sens. 1A, H317; Aquatic Chronic 2, H411	01-0000015075-76
≥0.5 - ≤1 %	acetone	CAS:67-64-1 EC:200-662-2 Index:606-001- 00-8	Flam. Liq. 2, H225; Eye Irrit. 2, H319; STOT SE 3, H336, EUH066	01-2119471330-49

Date 04/09/2024 Production Name MACROFAN PLUS UHS CLEARCOAT Page n. 2 of 17

≥0.3 - ≤0.5 %	Reaction mass of Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and Methyl 1,2,2,6,6-pentamethyl 4-piperidyl sebacate	91-5	Skin Sens. 1A, H317; Aquatic Acute 1, H400; Aquatic Chronic 1, H410; Repr. 2, H361f, M-Acute:1	01-2119491304-40-0000
≥0.1 - ≤0.25 %	isobutyl methacrylate	CAS:97-86-9 EC:202-613-0 Index:607-113- 00-X	Flam. Liq. 3, H226; Skin Irrit. 2, H315; Skin Sens. 1B, H317; STOT SE 3, H335	01-2119488331-38
≥0.1 - ≤0.25 %	ethylene bis(3- mercaptopropionate)	CAS:22504-50-3 EC:245-044-3	Acute Tox. 4, H302; Skin Sens. 1A, H317; Aquatic Acute 1, H400; Aquatic Chronic 1, H410	01-2120775145-52
≥0.1 - ≤0.25 %	dibutyltin dilaurate	CAS:77-58-7 EC:201-039-8 Index:050-030- 00-3	STOT SE 1, H370; STOT RE 1, H372; Skin Sens. 1, H317; Eye Irrit. 2, H319; Muta. 2, H341; Repr. 1B, H360FD; Aquatic Acute 1, H400; Aquatic Chronic 1, H410, M-Chronic:1, M-Acute:1	01-2119496068-27

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

#### 4.1. Description of first aid measures

In case of skin contact:

Immediately take off all contaminated clothing.

Areas of the body that have - or are only even suspected of having - come into contact with the product must be rinsed immediately with plenty of running water and possibly with soap.

Wash thoroughly the body (shower or bath).

Remove contaminated clothing immediatley and dispose off safely.

In case of eyes contact:

Wash immediately with water.

In case of Ingestion:

Do not induce vomiting, get medical attention showing the SDS and label hazardous.

In case of Inhalation:

Remove casualty to fresh air and keep warm and at rest.

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

N.A.

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

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

## **SECTION 5: Firefighting measures**

## 5.1. Extinguishing media

Suitable extinguishing media:

In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.

Extinguishing media which must not be used for safety reasons:

None in particular.

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

Do not inhale explosion and combustion gases.

Burning produces heavy smoke.

## 5.3. Advice for firefighters

Use suitable breathing apparatus .

Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

Move undamaged containers from immediate hazard area if it can be done safely.

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

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

Wear personal protection equipment.

Remove all sources of ignition.

Remove persons to safety.

See protective measures under point 7 and 8.

#### 6.2. Environmental precautions

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.

Retain contaminated washing water and dispose it.

In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

Suitable material for taking up: absorbing material, organic, sand

Date 04/09/2024 Production Name MACROFAN PLUS UHS CLEARCOAT Page n. 3 of 17

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

Suitable material for taking up: absorbing material, organic, sand Wash with plenty of water.

#### 6.4. Reference to other sections

See also section 8 and 13

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

## 7.1. Precautions for safe handling

Avoid contact with skin and eyes, inhalation of vapours and mists.

Exercise the greatest care when handling or opening the container.

Don't use empty container before they have been cleaned.

Before making transfer operations, assure that there aren't any incompatible material residuals in the containers.

Contamined clothing should be changed before entering eating areas.

Do not eat or drink while working.

See also section 8 for recommended protective equipment.

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

Always keep in a well ventilated place.

Store at below 20 °C. Keep away from unguarded flame and heat sources. Avoid direct exposure to sunlight.

Keep away from unguarded flame, sparks, and heat sources. Avoid direct exposure to sunlight.

Incompatible materials:

None in particular.

Instructions as regards storage premises:

Cool and adequately ventilated.

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

Recommendation(s)

None in particular

Industrial sector specific solutions:

None in particular

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

## 8.1. Control parameters

## **Community Occupational Exposure Limits (OEL)**

Community Occupational Exposure Limits (OEL)			
	OEL Type	Country	Occupational Exposure Limit
5-methylhexan-2-one CAS: 110-12-3	EU		Long Term: 95 mg/m3 - 20 ppm Behaviour Indicative 2000/39/EC
	EH40	UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND	Long Term: 95 mg/m3 - 20 ppm; Short Term: 475 mg/m3 - 100 ppm Can be absorbed through the skin. The assigned substances are those for which there are concerns that dermal absorption will lead to
	ACGIH		Long Term: 20 ppm; Short Term: 50 ppm CNS impair, URT irr
n-butyl acetate CAS: 123-86-4	EH40	UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND	Long Term: 724 mg/m3 - 150 ppm; Short Term: 966 mg/m3 - 200 ppm
	EU		Long Term: 241 mg/m3 - 50 ppm; Short Term: 723 mg/m3 - 150 ppm Behaviour Indicative 2019/1831/EU
	ACGIH		Long Term: 50 ppm; Short Term: 150 ppm Eye and URT irr
acetone CAS: 67-64-1	ACGIH		Long Term: 250 ppm; Short Term: 500 ppm A4, BEI - URT and eye irr, CNS impair
	EH40	UNITED KINGDOM OF GREAT	Long Term: 1210 mg/m3 - 500 ppm; Short Term: 3620 mg/m3 - 1500 ppm

Date 04/09/2024 Production Name MACROFAN PLUS UHS CLEARCOAT Page n. 4 of 17

BRITAIN AND NORTHERN IRELAND

EU Long Term: 1210 mg/m3 - 500 ppm

Behaviour Indicative

2000/39/EC

dibutyltin dilaurate

CAS: 77-58-7

EH40 UNITED Long Term: 0,1 mg/m3; Short Term: 0,2 mg/m3

KINGDOM OF Can be absorbed through the skin. The assigned substances are those for which there

