

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Düfa Extrem 5in1

Revision date: 18.10.2023

Product code: 10071020200000

Page 1 of 16

SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1. Product identifier**

Düfa Extrem 5in1

UFI: FFU1-RKCF-QQAM-PMD8

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

dispersion paint

Relevant identified uses

Uses advised against

None, use in accordance with instructions.

1.3. Details of the supplier of the safety data sheet

Company name: Meffert AG Farbwerke

Street: Sandweg 15

Place: D-55543 Bad Kreuznach

Telephone: +49 671 870-0

Telefax: +49 671 870-397

E-mail: info@meffert.com

Contact person: Regulatory Affairs Department

Telephone: +49 671 870-303

E-mail: SDB@meffert.com

Internet: www.meffert.com

1.4. Emergency telephone number:

00 800 63333782 Mon.–Fri. 7.30 a.m. – 8.00 p.m., Sat. 9.00 a.m. – 8.00 p.m.

SECTION 2: Hazards identification**2.1. Classification of the substance or mixture****Regulation (EC) No 1272/2008**

Skin Sens. 1; H317

Full text of hazard statements: see SECTION 16.

2.2. Label elements**Regulation (EC) No 1272/2008****Hazard components for labelling**

1,2-benzisothiazol-3(2H)-one

2-methyl-2H-isothiazol-3-one

reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)

Signal word: Warning**Pictograms:****Hazard statements**

H317

May cause an allergic skin reaction.

Precautionary statements

P102

Keep out of reach of children.

P280

Wear protective gloves.

P302+P352

IF ON SKIN: Wash with plenty of water.

P362+P364

Take off contaminated clothing and wash it before reuse.

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Düfa Extrem 5in1

Revision date: 18.10.2023

Product code: 10071020200000

Page 2 of 16

Special labelling of certain mixtures

EUH211:Warning! Hazardous respirable droplets may be formed when sprayed. Do not breathe spray or mist.

2.3. Other hazards

No information available.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification (Regulation (EC) No 1272/2008)			
13463-67-7	Titanium dioxide; [in powder form containing 1 % or more of particles with aerodynamic diameter $\leq 10 \mu\text{m}$]			10 - < 15 %
	236-675-5		01-2119489379-17	
	Carc. 2; H351			
14807-96-6	talc, hydrated magnesium silicate (MG3H2(SiO3)4)			5 - < 10 %
	238-877-9		01-2120140278-58	
77-99-6	1,1,1-trimethylolpropane, 1,1,1-Tris(hydroxymethyl)propane			0.1 - < 1 %
	201-074-9		01-2119486799-10	
	Repr. 2; H361fd			
2634-33-5	1,2-benzisothiazol-3(2H)-one			< 0.1 %
	220-120-9	613-088-00-6	01-2120761540-60	
	Acute Tox. 2, Acute Tox. 4, Skin Irrit. 2, Eye Dam. 1, Skin Sens. 1, Aquatic Acute 1, Aquatic Chronic 2; H330 H302 H315 H318 H317 H400 H411			
2682-20-4	2-methyl-2H-isothiazol-3-one			< 0.1 %
	220-239-6		01-2120764690-50	
	Acute Tox. 2, Acute Tox. 3, Acute Tox. 3, Skin Corr. 1B, Eye Dam. 1, Skin Sens. 1A, Aquatic Acute 1, Aquatic Chronic 1; H330 H311 H301 H314 H318 H317 H400 H410			
55965-84-9	reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)			< 0.1 %
		613-167-00-5	01-2120764691-48	
	Acute Tox. 2, Acute Tox. 2, Acute Tox. 3, Skin Corr. 1C, Eye Dam. 1, Skin Sens. 1A, Aquatic Acute 1, Aquatic Chronic 1; H330 H310 H301 H314 H318 H317 H400 H410 EUH071			

