Trade name: Marabu do it Metallic 787, 150 ml

Version: 9 / GB Date revised: 15.08.2023

Substance number: 21074006787 Replaces Version: 8 / GB Print date: 16.08.23

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

1.1. Product identifier

Marabu do it Metallic 787, 150 ml

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

Use of the substance/preparation

Colour spray

1.3. Details of the supplier of the safety data sheet

Address/Manufacturer

Marabu GmbH & Co. KG Asperger Strasse 4 71732 Tamm Germany

Telephone no. +49-7141/691-0

Information provided Department product safety

by / telephone

E-mail address of

PRSI@marabu.com

person responsible for this SDS

1.4. Emergency telephone number

(+49) (0)621-60-43333

SECTION 2: Hazards identification ***

2.1. Classification of the substance or mixture

Classification (Regulation (EC) No. 1272/2008)

Classification (Regulation (EC) No. 1272/2008)

Aerosol 1 H222 H229 Eye Irrit. 2 H319 STOT SE 3 H336 Aquatic Chronic 2 H411

2.2. Label elements

Labelling according to regulation (EC) No 1272/2008

Hazard pictograms



Signal word

Danger

Hazard statements

H222 Extremely flammable aerosol.
 H229 Pressurized container: may burst if heated.
 H319 Causes serious eye irritation.
 H336 May cause drowsiness or dizziness.
 H411 Toxic to aquatic life with long lasting effects.

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Precautionary statements

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children.

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition

sources. No smoking.

P211 Do not spray on an open flame or other ignition source.

P251 Do not pierce or burn, even after use.
P264.1 Wash hands thoroughly after handling.

P271 Use only outdoors or in a well-ventilated area.

P280 Wear protective gloves/protective clothing/eye protection/face protection.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact

lenses, if present and easy to do. Continue rinsing.

P405 Store locked up.

P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.

P501.9 Dispose of contents/container as problematic waste.

Hazardous component(s) to be indicated on label (Regulation (EC) No. 1272/2008)

contains Ethyl acetate; Propan-2-ol; 2-Methoxy-1-methylethyl acetate

Supplemental information

EUH066 Repeated exposure may cause skin dryness or cracking.

Further supplemental information

Without adequate ventilation, explosive atmosphere/gas mix may be created.

2.3. Other hazards

Pressurized container. At temperatures above 50 °C, deformation and explosion possible, resulting in serious physical injury. Vapours are heavier than air and may therefore form flammable and explosive mixtures with air, even at temperatures below 0 °C. Use in inadequately ventilated areas Environments may cause breathing problems, drowsiness and, in severe cases, unconsciousness.

The product contains no PBT substances. The product contains no vPvB substances. This product does not contain a substance that has endocrine disrupting properties with respect to human. The product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Hazardous ingredients

Ethyl acetate

CAS No. 141-78-6 EINECS no. 205-500-4

Registration no. 01-2119475103-46

Concentration >= 20 < 25 %

Classification (Regulation (EC) No. 1272/2008)

Flam. Liq. 2 H225 Eye Irrit. 2 H319 STOT SE 3 H336

Propan-2-ol

CAS No. 67-63-0 EINECS no. 200-661-7

Registration no. 01-2119457558-25

Concentration >= 20 < 25 %

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Classification (Regulation (EC) No. 1272/2008)

Flam. Liq. 2 H225 Eye Irrit. 2 H319 STOT SE 3 H336

Copper

CAS No. 7440-50-8 EINECS no. 231-159-6

Registration no. 01-2119480154-42

Concentration >= 2,5 < 10 %

Classification (Regulation (EC) No. 1272/2008)

Acute Tox. 4 H302 Aquatic Acute 1 H400 Aquatic Chronic 2 H411

Concentration limits (Regulation (EC) No. 1272/2008)

Aquatic Acute 1 H400 M = 1

cATpE oral 500 mg/kg

2-Methoxy-1-methylethyl acetate

CAS No. 108-65-6 EINECS no. 203-603-9

Registration no. 01-2119475791-29

Concentration >= 1 < 10 %

Classification (Regulation (EC) No. 1272/2008)