GREAT are concerns that dermal absorption will lead to

BRITAIN AND NORTHERN IRELAND

ACGIH Long Term: 0,1 mg/m3
ACGIH Short Term: 0,2 mg/m3

LEC-TD-95133

#### **Biological limit values**

acetone CAS: 67-64-1

Biological Indicator: Acetone; Sampling Period: End of turn

Value: 50 mg/L; Medium: Urine

Remark: Argentina. Biological Exposure Indices

Biological Indicator: Acetone; Sampling Period: End of turn

Value: 80 mg/L; Medium: Urine Remark: Bulgaria. Biological limit values

Biological Indicator: Acetone; Sampling Period: FSL

Value: 30000 μg/g; Medium: Urine Remark: Chile. Biological Limit Values

Biological Indicator: Acetone; Sampling Period: End of turn

Value: 25 mg/L; Medium: Urine

Remark: Maximum allowable occupational exposure limits in the workplace - Table 3. Adopted Biological

Exposu

Biological Indicator: Acetone; Sampling Period: End of turn

Value: 34 Millimoles per liter; Medium: Blood Remark: Croatia. Biological Exposure Limits

Biological Indicator: Acetone; Sampling Period: End of turn

Value: 20 mg/L; Medium: Blood

Remark: Croatia. Biological Exposure Limits

Biological Indicator: Acetone; Sampling Period: End of turn Value: 39 Millimoles per mole Creatinine; Medium: Urine

Remark: Croatia. Biological Exposure Limits

Biological Indicator: Acetone; Sampling Period: End of turn

Value: 20 mg/g Creatinine; Medium: Urine Remark: Croatia. Biological Exposure Limits

Biological Indicator: Acetone; Sampling Period: Immediately after exposure or after working hours

Value: 80 mg/L; Medium: Urine

Remark: TRGS 903 - Biological limit values

Biological Indicator: Acetone; Sampling Period: Within 2 h prior to end of shift

Value: 40 mg/L; Medium: Urine

Remark: Occupational exposure limits based on biological monitoring (JSOH).

Biological Indicator: Acetone; Sampling Period: End of turn

Value: 50 mg/L; Medium: Urine

Remark: Official Mexican Norm NOM-047-SSA1-2011, Environmental Health - Biological exposure indices

for work

Biological Indicator: Acetone; Sampling Period: End of turn

Value: 50 mg/L; Medium: Urine

Remark: Portuguese Norm 1796 - Biological Exposure Indices

Biological Indicator: Acetone; Sampling Period: End of turn

Value: 50 mg/L; Medium: Urine

Remark: Romania. Biological limit values

Biological Indicator: Acetone; Sampling Period: End of turn

Value: 80 mg/L; Medium: Urine

Remark: Slovakia. Biological Limit Values

Biological Indicator: Acetone; Sampling Period: End of turn

Date 04/09/2024 Production Name MACROFAN PLUS UHS CLEARCOAT Page n. 5 of 17

Value: 1378 micromol per litre; Medium: Urine Remark: Slovakia. Biological Limit Values

Biological Indicator: Acetone; Sampling Period: End of turn

Value: 5336 mg/g Creatinine; Medium: Urine Remark: Slovakia. Biological Limit Values

Biological Indicator: Acetone; Sampling Period: End of turn Value: 1039 micromoles per millimole creatinine; Medium: Urine

Remark: Slovakia. Biological Limit Values

Biological Indicator: Acetone; Sampling Period: End of turn

Value: 80 mg/L; Medium: Urine Remark: Slovenia. BAT-values

Biological Indicator: Acetone; Sampling Period: End of turn

Value: 100 mg/L; Medium: Urine

Remark: South Africa. Hazardous Chemical Substances Regulations, Biological Exposure Indices.

Biological Indicator: Acetone; Sampling Period: End of workday

Value: 50 mg/L; Medium: Urine

Remark: Occupational Exposure Limits for Chemical Agents in Spain - Biological Exposure Values

Biological Indicator: Acetone; Sampling Period: Immediately after exposure or after working hours

Value: 138 Millimoles per liter; Medium: Urine

Remark: Svizzera. Lista di valori BAT

Biological Indicator: Acetone; Sampling Period: Immediately after exposure or after working hours

Value: 80 mg/L: Medium: Urine Remark: Svizzera. Lista di valori BAT

Biological Indicator: Acetone; Sampling Period: End of turn

Value: 25 mg/L; Medium: Urine

Remark: ACGIH - Indicatori di Esposizione Biologica (BEI)

Biological Indicator: Acetone; Sampling Period: End of workday

Value: 50 mg/L; Medium: Urine Remark: VE.Biological Exposure Limits

Sampling Period: End of turn

## Predicted No Effect Concentration (PNEC) values

5-methvlhexan-2-one CAS: 110-12-3

Exposure Route: Fresh Water; PNEC Limit: 0,1 mg/l

Exposure Route: Marine water; PNEC Limit: 0,01 mg/l

Exposure Route: Freshwater sediments; PNEC Limit: 1,12 mg/kg Exposure Route: Marine water sediments; PNEC Limit: 0,112 mg/kg Exposure Route: Intermittent releases (fresh water); PNEC Limit: 1 mg/l

Exposure Route: Soil; PNEC Limit: 0,166 mg/kg

Exposure Route: Microorganisms in sewage treatments; PNEC Limit: 100 mg/l

n-butyl acetate

CAS: 123-86-4

Exposure Route: Intermittent releases (fresh water); PNEC Limit: 0,36 mg/l

Exposure Route: Marine water; PNEC Limit: 0,01 mg/l

Exposure Route: Fresh Water; PNEC Limit: 0,0023 mg/l

Exposure Route: Fresh Water; PNEC Limit: 0,18 mg/l

Exposure Route: Freshwater sediments; PNEC Limit: 0,98 mg/kg Exposure Route: Marine water sediments; PNEC Limit: 0,09 mg/kg