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

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Düfa Extrem 5in1

Revision date: 18.10.2023

Product code: 10071020200000

Page 3 of 16

Specific Conc. Limits, M-factors and ATE

CAS No	EC No	Chemical name	Quantity
		Specific Conc. Limits, M-factors and ATE	
13463-67-7	236-675-5	Titanium dioxide; [in powder form containing 1 % or more of particles with aerodynamic diameter $\leq 10 \mu\text{m}$]	10 - < 15 %
		inhalation: LC50 = $>6,82 \text{ mg/l}$ (dusts or mists); dermal: LD50 = $>2000 \text{ mg/kg}$; oral: LD50 = $>5000 \text{ mg/kg}$ Carc. 2; H351: $\geq 100 - 100$	
14807-96-6	238-877-9	talco, hydrated magnesium silicate (MG3H2(SiO3)4)	5 - < 10 %
		dermal: LD50 = $>2000 \text{ mg/kg}$; oral: LD50 = $>5000 \text{ mg/kg}$	
77-99-6	201-074-9	1,1,1-trimethylolpropane, 1,1,1-Tris(hydroxymethyl)propane	0.1 - < 1 %
		inhalation: LC50 = 850 mg/l (vapours); dermal: LD50 = 10000 mg/kg ; oral: LD50 = 14700 mg/kg	
2634-33-5	220-120-9	1,2-benzisothiazol-3(2H)-one	< 0.1 %
		inhalation: ATE = $0,5 \text{ mg/l}$ (vapours); inhalation: ATE = $0,05 \text{ mg/l}$ (dusts or mists); dermal: LD50 = $>2000 \text{ mg/kg}$; oral: LD50 = 530 mg/kg Skin Sens. 1; H317: $\geq 0,05 - 100$ Aquatic Acute 1; H400: M=1	
2682-20-4	220-239-6	2-methyl-2H-isothiazol-3-one	< 0.1 %
		inhalation: ATE = $0,5 \text{ mg/l}$ (vapours); inhalation: ATE = $0,05 \text{ mg/l}$ (dusts or mists); dermal: LD50 = $>2000 \text{ mg/kg}$; oral: LD50 = 285 mg/kg Skin Sens. 1A; H317: $\geq 0,0015 - 100$ Aquatic Acute 1; H400: M=10 Aquatic Chronic 1; H410: M=1	
55965-84-9		reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	< 0.1 %
		inhalation: ATE = $0,5 \text{ mg/l}$ (vapours); inhalation: LC50 = $0,33 \text{ mg/l}$ (dusts or mists); dermal: LD50 = $>75 \text{ mg/kg}$; oral: LD50 = $49,6-75 \text{ mg/kg}$ Skin Corr. 1C; H314: $\geq 0,6 - 100$ Skin Irrit. 2; H315: $\geq 0,06 - < 0,6$ Eye Dam. 1; H318: $\geq 0,6 - 100$ Eye Irrit. 2; H319: $\geq 0,06 - < 0,6$ Skin Sens. 1A; H317: $\geq 0,0015 - 100$ Aquatic Acute 1; H400: M=100 Aquatic Chronic 1; H410: M=100	

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

Take off immediately all contaminated clothing and wash it before reuse. If unconscious but breathing normally, place in recovery position and seek medical advice. In case of allergic symptoms, especially in the breathing area, seek medical advice immediately. When in doubt or if symptoms are observed, get medical advice.

After inhalation

If breathing is irregular or stopped, administer artificial respiration. Medical treatment necessary. Provide fresh air.

After contact with skin

After contact with skin, wash immediately with plenty of water and soap. Take off immediately all contaminated clothing and wash it before reuse. If skin irritation occurs: Get medical advice/attention. Wash immediately with: Water and soap. Do not wash with: Solvents/Thinner

After contact with eyes

Rinse immediately carefully and thoroughly with eye-bath or water. In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist. Remove contact lenses, if present and easy to do. Continue rinsing. Seek medical advice immediately.

After ingestion

Do NOT induce vomiting. Rinse mouth immediately and drink plenty of water. Call a physician immediately.

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

Allergic reactions

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

Treat symptomatically.

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Düfa Extrem 5in1

Revision date: 18.10.2023

Product code: 10071020200000

Page 4 of 16

SECTION 5: Firefighting measures**5.1. Extinguishing media****Suitable extinguishing media**

Co-ordinate fire-fighting measures to the fire surroundings. The product itself does not burn. Co-ordinate fire-fighting measures to the fire surroundings.

Unsuitable extinguishing media

Full water jet

5.2. Special hazards arising from the substance or mixture

Non-flammable. In case of fire may be liberated: Carbon dioxide (CO₂). Carbon monoxide

5.3. Advice for firefighters

In case of fire: Wear self-contained breathing apparatus. Use water spray jet to protect personnel and to cool endangered containers.

Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

Additional information

Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water. In case of fire: Wear self-contained breathing apparatus.

SECTION 6: Accidental release measures**6.1. Personal precautions, protective equipment and emergency procedures****General advice**

Provide adequate ventilation.

6.2. Environmental precautions

Do not allow to enter into surface water or drains. Do not allow to enter into surface water or drains. If the product contaminates lakes, rivers or sewages, inform appropriate authorities in accordance with local regulations.

6.3. Methods and material for containment and cleaning up**Other information**

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents). Treat the recovered material as prescribed in the section on waste disposal. Take up mechanically, placing in appropriate containers for disposal.

Methods and material for containment and cleaning up: Sand Sawdust Universal binder

6.4. Reference to other sections

Safe handling: see section 7

Personal protection equipment: see section 8

Disposal: see section 13 Safe handling: see section 7 Personal protection equipment: see section 8

Treat the recovered material as prescribed in the section on waste disposal.

SECTION 7: Handling and storage**7.1. Precautions for safe handling****Advice on safe handling**

Provide adequate ventilation as well as local exhaustion at critical locations. Avoid contact with skin, eyes and clothes. Avoid breathing dust/fume/gas/mist/vapours/spray. Personal protection equipment: see section 8

Advice on protection against fire and explosion

No special fire protection measures are necessary.

Advice on general occupational hygiene

Take off contaminated clothing. Wash hands before breaks and after work. When using do not eat, drink, smoke, sniff.

7.2. Conditions for safe storage, including any incompatibilities

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Düfa Extrem 5in1

Revision date: 18.10.2023

Product code: 10071020200000

Page 5 of 16

Requirements for storage rooms and vessels

Keep container tightly closed. Always close containers tightly after the removal of product.

Hints on joint storage

Do not store together with: Acid alkali

Further information on storage conditions

Keep/Store only in original container. Protect from direct sunlight. Avoid cooling down below 10°C.

7.3. Specific end use(s)

Water-based paints, solvent-free

SECTION 8: Exposure controls/personal protection**8.1. Control parameters**

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Düfa Extrem 5in1

Revision date: 18.10.2023

Product code: 10071020200000

Page 6 of 16

DNEL/DMEL values

CAS No	Name of agent			
DNEL type		Exposure route	Effect	Value
13463-67-7	Titanium dioxide; [in powder form containing 1 % or more of particles with aerodynamic diameter <= 10 µm]			
Worker DNEL, long-term		inhalation	local	10 mg/m³
Consumer DNEL, long-term		oral	systemic	700 mg/kg bw/day
14807-96-6	talc, hydrated magnesium silicate (MG3H2(SiO3)4)			
Worker DNEL, long-term		inhalation	systemic	2,16 mg/m³
Worker DNEL, acute		inhalation	systemic	2,16 mg/m³
Worker DNEL, long-term		inhalation	local	3,6 mg/m³
Worker DNEL, acute		inhalation	local	3,6 mg/m³
Worker DNEL, long-term		dermal	systemic	43,2 mg/kg bw/day
Worker DNEL, long-term		dermal	local	4,54 mg/cm²
Consumer DNEL, long-term		inhalation	systemic	1,08 mg/m³
Consumer DNEL, acute		inhalation	systemic	1,08 mg/m³
Consumer DNEL, long-term		inhalation	local	1,18 mg/m³
Consumer DNEL, acute		inhalation	local	1,18 mg/m³
Consumer DNEL, long-term		dermal	systemic	21,6 mg/kg bw/day
Consumer DNEL, long-term		dermal	local	2,27 mg/cm²
Consumer DNEL, long-term		oral	systemic	160 mg/kg bw/day
Consumer DNEL, acute		oral	systemic	160 mg/kg bw/day
77-99-6	1,1,1-trimethylolpropane, 1,1,1-Tris(hydroxymethyl)propane			
Worker DNEL, long-term		inhalation	systemic	3,3 mg/m³
Worker DNEL, long-term		dermal	systemic	0,94 mg/kg bw/day
Consumer DNEL, long-term		inhalation	systemic	0,58 mg/m³
Consumer DNEL, long-term		dermal	systemic	0,34 mg/kg bw/day
Consumer DNEL, long-term		oral	systemic	0,34 mg/kg bw/day
2634-33-5	1,2-benzisothiazol-3(2H)-one			
Worker DNEL, long-term		inhalation	systemic	6,8 mg/m³
Worker DNEL, long-term		dermal	systemic	0,966 mg/kg bw/day
Consumer DNEL, long-term		inhalation	systemic	1,2 mg/m³
Consumer DNEL, long-term		dermal	systemic	0,345 mg/kg bw/day
55965-84-9	reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)			
Worker DNEL, long-term		inhalation	local	0,02 mg/m³
Worker DNEL, acute		inhalation	local	0,04 mg/m³
Consumer DNEL, long-term		inhalation	local	0,02 mg/m³
Consumer DNEL, acute		inhalation	local	0,04 mg/m³
Consumer DNEL, long-term		oral	systemic	0,11 mg/kg bw/day