Flam. Liq. 3 H226 STOT SE 3 H336

2-Butoxyethanol

CAS No. 111-76-2 EINECS no. 203-905-0

Registration no. 01-2119475108-36

Concentration >= 1 < 8,8 %

Classification (Regulation (EC) No. 1272/2008)

 Skin Irrit. 2
 H315

 Acute Tox. 4
 H332

 Acute Tox. 4
 H312

 Acute Tox. 4
 H302

 Eye Irrit. 2
 H319

ATE oral 1.200 mg/kg cATpE dermal 1.100 mg/kg cATpE inhalative, Dust/Mist 1,5 mg/l cATpE inhalative, Vapors mg/l 11

Zinc powder - Zinc dust

CAS No. 7440-66-6 EINECS no. 231-175-3

Registration no. 01-2119467174-37

Concentration >= 2,5 < 10 %

Classification (Regulation (EC) No. 1272/2008)

Aquatic Acute 1 H400 Aquatic Chronic 1 H410

SECTION 4: First aid measures

4.1. Description of first aid measures

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General information

In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person. If unconscious place in recovery position and seek medical advice.

After inhalation

Remove affected person from danger area. Remove to fresh air, keep patient warm and at rest. If breathing is irregular or stopped, administer artificial respiration. Summon a doctor immediately.

After skin contact

Remove contaminated clothing. Wash skin thoroughly with soap and water or use recognised skin cleanser. Do NOT use solvents or thinners. Consult a doctor if skin irritation persists.

After eye contact

Remove contact lenses, irrigate copiously with clean, fresh water, holding the eyelids apart for at least 10 minutes and seek immediate medical advice. Take medical treatment.

After ingestion

As the product is in a pressurised gas container, ingestion is not expected. If accidentally swallowed rinse the mouth with plenty of water (only if the person is conscious) and obtain immediate medical attention. Keep at rest. Do NOT induce vomiting. Summon a doctor immediately.

Adhere to personal protective measures when giving first aid

Use personal protective equipment in case of possible contact with the product (see section 8).

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

The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11. Further symptoms are possible.

4.3. Indication of any immediate medical attention and special treatment needed Hints for the physician / treatment

Treat symptomatically

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Aalcohol resistant foam, CO2, powders, water spray/mist

Non suitable extinguishing media

water jet

5.2. Special hazards arising from the substance or mixture

In the event of fire the following can be released: Carbon monoxide (CO); Carbon dioxide (CO2); dense black smoke; Exposure to decomposition products may cause a health hazard. Appropriate breathing apparatus may be required.

5.3. Advice for firefighters

Special protective equipment for fire-fighting

Use self-contained breathing apparatus. Wear full chemical protective clothing. Fire fighter's clothing must conform to European standard EN469.

Other information

Cool endangered containers with water spray jet. Do not allow run-off from fire fighting to enter drains or water courses.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel: Keep away sources of ignition. Remove persons to safety. Ensure adequate ventilation. Keep away unprotected persons. Avoid contact with skin, eyes and clothing. Do not

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breathe gas/fumes/vapour/spray. For emergency responders: Wear personal protective equipment. Use breathing apparatus if exposed to vapours/dust/aerosol.

6.2. Environmental precautions

Do not allow to enter drains or waterways. If the product contaminates lakes, rivers or sewage, inform appropriate authorities in accordance with local regulations. If the product contaminates lakes, rivers or sewage, inform appropriate authorities in accordance with local regulations.

6.3. Methods and material for containment and cleaning up

Contain and collect spillage with non-combustible absorbent materials, e.g. sand, earth, vermiculite, diatomaceous earth and place in container for disposal according to local regulations (see section 13). Clean preferably with a detergent - avoid use of solvents.

6.4. Reference to other sections

Information regarding personal protective measures, see Section 8. Information regarding waste disposal, see Section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Prevent the creation of flammable or explosive concentrations of vapour in air and avoid vapour concentration higher than the occupational exposure limits. Provide good ventilation of working area (local exhaust ventilation if necessary). In addition, the product should only be used in areas from which all naked lights and other sources of ignition have been excluded. Electrical equipment should be protected to the appropriate standard. Operators should wear anti-static footwear and clothing and floors should be of the conducting type. Isolate from sources of heat, sparks and open flame. Avoid skin and eye contact. Avoid the inhalation of particulates and spray mist arising from the application of this mixture. Smoking, eating and drinking shall be prohibited in application area. For personal protection see Section 8. Comply with the health and safety at work laws. Do not allow to enter drains or water courses.