Exposure Route: Soil; PNEC Limit: 0,09 mg/kg

Exposure Route: Microorganisms in sewage treatments; PNEC Limit: 35,6 mg/l

reaction mass of a-3-(3-

(2H-benzotriazol- 2-yl)-5-

tert-butyl-4-

hydroxyphenyl)propionyl-

ω-hydroxypoly

(oxyethylene) and a-3-

(3-(2H-benzotriazol-2-yl)-

5-tert-butyl-4-

hydroxyphenyl)propionyl- $\omega$ -3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl- 4-

hydroxyphenyl) propionyloxypoly (oxyethylene)

**Production Name** 

MACROFAN PLUS UHS CLEARCOAT

CAS: 104810-47-1, 104810-48-2

Exposure Route: Marine water; PNEC Limit: 0,00023 mg/l

Exposure Route: Intermittent releases (fresh water); PNEC Limit: 0,028 mg/l Exposure Route: Microorganisms in sewage treatments; PNEC Limit: 10 mg/l

Exposure Route: Freshwater sediments; PNEC Limit: 3,06 mg/kg Exposure Route: Marine water sediments; PNEC Limit: 0,306 mg/kg

Exposure Route: Soil; PNEC Limit: 2 mg/kg

acetone CAS: 67-64-1 Exposure Route: Fresh Water; PNEC Limit: 10,6 mg/l

Exposure Route: Intermittent releases (fresh water); PNEC Limit: 21 mg/l

Exposure Route: Marine water; PNEC Limit: 1,06 mg/l

Exposure Route: Fresh Water; PNEC Limit: 0,002 mg/l

Exposure Route: Freshwater sediments; PNEC Limit: 30,4 mg/kg Exposure Route: Marine water sediments; PNEC Limit: 3,04 mg/kg

Exposure Route: Soil; PNEC Limit: 29,5 mg/kg

Exposure Route: Microorganisms in sewage treatments; PNEC Limit: 100 mg/l

Reaction mass of Bis(1,2,2,6,6-

pentamethyl-4-piperidyl) sebacate and Methyl 1,2,2,6,6-pentamethyl-4piperidyl sebacate CAS: 1065336-91-5

Exposure Route: Marine water; PNEC Limit: 0 mg/l

Exposure Route: Intermittent releases (fresh water); PNEC Limit: 0,009 mg/l

Exposure Route: Freshwater sediments; PNEC Limit: 1,05 mg/kg Exposure Route: Marine water sediments; PNEC Limit: 0,11 mg/kg

Exposure Route: Soil; PNEC Limit: 0,21 mg/kg

Exposure Route: Microorganisms in sewage treatments; PNEC Limit: 1 mg/l

dibutyltin dilaurate CAS: 77-58-7

Exposure Route: Fresh Water; PNEC Limit:  $0,463 \mu g/L$ 

Exposure Route: Freshwater sediments; PNEC Limit: 0,05 μg/L

Exposure Route: Intermittent releases (fresh water); PNEC Limit: 4,63 µg/L

Exposure Route: Marine water; PNEC Limit: 0,0463 mg/kg

Exposure Route: Marine water sediments; PNEC Limit: 0,005 mg/kg

Exposure Route: Microorganisms in sewage treatments; PNEC Limit: 100 mg/l

Exposure Route: Soil; PNEC Limit: 0,0407 mg/kg

#### **Derived No Effect Level (DNEL) values**

5-methylhexan-2-one CAS: 110-12-3

Exposure Route: Human Inhalation; Exposure Frequency: Short Term, systemic effects

Worker Professional: 196 mg/m3

Exposure Route: Human Dermal; Exposure Frequency: Long Term, systemic effects

Worker Professional: 14,2 mg/kg dry weight (d.w.)

Exposure Route: Human Inhalation; Exposure Frequency: Long Term, systemic effects

Worker Professional: 100,25 mg/m3

Exposure Route: Human Inhalation; Exposure Frequency: Short Term, systemic effects

Consumer: 146,5 mg/m3

Exposure Route: Oral; Exposure Frequency: Long Term, systemic effects

Consumer: 5,12 mg/kg dry weight (d.w.)

Exposure Route: Human Dermal; Exposure Frequency: Long Term, systemic effects

Consumer: 5,12 mg/kg dry weight (d.w.)

Exposure Route: Human Inhalation; Exposure Frequency: Long Term, systemic effects

Consumer: 17,812 mg/m3

n-butyl acetate CAS: 123-86-4

Exposure Route: Human Inhalation; Exposure Frequency: Long Term, systemic effects

Worker Industry: 300 mg/m3

Exposure Route: Human Inhalation; Exposure Frequency: Short Term, systemic effects

Worker Industry: 600 mg/m3

Date 04/09/2024 Production Name MACROFAN PLUS UHS CLEARCOAT Page n. 7 of 17

Exposure Route: Human Inhalation; Exposure Frequency: Long Term, local effects Worker Industry: 300 mg/m3

Exposure Route: Human Inhalation; Exposure Frequency: Short Term, local effects Worker Industry: 600 mg/m3

Exposure Route: Human Dermal; Exposure Frequency: Long Term, systemic effects Worker Industry: 11 mg/kg dry weight (d.w.)

Exposure Route: Human Dermal; Exposure Frequency: Short Term, systemic effects Worker Industry: 11 mg/kg dry weight (d.w.)

Exposure Route: Human Inhalation; Exposure Frequency: Long Term, systemic effects Consumer: 35.7 ma/m3

Exposure Route: Human Inhalation; Exposure Frequency: Short Term, systemic effects Consumer: 300 mg/m3

Exposure Route: Human Inhalation; Exposure Frequency: Long Term, local effects Consumer: 35,7 mg/m3

Exposure Route: Human Inhalation; Exposure Frequency: Short Term, local effects Consumer: 300 mg/m3

Exposure Route: Human Dermal; Exposure Frequency: Long Term, systemic effects Consumer: 6 mg/kg dry weight (d.w.)

Exposure Route: Human Dermal; Exposure Frequency: Short Term, systemic effects Consumer: 6 mg/kg dry weight (d.w.)

Exposure Route: Human Oral; Exposure Frequency: Long Term, systemic effects Consumer: 2 mg/kg dry weight (d.w.)