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Düfa Extrem 5in1

Revision date: 18.10.2023

Product code: 10071020200000

Page 7 of 16

Consumer DNEL, acute	oral	systemic	0,09 mg/kg bw/day
----------------------	------	----------	----------------------

PNEC values

CAS No	Name of agent	
Environmental compartment		Value
13463-67-7	Titanium dioxide; [in powder form containing 1 % or more of particles with aerodynamic diameter <= 10 µm]	
Freshwater		0,127 mg/l
Freshwater (intermittent releases)		0,61 mg/l
Marine water		1 mg/l
Freshwater sediment		1000 mg/kg
Marine sediment		100 mg/kg
Micro-organisms in sewage treatment plants (STP)		100 mg/l
Soil		100 mg/kg
14807-96-6	talc, hydrated magnesium silicate (MG3H2(SIO3)4)	
Freshwater		597,97 mg/l
Freshwater (intermittent releases)		597,97 mg/l
Marine water		141,26 mg/l
Marine water (intermittent releases)		141,26 mg/l
Freshwater sediment		31,33 mg/kg
Marine sediment		3,13 mg/kg
77-99-6	1,1,1-trimethylolpropane, 1,1,1-Tris(hydroxymethyl)propane	
2634-33-5	1,2-benzisothiazol-3(2H)-one	
Freshwater		0,00403 mg/l
Freshwater (intermittent releases)		0,0011 mg/l
Marine water		0,000403 mg/l
Marine water (intermittent releases)		0,0011 mg/l
Freshwater sediment		0,049 mg/l
Marine sediment		0,00499 mg/kg
Micro-organisms in sewage treatment plants (STP)		1,03 mg/l
Soil		3 mg/kg
55965-84-9	reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	
Freshwater		0,0039 mg/l
Freshwater (intermittent releases)		0,0039 mg/l
Marine water		0,0039 mg/l
Marine water (intermittent releases)		0,0039 mg/l
Freshwater sediment		0,027 mg/kg
Marine sediment		0,027 mg/kg
Micro-organisms in sewage treatment plants (STP)		0,23 mg/l
Soil		0,01 mg/kg

8.2. Exposure controls

Appropriate engineering controls

Provide adequate ventilation.

Individual protection measures, such as personal protective equipment

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Düfa Extrem 5in1

Revision date: 18.10.2023

Product code: 10071020200000

Page 8 of 16

Eye/face protection

Wear eye/face protection. Wear eye/face protection.
Wear protective glasses during application with a spray gun.

Hand protection

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. Replace when worn.

For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves. See information supplied by the manufacturer.

Suitable material: NBR (Nitrile rubber). Wear cotton undermitten if possible.

Breakthrough time: >480 min.

Thickness of the glove material: >0,5 mm

Skin protection

Use of protective clothing. Body protection: not required.

Respiratory protection

In case of inadequate ventilation wear respiratory protection. In case of spray processing: Filtering device (full mask or mouthpiece) with filter: A2/P2

Environmental exposure controls

Do not allow to enter into surface water or drains. If the product contaminates lakes, rivers or sewages, inform appropriate authorities in accordance with local regulations.