Exposure Route: Human Oral; Exposure Frequency: Short Term, systemic effects Consumer: 2 mg/kg dry weight (d.w.)

reaction mass of a-3-(3- Exposure Route: Human Inhalation; Exposure Frequency: Long Term, systemic effects (2H-benzotriazol- 2-yl)-5- Worker Professional: 0,35 mg/m3 tert-butyl-4hydroxyphenyl)propionylω-hydroxypoly (oxyethylene) and a-3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4hydroxyphenyl)propionyl- $\omega$ -3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl- 4hydroxyphenyl) propionyloxypoly (oxyethylene) CAS: 104810-47-1,

104810-48-2

acetone CAS: 67-64-1

Exposure Route: Human Dermal; Exposure Frequency: Long Term, systemic effects Worker Professional: 0,5 mg/kg

Exposure Route: Human Inhalation; Exposure Frequency: Long Term, systemic effects Consumer: 0,085 mg/m3

Exposure Route: Human Dermal; Exposure Frequency: Long Term, systemic effects Consumer: 0,25 mg/kg

Exposure Route: Oral; Exposure Frequency: Long Term, systemic effects Consumer: 0,025 mg/kg

Exposure Route: Oral; Exposure Frequency: Long Term, systemic effects Consumer: 62 mg/kg

Exposure Route: Human Dermal; Exposure Frequency: Long Term, systemic effects Consumer: 62 mg/kg

Exposure Route: Human Inhalation; Exposure Frequency: Long Term, systemic effects Consumer: 200 mg/m3

Exposure Route: Human Inhalation; Exposure Frequency: Short Term (acute) Worker Professional: 2420 mg/m3

Exposure Route: Human Dermal; Exposure Frequency: Long Term, systemic effects Worker Professional: 186 mg/kg

04/09/2024 **Production Name** MACROFAN PLUS UHS CLEARCOAT Page n. 8 of 17 Date

Exposure Route: Human Inhalation; Exposure Frequency: Long Term, systemic effects

Worker Professional: 1210 mg/m3

Reaction mass of Bis(1,2,2,6,6-

pentamethyl-4-piperidyl) sebacate and Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate CAS: 1065336-91-5

Exposure Route: Human Inhalation; Exposure Frequency: Long Term, systemic effects

Worker Industry: 1,27 mg/m3

Exposure Route: Human Dermal; Exposure Frequency: Long Term, systemic effects

Worker Industry: 1,8 mg/kg

Exposure Route: Human Inhalation; Exposure Frequency: Long Term, systemic effects

Consumer: 0,31 mg/m3

Exposure Route: Human Dermal; Exposure Frequency: Long Term, systemic effects

Consumer: 0,9 mg/kg

Exposure Route: Human Oral; Exposure Frequency: Long Term, systemic effects

Consumer: 0,18 mg/kg

dibutyltin dilaurate CAS: 77-58-7

Exposure Route: Oral; Exposure Frequency: Long Term, systemic effects

Consumer: 0,0031 mg/kg

Exposure Route: Human Dermal; Exposure Frequency: Short Term, systemic effects

Consumer: 0,5 mg/kg

Exposure Route: Human Dermal; Exposure Frequency: Long Term, systemic effects

Consumer: 0,16 mg/kg

Exposure Route: Oral; Exposure Frequency: Short Term, systemic effects

Consumer: 0,02 mg/kg

Exposure Route: Human Dermal; Exposure Frequency: Long Term, systemic effects

Worker Professional: 0,43 mg/kg

Exposure Route: Human Dermal; Exposure Frequency: Short Term, systemic effects

Worker Professional: 2,05 mg/kg

Exposure Route: Human Inhalation; Exposure Frequency: Long Term, systemic effects

Consumer: 0,0046 mg/m3

Exposure Route: Human Inhalation; Exposure Frequency: Short Term, systemic effects

Consumer: 0,04 mg/m3

Exposure Route: Human Inhalation; Exposure Frequency: Long Term, systemic effects

Worker Professional: 0,02 mg/m3

Exposure Route: Human Inhalation; Exposure Frequency: Short Term, systemic effects

Worker Professional: 0,059 mg/m3

## 8.2. Exposure controls

Eye protection:

Use close fitting safety goggles, don't use eye lens.

Protection for skin:

Use clothing that provides comprehensive protection to the skin, e.g. cotton, rubber, PVC or viton.

Protection for hands:

Use protective gloves that provides comprehensive protection, e.g. P.V.C., neoprene or rubber.

Respiratory protection:

N.A.

Thermal Hazards:

N.A.

Environmental exposure controls:

N.A

Hygienic and Technical measures

N.A.

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

## 9.1. Information on basic physical and chemical properties

Physical State: Liquid Colour: Colourless Odour: N.A.

Date 04/09/2024 Production Name MACROFAN PLUS UHS CLEARCOAT Page n. 9 of 17

pH: Not Relevant

Kinematic viscosity: > 20,5 mm2/sec (40 °C)

Melting point / freezing point: N.A.

Initial boiling point and boiling range: N.A.

Flash point: 28,5 °C (83,3 °F)

Upper/lower flammability or explosive limits: N.A.

Vapour density: N.A. Vapour pressure: N.A. Relative density: 0.96 g/cm3 Solubility in water: N.A. Solubility in oil: N.A.

Partition coefficient (n-octanol/water): N.A.

Auto-ignition temperature: N.A. Decomposition temperature: N.A.

Flammability: The product is classified Flam. Liq. 3 H226 Kinematic viscosity m2/s (40°C) > 20,5 mm2/sec (40 °C)

Viscosity: = 20.00 s - Method: ASTM D 1200 82 - Section: 4.00 mm

#### **Particle characteristics:**

Particle size: N.A. 9.2. Other information

> Evaporation rate: N.A. Miscibility: N.A. Conductivity: N.A.

No other relevant information

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

#### 10.1. Reactivity

Stable under normal conditions

#### 10.2. Chemical stability

Data not available.

## 10.3. Possibility of hazardous reactions

None.

#### 10.4. Conditions to avoid

Stable under normal conditions.

## 10.5. Incompatible materials

Avoid contact with combustible materials. The product could catch fire.

## 10.6. Hazardous decomposition products

None.

## **SECTION 11: Toxicological information**

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

## **Toxicological Information of the Preparation**

a) acute toxicity Not classified

Based on available data, the classification criteria are not met

ATEmix - Inhalation (Vapours): 40.6654 mg/l

b) skin corrosion/irritation Not classified

Based on available data, the classification criteria are not met

c) serious eye damage/irritation Not classified

Based on available data, the classification criteria are not met

d) respiratory or skin sensitisation The product is classified: Skin Sens. 1A(H317)

e) germ cell mutagenicity Not classified

Based on available data, the classification criteria are not met

f) carcinogenicity Not classified

Based on available data, the classification criteria are not met

g) reproductive toxicity The product is classified: Repr. 2(H361)

h) STOT-single exposure Not classified

Based on available data, the classification criteria are not met

Not classified i) STOT-repeated exposure

Date 04/09/2024 **Production Name** MACROFAN PLUS UHS CLEARCOAT Page n. 10 of 17 Based on available data, the classification criteria are not met

i) aspiration hazard

Not classified

Based on available data, the classification criteria are not met

## Toxicological information on main components of the mixture:

5-methylhexan-2-one a) acute toxicity LD50 Oral Rat = 5657 mg/kg

n-butyl acetate a) acute toxicity LD50 Oral Rat = 10760 mg/kg OECD Test Guideline 423

LC50 Inhalation > 20, mg/l 4h

LD50 Oral Rat > 5000 mg/kg

LD50 Skin Rabbit > 14112, mg/kg OECD Test Guideline 402

OECD Test Guideline 401

reaction mass of a-3-(3- a) acute toxicity

(2H-benzotriazol- 2-yl)-5-

tert-butyl-4-

hydroxyphenyl)propionyl-

ω-hydroxypoly

(oxyethylene) and a-3-

(3-(2H-benzotriazol-2-yl)-

5-tert-butyl-4-

hydroxyphenyl)propionyl- $\omega$ -3-(3-(2H-benzotriazol-

2-yl)-5-tert-butyl- 4hydroxyphenyl) propionyloxypoly

(oxyethylene)

LC50 Inhalation Rat = 5,8 mg/l 4h OECD Test Guideline 403

LD50 Skin > 2000 mg/kg OECD Test Guideline 402

a) acute toxicity LD50 Oral Rat = 5800 mg/kg acetone

a) acute toxicity

LC50 Inhalation Rat = 76 mg/l 4h LD50 Skin Rabbit > 15800 mg/kg

Reaction mass of

Bis(1,2,2,6,6-

pentamethyl-4-piperidyl) sebacate and Methyl 1,2,2,6,6-pentamethyl-4piperidyl sebacate

LD50 Oral Rat = 3230 mg/kg

LD50 Skin Rat = 3170, mg/kg

**OECD Test Guideline 401** dibutyltin dilaurate a) acute toxicity LD50 Oral Rat = 2071 mg/kg

## 11.2. Information on other hazards

## **Endocrine disrupting properties:**

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.

## **SECTION 12: Ecological information**

## 12.1. Toxicity

Adopt good working practices, so that the product is not released into the environment.

Eco-Toxicological Information:

Harmful to aquatic life with long lasting effects.

## List of Eco-Toxicological properties of the product

The product is classified: Aquatic Chronic 3(H412)

## List of Eco-Toxicological properties of the components

Component **Ecotox Data** Ident. Numb.

5-methylhexan-2-one CAS: 110-12-3 - a) Aquatic acute toxicity: LC50 Fish Fish = 159 mg/L 96 H

EINECS: 203-737-8 - INDEX: 606-026-00-4

04/09/2024 **Production Name** MACROFAN PLUS UHS CLEARCOAT Date Page n. 11 of 17 Chlorella pyrenoidosa (aglae) > 100 mg/L 72 H

n-butyl acetate CAS: 123-86-4 -

EINECS: 204-658-1 - INDEX: 607-025-00-1

a) Aquatic acute toxicity: LC50 Fish Pimephales promelas (fathead minnow) = 18 mg/L 96 H OECD Test Guideline 203

a) Aquatic acute toxicity: EC50 Invertebrates Daphnia magna (Water flea) = 44 mg/L 48 H OECD Test Guideline 202

e) Plant toxicity: EC50 Algae Selenastrum capricornutum (green algae) = 397 mg/L 72 H OECD Test Guideline 201

c) Bacteria toxicity: IC50 Microorganisms Tetrahymena pyriformis = 356 mg/L

reaction mass of a-3-(3-(2Hbenzotriazol- 2-yl)-5-tert-butyl-4hydroxyphenyl)propionyl-ωhydroxypoly (oxyethylene) and a- 400-830-7 -3- (3-(2H-benzotriazol-2-yl)- 5tert-butyl-4hydroxyphenyl)propionyl-ω-3-(3-(2H-benzotriazol-2-yl)-5-tertbutyl- 4-hydroxyphenyl)

propionyloxypoly(oxyethylene)

CAS: 104810-47-1, 104810-48-2 - EINECS: INDEX: 607-176-00-3

a) Aquatic acute toxicity: LC50 Fish Oncorhynchus mykiss (rainbow trout) = 2,8 mg/L 96 H

a) Aquatic acute toxicity: EC50 Invertebrates Daphnia magna (Water flea) = 4 mg/L 48 H

e) Plant toxicity: EC50 Algae Pseudokirchneriella subcapitata (green algae) > 100 mg/L 72 H

e) Plant toxicity: EC10 Algae Pseudokirchneriella subcapitata (green algae) = 10 mg/L 72 H

acetone CAS: 67-64-1 -

EINECS: 200-662-2 - INDEX: 606-001-00-8

a) Aquatic acute toxicity: LC50 Fish Pimephales promelas (fathead minnow) = 8120 mg/L 96 H

a) Aquatic acute toxicity: EC50 Invertebrates Daphnia (water flea) = 8800 mg/L 48 H

e) Plant toxicity: NOEC Algae algae = 530 mg/L 8 D

Reaction mass of Bis(1,2,2,6,6-CAS: 1065336pentamethyl-4-piperidyl) sebacate 91-5 - EINECS: and Methyl 1,2,2,6,6-pentamethyl- 915-687-0 4-piperidyl sebacate

e) Plant toxicity: EC50 Algae Desmodesmus subspicatus (green algae) = 1,68 mg/L 72 H

a) Aquatic acute toxicity: LC50 Fish Brachydanio rerio (zebrafish) = 0,9 mg/L 96 H

a) Aquatic acute toxicity: NOEC Invertebrates Daphnia magna = 1 mg/L 21 Davs

CAS: 77-58-7 dibutyltin dilaurate

EINECS: 201-039-8 - INDEX: 050-030-00-3

a) Aquatic acute toxicity: EC50 Invertebrates Daphnia magna (Water flea) =

0,463 mg/L 48 H

e) Plant toxicity: EC50 Algae Desmodesmus subspicatus (green algae) = 1 mg/L 72 H

#### 12.2. Persistence and degradability

N.A.