SECTION 9: Physical and chemical properties**9.1. Information on basic physical and chemical properties**

Physical state:	Liquid
Colour:	see color on the packaging label
Odour:	sweetish
Odour threshold:	not determined
Melting point/freezing point:	ca. 0 °C °C
Boiling point or initial boiling point and boiling range:	ca. 100 °C
Lower explosion limits:	not applicable
Upper explosion limits:	not applicable
Flash point:	na
Auto-ignition temperature:	not applicable
Decomposition temperature:	not applicable
pH-Value (at 20 °C):	8,0 - 8,5
Viscosity / kinematic:	na
Water solubility:	completely miscible
Solubility in other solvents	
not determined	
Dissolution rate:	not applicable
Partition coefficient n-octanol/water:	not determined
Vapour pressure:	not determined
Density (at 20 °C):	1,42 g/cm ³
Relative vapour density:	not determined
Particle characteristics:	Liquid, not applicable

9.2. Other information

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Düfa Extrem 5in1

Revision date: 18.10.2023

Product code: 10071020200000

Page 9 of 16

Information with regard to physical hazard classes

Explosive properties

The product is not: Explosive.

Sustaining combustion:

Not sustaining combustion

Self-ignition temperature

Solid:

not applicable

Gas:

not applicable

Oxidizing properties

Not oxidising.

Other safety characteristics

Evaporation rate:

not determined

Solvent separation test:

not applicable

Solid content:

not determined

Sublimation point:

not applicable

Softening point:

not applicable

Pour point:

not applicable

Flow time:

na

Further Information

none

SECTION 10: Stability and reactivity**10.1. Reactivity**

This material is considered to be non-reactive under normal use conditions.

10.2. Chemical stability

The mixture is chemically stable under recommended conditions of storage, use and temperature.

10.3. Possibility of hazardous reactions

Exothermic reaction with: Oxidising agent, Strong acid, Strong alkali

10.4. Conditions to avoid

Do not dry up the product. Avoid heat and frost.

10.5. Incompatible materials

Materials that react with water. Alkali (lye) Acid, Oxidising agent..

10.6. Hazardous decomposition productsIn case of fire may be liberated: Carbon monoxide, Nitrogen oxides (NO_x), Carbon dioxide (CO₂). Under certain fire conditions, traces of other toxic products can not be excluded.**SECTION 11: Toxicological information****11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008****Acute toxicity**

Based on available data, the classification criteria are not met.

ATEmix calculated

ATE (oral) > 2000 mg/kg; ATE (dermal) > 2000 mg/kg; ATE (inhalation vapour) > 20 mg/l; ATE (inhalation dust/mist) > 5 mg/l

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Düfa Extrem 5in1

Revision date: 18.10.2023

Product code: 10071020200000

Page 10 of 16

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
13463-67-7	Titanium dioxide; [in powder form containing 1 % or more of particles with aerodynamic diameter $\leq 10 \mu\text{m}$]				
	oral	LD50 >5000 mg/kg	Rat		OECD 425
	dermal	LD50 >2000 mg/kg	Rat		
	inhalation (4 h) dust/mist	LC50 >6,82 mg/l			
14807-96-6	talc, hydrated magnesium silicate (MG3H2(SiO3)4)				
	oral	LD50 >5000 mg/kg	Rat		
	dermal	LD50 >2000 mg/kg	Rat		
77-99-6	1,1,1-trimethylolpropane, 1,1,1-Tris(hydroxymethyl)propane				
	oral	LD50 14700 mg/kg	Rabbit		
	dermal	LD50 10000 mg/kg	Rabbit		
	inhalation (4 h) vapour	LC50 850 mg/l	Rat		
2634-33-5	1,2-benzisothiazol-3(2H)-one				
	oral	LD50 530 mg/kg	Rat		OECD 423
	dermal	LD50 >2000 mg/kg	Rat		OECD 402
	inhalation vapour	ATE 0,5 mg/l			
	inhalation dust/mist	ATE 0,05 mg/l			
2682-20-4	2-methyl-2H-isothiazol-3-one				
	oral	LD50 285 mg/kg	Rat		
	dermal	LD50 >2000 mg/kg	Rat		
	inhalation vapour	ATE 0,5 mg/l			
	inhalation dust/mist	ATE 0,05 mg/l			
55965-84-9	reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)				
	oral	LD50 49,6-75 mg/kg	Rat		
	dermal	LD50 >75 mg/kg	Rabbit		
	inhalation vapour	ATE 0,5 mg/l			
	inhalation (4 h) dust/mist	LC50 0,33 mg/l	Rat		

Irritation and corrosivity

Based on available data, the classification criteria are not met.