## 12.3. Bioaccumulative potential

N.A.

## 12.4. Mobility in soil

## 12.5. Results of PBT and vPvB assessment

No PBT or vPvB substances present in concentration >= 0.1%

## 12.6. Endocrine disrupting properties

The substance/mixture does not contain components considered to have endocrine disrupting properties according to

Date 04/09/2024 **Production Name** MACROFAN PLUS UHS CLEARCOAT Page n. 12 of 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

NΑ

#### **SECTION 13: Disposal considerations**

#### 13.1. Waste treatment methods

Recover, if possible. Send to authorised disposal plants or for incineration under controlled conditions. In so doing, comply with the local and national regulations currently in force.

## **SECTION 14: Transport information**

#### 14.1. UN number or ID number

1263

#### 14.2. UN proper shipping name

ADR-Shipping Name: PAINT IATA-Technical name: PAINT IMDG-Technical name: PAINT

## 14.3. Transport hazard class(es)

ADR-Class: 3
IATA-Class: 3
IMDG-Class: 3

#### 14.4. Packing group

ADR-Packing Group: III IATA-Packing group: III IMDG-Packing group: III

#### 14.5. Environmental hazards

Toxic ingredients quantity: 0.00 Very toxic ingredients quantity: 0.00

Marine pollutant: No

Environmental Pollutant: No

IMDG-EMS: F-E, S-E

## 14.6. Special precautions for user

Road and Rail (ADR-RID):

ADR exempt: ADR-Label: 3

ADR - Hazard identification number: -

ADR-Special Provisions: 163 367 650

ADR-Transport category (Tunnel restriction code): 3 (E)

Air (IATA):

IATA-Passenger Aircraft: 355 IATA-Cargo Aircraft: 366

IATA-Label: 3

IATA-Subsidiary hazards: -

IATA-Erg: 3L

IATA-Special Provisions: A3 A72 A192

Sea (IMDG):

IMDG-Stowage Code: Category A

IMDG-Stowage Note: -

IMDG-Subsidiary hazards: -

IMDG-Special Provisions: 163 223 367 955

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

N.A.

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

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

Dir. 98/24/EC (Risks related to chemical agents at work)

Dir. 2000/39/EC (Occupational exposure limit values)

Date 04/09/2024 Production Name MACROFAN PLUS UHS CLEARCOAT Page n. 13 of 17

Regulation (EC) n. 1907/2006 (REACH)

Regulation (EC) n. 1272/2008 (CLP)

Regulation (EC) n. 790/2009 (ATP 1 CLP) and (EU) n. 758/2013

Regulation (EU) n. 286/2011 (ATP 2 CLP)

Regulation (EU) n. 618/2012 (ATP 3 CLP)

Regulation (EU) n. 487/2013 (ATP 4 CLP)

Regulation (EU) n. 944/2013 (ATP 5 CLP)

Regulation (EU) n. 605/2014 (ATP 6 CLP)

Regulation (EU) n. 2016/918 (ATP 8 CLP)

Regulation (EU) n. 2016/1179 (ATP 9 CLP)

Regulation (EU) n. 2017/776 (ATP 10 CLP)

Regulation (EU) n. 2018/669 (ATP 11 CLP)

Regulation (EU) n. 2018/1480 (ATP 13 CLP)

Regulation (EU) n. 2019/521 (ATP 12 CLP)

Regulation (EU) n. 2020/217 (ATP 14 CLP)

Regulation (EU) n. 2020/1182 (ATP 15 CLP)

Regulation (EU) n. 2021/643 (ATP 16 CLP)

Regulation (EU) n. 2021/849 (ATP 17 CLP)

Regulation (EU) n. 2020/878

Restrictions related to the product or the substances contained according to Annex XVII Regulation (EC) 1907/2006 (REACH) and subsequent modifications:

Restrictions related to the product: 3, 40

Restrictions related to the substances contained: 30, 70, 75

## Provisions related to directive EU 2012/18 (Seveso III):

# Seveso III category according Lower-tier threshold (tonnes) Upper-tier threshold (tonnes) to Annex 1, part 1

Product belongs to category: P5c 5000 50000

Regulation (EU) No 649/2012 (PIC regulation)

## Substances listed in Annex V to the PIC regulation:

No substances listed

## Substances listed in Annex I to the PIC regulation:

dibutyltin dilaurate Part 1

## German Water Hazard Class.

1: Low hazard to waters

#### **SVHC Substances:**

No data available

## Dir. 2010/75/EC (VOC directive)

Volatile Organic compounds - VOCs = 46.64 %

Volatile Organic compounds - VOCs = 447.79 g/L

Estimated Total Content of Water 0.00 %

Estimated Total Solid Content 53.36 %

## Storage Class (TRGS 510)

Storage Class (TRGS 510) Flammable liquid substances

#### Classification according to VbF

Classification according to VbF A I - Flash point less than 21 °C, at 15 °C not miscible in water

## Mal-Code (Denmark)

Mal-Code (Denmark) Mal Factor Unit of Measure Revision Status / Number Regulatory Base

3 - 5 1.419 m3 air/10 g 1993 Administrative determined MAL-

Factors

## **Biocides**

REGULATION (EC) No 528/2012

## 15.2. Chemical safety assessment

No Chemical Safety Assessment has been carried out for the mixture.

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

Code	Description
EUH066	Repeated exposure may cause skin dryness or cracking.
H225	Highly flammable liquid and vapour.

Date 04/09/2024 Production Name MACROFAN PLUS UHS CLEARCOAT Page n. 14 of 17

11302				
H315	Causes skin irritation.			
H317	May cause an allergic skin reaction.			
H319	Causes serious eye irritation.			
H332	Harmful if inhaled.	Harmful if inhaled.		
H335	May cause respiratory irritation.			
H336	May cause drowsiness or dizziness.			
H341	Suspected of causing genetic defects.			
H360FD	May damage fertility. May damage the ur	born child.		
H361	Suspected of damaging fertility or the un	born child.		
H361d	Suspected of damaging the unborn child.	Suspected of damaging the unborn child.		
H361f	Suspected of damaging fertility.			
H370	Causes damage to organs (thymus).			
H372	Causes damage to organs (thymus) through prolonged or repeated exposure.			
H400	Very toxic to aquatic life.	Very toxic to aquatic life.		
H410	Very toxic to aquatic life with long lasting	Very toxic to aquatic life with long lasting effects.		
H411	Toxic to aquatic life with long lasting effe	Toxic to aquatic life with long lasting effects.		
H412	Harmful to aquatic life with long lasting e	ffects.		
Code	Hazard class and hazard category	Description		
2.6/2	Flam. Liq. 2	Flammable liquid, Category 2		
2.6/3	Flam. Liq. 3	Flammable liquid, Category 3		
3.1/4/Inhal	Acute Tox. 4	Acute toxicity (inhalation), Category 4		
3.1/4/Oral	Acute Tox. 4	Acute toxicity (oral), Category 4		
2.2/2				
3.2/2	Skin Irrit. 2	Skin irritation, Category 2		
3.2/2 3.3/2	Skin Irrit. 2 Eye Irrit. 2	Skin irritation, Category 2 Eye irritation, Category 2		
3.3/2	Eye Irrit. 2	Eye irritation, Category 2		
3.3/2 3.4.2/1	Eye Irrit. 2 Skin Sens. 1	Eye irritation, Category 2 Skin Sensitisation, Category 1		
3.3/2 3.4.2/1 3.4.2/1A	Eye Irrit. 2 Skin Sens. 1 Skin Sens. 1A	Eye irritation, Category 2 Skin Sensitisation, Category 1 Skin Sensitisation, Category 1A		
3.3/2 3.4.2/1 3.4.2/1A 3.4.2/1B	Eye Irrit. 2 Skin Sens. 1 Skin Sens. 1A Skin Sens. 1B	Eye irritation, Category 2 Skin Sensitisation, Category 1 Skin Sensitisation, Category 1A Skin Sensitisation, Category 1B		
3.3/2 3.4.2/1 3.4.2/1A 3.4.2/1B 3.5/2	Eye Irrit. 2 Skin Sens. 1 Skin Sens. 1A Skin Sens. 1B Muta. 2	Eye irritation, Category 2 Skin Sensitisation, Category 1 Skin Sensitisation, Category 1A Skin Sensitisation, Category 1B Germ cell mutagenicity, Category 2		
3.3/2 3.4.2/1 3.4.2/1A 3.4.2/1B 3.5/2 3.7/1B	Eye Irrit. 2 Skin Sens. 1 Skin Sens. 1A Skin Sens. 1B Muta. 2 Repr. 1B	Eye irritation, Category 2 Skin Sensitisation, Category 1 Skin Sensitisation, Category 1A Skin Sensitisation, Category 1B Germ cell mutagenicity, Category 2 Reproductive toxicity, Category 1B		
3.3/2 3.4.2/1 3.4.2/1A 3.4.2/1B 3.5/2 3.7/1B 3.7/2	Eye Irrit. 2 Skin Sens. 1 Skin Sens. 1A Skin Sens. 1B Muta. 2 Repr. 1B Repr. 2	Eye irritation, Category 2 Skin Sensitisation, Category 1 Skin Sensitisation, Category 1A Skin Sensitisation, Category 1B Germ cell mutagenicity, Category 2 Reproductive toxicity, Category 1B Reproductive toxicity, Category 2		
3.3/2 3.4.2/1 3.4.2/1A 3.4.2/1B 3.5/2 3.7/1B 3.7/2 3.8/1	Eye Irrit. 2 Skin Sens. 1 Skin Sens. 1A Skin Sens. 1B Muta. 2 Repr. 1B Repr. 2 STOT SE 1	Eye irritation, Category 2 Skin Sensitisation, Category 1 Skin Sensitisation, Category 1A Skin Sensitisation, Category 1B Germ cell mutagenicity, Category 2 Reproductive toxicity, Category 1B Reproductive toxicity, Category 2 Specific target organ toxicity — single exposure, Category 1		
3.3/2 3.4.2/1 3.4.2/1A 3.4.2/1B 3.5/2 3.7/1B 3.7/2 3.8/1 3.8/3	Eye Irrit. 2 Skin Sens. 1 Skin Sens. 1A Skin Sens. 1B Muta. 2 Repr. 1B Repr. 2 STOT SE 1 STOT SE 3	Eye irritation, Category 2 Skin Sensitisation, Category 1 Skin Sensitisation, Category 1A Skin Sensitisation, Category 1B Germ cell mutagenicity, Category 2 Reproductive toxicity, Category 1B Reproductive toxicity, Category 2 Specific target organ toxicity — single exposure, Category 1 Specific target organ toxicity — single exposure, Category 3		
3.3/2 3.4.2/1 3.4.2/1A 3.4.2/1B 3.5/2 3.7/1B 3.7/2 3.8/1 3.8/3 3.9/1	Eye Irrit. 2 Skin Sens. 1 Skin Sens. 1A Skin Sens. 1B Muta. 2 Repr. 1B Repr. 2 STOT SE 1 STOT SE 3 STOT RE 1	Eye irritation, Category 2 Skin Sensitisation, Category 1 Skin Sensitisation, Category 1A Skin Sensitisation, Category 1B Germ cell mutagenicity, Category 2 Reproductive toxicity, Category 1B Reproductive toxicity, Category 2 Specific target organ toxicity — single exposure, Category 1 Specific target organ toxicity — single exposure, Category 3 Specific target organ toxicity — repeated exposure, Category 1 Acute aquatic hazard, category 1 Chronic (long term) aquatic hazard, category 1		
3.3/2 3.4.2/1 3.4.2/1A 3.4.2/1B 3.5/2 3.7/1B 3.7/2 3.8/1 3.8/3 3.9/1 4.1/A1	Eye Irrit. 2 Skin Sens. 1 Skin Sens. 1A Skin Sens. 1B Muta. 2 Repr. 1B Repr. 2 STOT SE 1 STOT SE 3 STOT RE 1 Aquatic Acute 1 Aquatic Chronic 1 Aquatic Chronic 2	Eye irritation, Category 2 Skin Sensitisation, Category 1 Skin Sensitisation, Category 1A Skin Sensitisation, Category 1B Germ cell mutagenicity, Category 2 Reproductive toxicity, Category 1B Reproductive toxicity, Category 2 Specific target organ toxicity — single exposure, Category 1 Specific target organ toxicity — single exposure, Category 3 Specific target organ toxicity — repeated exposure, Category 1 Acute aquatic hazard, category 1		
3.3/2 3.4.2/1 3.4.2/1A 3.4.2/1B 3.5/2 3.7/1B 3.7/2 3.8/1 3.8/3 3.9/1 4.1/A1 4.1/C1	Eye Irrit. 2 Skin Sens. 1 Skin Sens. 1A Skin Sens. 1B Muta. 2 Repr. 1B Repr. 2 STOT SE 1 STOT SE 3 STOT RE 1 Aquatic Acute 1 Aquatic Chronic 1	Eye irritation, Category 2 Skin Sensitisation, Category 1 Skin Sensitisation, Category 1A Skin Sensitisation, Category 1B Germ cell mutagenicity, Category 2 Reproductive toxicity, Category 1B Reproductive toxicity, Category 2 Specific target organ toxicity — single exposure, Category 1 Specific target organ toxicity — single exposure, Category 3 Specific target organ toxicity — repeated exposure, Category 1 Acute aquatic hazard, category 1 Chronic (long term) aquatic hazard, category 1		