Sensitising effects

May cause an allergic skin reaction. (1,2-benzisothiazol-3(2H)-one; 2-methyl-2H-isothiazol-3-one; reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1))

Carcinogenic/mutagenic/toxic effects for reproduction

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Düfa Extrem 5in1

Revision date: 18.10.2023

Product code: 10071020200000

Page 11 of 16

Based on available data, the classification criteria are not met.

Titanium dioxide; [in powder form containing 1 % or more of particles with aerodynamic diameter $\leq 10 \mu\text{m}$]:

Test data from the manufacturer of the raw materials containing TiO_2 according to EN 15051-2 show that the raw materials contain $< 1\%$ particles with an aerodynamic diameter of $\leq 10 \mu\text{m}$ and therefore do not meet the classification criteria. The respirable and thoracic dust content of raw materials containing TiO_2 falls into the very low or low dust category according to the EN 15051-2 method.

STOT-single exposure

Based on available data, the classification criteria are not met.

STOT-repeated exposure

Based on available data, the classification criteria are not met.

Aspiration hazard

Based on available data, the classification criteria are not met.

Additional information on tests

The mixture is classified as not hazardous according to regulation (EC) No 1272/2008 [CLP].

11.2. Information on other hazards**Endocrine disrupting properties**

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

SECTION 12: Ecological information**12.1. Toxicity**

The product is not: Ecotoxic.

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Düfa Extrem 5in1

Revision date: 18.10.2023

Product code: 10071020200000

Page 12 of 16

CAS No	Chemical name					
	Aquatic toxicity	Dose	[h] [d]	Species	Source	Method
13463-67-7	Titanium dioxide; [in powder form containing 1 % or more of particles with aerodynamic diameter <= 10 µm]					
	Acute fish toxicity	LC50 >10000 mg/l	96 h	Cyprinus carpio (Common Carp)		OECD 203
	Acute algae toxicity	ErC50 >100 mg/l	72 h	Pseudokirchneriella subcapitata		
	Acute crustacea toxicity	EC50 >100 mg/l	48 h	Daphnia magna (Big water flea)		
77-99-6	1,1,1-trimethylolpropane, 1,1,1-Tris(hydroxymethyl)propane					
	Acute fish toxicity	LC50 10000 mg/l	96 h	Alburnus alburnus (alburnum)		
	Acute algae toxicity	ErC50 1000-10000 mg/l	72 h	Pseudokirchneriella subcapitata		
	Acute crustacea toxicity	EC50 13000 mg/l	48 h	Daphnia magna (Big water flea)		
	Algae toxicity	NOEC 1000 mg/l	3 d	not determined		
	Crustacea toxicity	NOEC 1000 mg/l	21 d	not determined		
	Acute bacteria toxicity	(EC50 1000 mg/l)	3 h	not determined		
2634-33-5	1,2-benzisothiazol-3(2H)-one					
	Acute fish toxicity	LC50 2,15 mg/l	96 h	Oncorhynchus mykiss (Rainbow trout)		OECD 203
	Acute algae toxicity	ErC50 0,11 mg/l	72 h	Pseudokirchneriella subcapitata		OECD 201
	Acute crustacea toxicity	EC50 3,27 mg/l	48 h	Daphnia magna (Big water flea)		OECD 202
	Fish toxicity	NOEC 0,21 mg/l	28 d	Oncorhynchus mykiss (Rainbow trout)		OECD 215
	Algae toxicity	NOEC 0,0403 mg/l	3 d	Pseudokirchneriella subcapitata		OECD 201
	Acute bacteria toxicity	(EC50 12,8 mg/l)	3 h	Activated sludge		OECD 209
2682-20-4	2-methyl-2H-isothiazol-3-one					
	Acute fish toxicity	LC50 >0,15 mg/l	96 h	Danio rerio (zebrafish)		
	Acute algae toxicity	ErC50 0,157 mg/l	72 h	Pseudokirchneriella subcapitata		
	Acute crustacea toxicity	EC50 0,87 mg/l	48 h	Daphnia magna (Big water flea)		
	Acute bacteria toxicity	(EC50 34,6 mg/l)	3 h	Activated sludge		
55965-84-9	reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)					
	Acute fish toxicity	LC50 0,19 mg/l	96 h	Oncorhynchus mykiss (Rainbow trout)		OECD 202
	Acute algae toxicity	ErC50 0,027 mg/l	72 h	Pseudokirchneriella subcapitata		OECD 201
	Acute crustacea toxicity	EC50 0,16 mg/l	48 h	Daphnia magna (Big water flea)		OECD 203
	Fish toxicity	NOEC 0,05 mg/l	14 d	Oncorhynchus mykiss (Rainbow trout)		

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Düfa Extrem 5in1

Revision date: 18.10.2023

Product code: 10071020200000

Page 13 of 16

	Algae toxicity	NOEC mg/l	0,0012	3 d	Pseudokirchneriella subcapitata		OECD 201
	Crustacea toxicity	NOEC	0,1 mg/l	21 d	Daphnia magna (Big water flea)		
	Acute bacteria toxicity	(EC50 mg/l)	7,92	3 h	Activated sludge		OECD 209

12.2. Persistence and degradability

The product has not been tested.

CAS No	Chemical name			
	Method	Value	d	Source
	Evaluation			
2634-33-5	1,2-benzisothiazol-3(2H)-one			
	OECD 301B/ ISO 9439/ EEC 92/69/V, C.4-C	70-80%	28	
55965-84-9	reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)			
	OECD 301D/ EEC 92/69/V, C.4-E	>60%	28	
	Readily biodegradable (according to OECD criteria).			
	OECD 302B/ ISO 9888/ EEC 92/69/V, C.9	100%	28	
	OECD 303/ EEC 92/69/V, C10	>80%	28	

12.3. Bioaccumulative potential

The product has not been tested.

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
2634-33-5	1,2-benzisothiazol-3(2H)-one	0,7
2682-20-4	2-methyl-2H-isothiazol-3-one	-0,32
55965-84-9	reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	<3

BCF

CAS No	Chemical name	BCF	Species	Source
13463-67-7	Titanium dioxide; [in powder form containing 1 % or more of particles with aerodynamic diameter ≤ 10 µm]	352	Oncorhynchus mykiss (Rainbow trout)	
2634-33-5	1,2-benzisothiazol-3(2H)-one	189	Danio rerio (zebrafish)	OECD 305
2682-20-4	2-methyl-2H-isothiazol-3-one	3,16	No data available	
55965-84-9	reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	<100		

12.4. Mobility in soil

The product has not been tested.

12.5. Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

The product has not been tested.

12.6. Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

12.7. Other adverse effects

No information available.

Further information

Avoid release to the environment. There are no data available on the mixture itself.

Do not allow to enter into surface water or drains.

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Düfa Extrem 5in1

Revision date: 18.10.2023

Product code: 10071020200000

Page 14 of 16

SECTION 13: Disposal considerations**13.1. Waste treatment methods****Disposal recommendations**

Do not allow to enter into surface water or drains.

Dispose according to legislation.

Dried out material residue can be disposed of with household waste. For liquid material residue, contact your local waste collection provider.

List of Wastes Code - residues/unused products

080112 WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS; wastes from MFSU and removal of paint and varnish; waste paint and varnish other than those mentioned in 08 01 11

List of Wastes Code - contaminated packaging

150102 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); plastic packaging

Contaminated packaging

Wash with plenty of water. Completely emptied packages can be recycled. Contaminated packages must be completely emptied and can be re-used following proper cleaning. Completely emptied packages can be recycled.

SECTION 14: Transport information**Land transport (ADR/RID)****14.1. UN number or ID number:**

No dangerous good in sense of this transport regulation.

14.2. UN proper shipping name:

No dangerous good in sense of this transport regulation.

14.3. Transport hazard class(es):

No dangerous good in sense of this transport regulation.

14.4. Packing group:

No dangerous good in sense of this transport regulation.

Inland waterways transport (ADN)**14.1. UN number or ID number:**

No dangerous good in sense of this transport regulation.

14.2. UN proper shipping name:

No dangerous good in sense of this transport regulation.

14.3. Transport hazard class(es):

No dangerous good in sense of this transport regulation.

14.4. Packing group:

No dangerous good in sense of this transport regulation.

Marine transport (IMDG)**14.1. UN number or ID number:**

No dangerous good in sense of this transport regulation.

14.2. UN proper shipping name:

No dangerous good in sense of this transport regulation.

14.3. Transport hazard class(es):

No dangerous good in sense of this transport regulation.