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

Classification according to Regulation (EC) Nr. 1272/2008	Classification procedure
2.6/3	On basis of test data
3.4.2/1A	Calculation method
3.7/2	Calculation method
4.1/C3	Calculation method

This document was prepared by a competent person who has received appropriate training.

Main bibliographic sources:

H226

H302

Flammable liquid and vapour.

Harmful if swallowed.

ECDIN - Environmental Chemicals Data and Information Network - Joint Research Centre, Commission of the European Communities

SAX's DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS - Eight Edition - Van Nostrand Reinold

The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality.

It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.

This MSDS cancels and replaces any preceding release.

MACROFAN PLUS UHS CLEARCOAT Date 04/09/2024 **Production Name** Page n. 15 of 17 Legend to abbreviations and acronyms used in the safety data sheet:

ACGIH: American Conference of Governmental Industrial Hygienists

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.

AND: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways

ATE: Acute Toxicity Estimate

ATEmix: Acute toxicity Estimate (Mixtures)

BCF: Biological Concentration Factor

BEI: Biological Exposure Index

BOD: Biochemical Oxygen Demand

CAS: Chemical Abstracts Service (division of the American Chemical Society).

CAV: Poison Center

CE: European Community

CLP: Classification, Labeling, Packaging.

CMR: Carcinogenic, Mutagenic and Reprotoxic

COD: Chemical Oxygen Demand

COV: Volatile Organic Compound

CSA: Chemical Safety Assessment

CSR: Chemical Safety Report

DMEL: Derived Minimal Effect Level

DNEL: Derived No Effect Level.

DPD: Dangerous Preparations Directive

DSD: Dangerous Substances Directive

EC50: Half Maximal Effective Concentration

ECHA: European Chemicals Agency

EINECS: European Inventory of Existing Commercial Chemical Substances.

ES: Exposure Scenario

GefStoffVO: Ordinance on Hazardous Substances, Germany.

GHS: Globally Harmonized System of Classification and Labeling of Chemicals.

IARC: International Agency for Research on Cancer

IATA: International Air Transport Association.

IATA-DGR: Dangerous Goods Regulation by the "International Air Transport Association" (IATA).

IC50: half maximal inhibitory concentration

ICAO: International Civil Aviation Organization.

ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO).

IMDG: International Maritime Code for Dangerous Goods.

INCI: International Nomenclature of Cosmetic Ingredients.

IRCCS: Scientific Institute for Research, Hospitalization and Health Care

KAFH: KAFH

KSt: Explosion coefficient.

LC50: Lethal concentration, for 50 percent of test population.

LD50: Lethal dose, for 50 percent of test population.

LDLo: Leathal Dose Low N.A.: Not Applicable N/A: Not Applicable

N/D: Not defined/ Not available

NA: Not available

NIOSH: National Institute for Occupational Safety and Health

NOAEL: No Observed Adverse Effect Level

OSHA: Occupational Safety and Health Administration

PBT: Persistent, Bioaccumulative and Toxic

PGK: Packaging Instruction

PNEC: Predicted No Effect Concentration.

PSG: Passengers

RID: Regulation Concerning the International Transport of Dangerous Goods by Rail.

STEL: Short Term Exposure limit.

STOT: Specific Target Organ Toxicity.

TLV: Threshold Limiting Value.

TWATLV: Threshold Limit Value for the Time Weighted Average 8 hour day. (ACGIH Standard).

vPvB: Very Persistent, Very Bioaccumulative.

WGK: German Water Hazard Class.

## Paragraphs modified from the previous revision:

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

Date 04/09/2024 Production Name MACROFAN PLUS UHS CLEARCOAT Page n. 16 of 17

- SECTION 2: Hazards identification
- SECTION 3: Composition/information on ingredients
- SECTION 4: First aid measures
- SECTION 5: Firefighting measures
- SECTION 6: Accidental release measures
- SECTION 7: Handling and storage
- SECTION 8: Exposure controls/personal protection
- SECTION 9: Physical and chemical properties
- SECTION 10: Stability and reactivity
- SECTION 11: Toxicological information
- SECTION 12: Ecological information
- SECTION 13: Disposal considerations
- SECTION 14: Transport information
- SECTION 15: Regulatory information
- SECTION 16: Other information

Date 04/09/2024 Production Name MACROFAN PLUS UHS CLEARCOAT Page n. 17 of 17