14.4. Packing group:

No dangerous good in sense of this transport regulation.

Air transport (ICAO-TI/IATA-DGR)**14.1. UN number or ID number:**

No dangerous good in sense of this transport regulation.

14.2. UN proper shipping name:

No dangerous good in sense of this transport regulation.

14.3. Transport hazard class(es):

No dangerous good in sense of this transport regulation.

14.4. Packing group:

No dangerous good in sense of this transport regulation.

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: No

14.6. Special precautions for user

No dangerous good in sense of this transport regulation.

14.7. Maritime transport in bulk according to IMO instruments

not applicable

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Düfa Extrem 5in1

Revision date: 18.10.2023

Product code: 10071020200000

Page 15 of 16

SECTION 15: Regulatory information**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****EU regulatory information**

Restrictions on use (REACH, annex XVII):

Entry 3, Entry 75

2010/75/EU (VOC): 0,028 % (0,392 g/l)

2004/42/EC (VOC): 0,014 % (0,203 g/l)

Information according to 2012/18/EU (SEVESO III): Not subject to 2012/18/EU (SEVESO III)

Additional information

This product is a "treated article without a primary biocidal function" (Article 58 in conjunction with Article 3(1)(a)). The product contains biocides with preservative action to combat microbial decay (PT6).

National regulatory information

Water hazard class (D): 1 - slightly hazardous to water

Skin resorption/Sensitization: Causes allergic hypersensitivity reactions.

15.2. Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information**Changes**

This data sheet contains changes from the previous version in section(s): 2,9,13.

Abbreviations and acronymsADR: Accord européen sur le transport des marchandises dangereuses par Route
(European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service

LC50: Lethal concentration, 50%

LD50: Lethal dose, 50%

CLP: Classification, labelling and Packaging

REACH: Registration, Evaluation and Authorization of Chemicals

GHS: Globally Harmonised System of Classification, Labelling and Packaging of Chemicals

UN: United Nations

DNEL: Derived No Effect Level

DMEL: Derived Minimal Effect Level

PNEC: Predicted No Effect Concentration

ATE: Acute toxicity estimate

LL50: Lethal loading, 50%

EL50: Effect loading, 50%

EC50: Effective Concentration 50%

ErC50: Effective Concentration 50%, growth rate

NOEC: No Observed Effect Concentration

BCF: Bio-concentration factor

PBT: persistent, bioaccumulative, toxic

vPvB: very persistent, very bioaccumulative

RID: Regulations concerning the international carriage of dangerous goods by rail

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Düfa Extrem 5in1

Revision date: 18.10.2023

Product code: 10071020200000

Page 16 of 16

ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
(Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures)

EmS: Emergency Schedules

MFAG: Medical First Aid Guide

ICAO: International Civil Aviation Organization

MARPOL: International Convention for the Prevention of Marine Pollution from Ships

IBC: Intermediate Bulk Container

VOC: Volatile Organic Compounds

SVHC: Substance of Very High Concern

For abbreviations and acronyms, see table at <http://abbrev.esdscom.eu>

Key literature references and sources for data

Sources: <http://www.gisbau.de> <http://www.baua.de>

Classification for mixtures and used evaluation method according to Regulation (EC) No 1272/2008 [CLP]

Classification	Classification procedure
Skin Sens. 1; H317	Calculation method

Relevant H and EUH statements (number and full text)

H301	Toxic if swallowed.
H302	Harmful if swallowed.
H310	Fatal in contact with skin.
H311	Toxic in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H330	Fatal if inhaled.
H351	Suspected of causing cancer if inhaled.
H361fd	Suspected of damaging fertility. Suspected of damaging the unborn child.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.
EUH071	Corrosive to the respiratory tract.

Further Information

The information is based on the present level of our knowledge. It does not, however, give assurance of product properties and establishes no contract legal rights. The receiver of our product is singularly responsible for adhering to existing laws and regulations.

Identified uses

No	Short title	LCS	SU	PC	PROC	ERC	AC	TF	Specification
1	Coatings and paints, thinners, paint removers	PW, C	19	9a	10, 11	10a, 11a	-	-	Sprüh/Rol/St

LCS: Life cycle stages

PC: Product categories

ERC: Environmental release categories

TF: Technical functions

SU: Sectors of use

PROC: Process categories

AC: Article categories

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)