Advice on protection against fire and explosion

Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50 °C. Do not pierce or burn, even after use. Keep away from sources of ignition - No smoking. Take action to prevent static discharges. Do not spray on a naked flame or any incandescent material. Vapours are heavier than air and may spread along floors. Vapours may form explosive mixtures with air. With conveying and handling possibilty of electrostatic charges.

Classification of fires / temperature class / Ignition group / Dust explosion class

Classification of fires C (Flammable gases)

Temperature class T2

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Store in accordance with national regulation

Further information on storage conditions

Observe label precautions. Keep in original containers. Keep container dry in a cool, well-ventilated place. Protect from direct sunlight. Protect from warmth. Keep away from sources of ignition. No smoking. Prevent unauthorised access.

7.3. Specific end use(s)

Colour spray

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limit values

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Ethyl acetate	EU40			
List Type	EH40 WEL			
Value	VVEL		200	ppm(V
Short term exposure limit			400	ppm(V
Status: 2011			400	ppiii(v
Ethyl acetate				
List	EU	4 0		0
Value	734	mg/m³	200	ppm(V
Short term exposure limit Remarks: (EU) 2017/164	1468	mg/m³	400	ppm(V
2-Methoxy-1-methylethyl ace	tate			
List	EH40			
Type	WEL			
Value	274	mg/m³	50	ppm(√
Short term exposure limit	548	mg/m³	100	ppm(\
Skin resorption / sensibilisation				
2-Methoxy-1-methylethyl ace				
List	EU 275	m a/m 3	ΕO	nnm/\
Value	275 550	mg/m³	50 100	ppm(\
Short term exposure limit Skin resorption / sensibilisation		mg/m³ Remarks: 2000/39/EG	100	ppm(\
Propan-2-ol	- ,			
List	EH40			
Type	WEL			
Value	999	mg/m³	400	ppm(\
Short term exposure limit	1250	mg/m³	500	ppm(\
Status: 2011				
2-Butoxyethanol	5 1140			
List	EH40			
Type	WEL		05	n n n ()
Value Short term exposure limit			25 50	ppm(\
Skin resorption / sensibilisation	on: Sk: 2011		50	ppm(\
2-Butoxyethanol				
List	EU			
Value	98	mg/m³	20	ppm(\
Short term exposure limit	246	mg/m³	50	ppm(\
Skin resorption / sensibilisation		Remarks: 2000/39/EG		
Derived No/Minimal Effect L	_evels (DN	EL/DMEL)		
Ethyl acetate		=,,=		
Type of value		No Effect Level (DNEL))	
Reference group	Worker			
Duration of exposure	Acute	-		
Route of exposure	inhalativ			ma/m³
Concentration		1468		mg/m³
Type of value	Derived	No Effect Level (DNEL)	
Reference group	Worker		•	
Duration of avacaura	A auta			

Type of value Derived No Effect Level (DNEL)

Duration of exposure

Route of exposure

Mode of action

Concentration

inhalative

Local effects

1468

Acute

g/m³

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Reference group Worker Route of exposure dermal

Mode of action Chronic effects

Concentration 63 mg/kg

Type of value Derived No Effect Level (DNEL)

Reference group Worker
Route of exposure inhalative
Mode of action Chronic effects

Concentration 734 mg/m³

Type of value Derived No Effect Level (DNEL)

Reference group Worker
Route of exposure inhalative
Mode of action Chronic effects
Concentration 734

oncentration 734 mg/m³

Type of value Derived No Effect Level (DNEL)

Reference group

Route of exposure

Mode of action

Consumer
inhalative

Acute effects

Concentration

734

Concentration 734 mg/m³

Type of value Derived No Effect Level (DNEL)

Reference group Consumer
Route of exposure inhalative
Mode of action Local effects
Concentration 734

Concentration 734 mg/m³

Type of value Derived No Effect Level (DNEL)

Reference group Consumer
Route of exposure dermal
Mode of action Chronic effects

Concentration 37 mg/kg

Type of value Derived No Effect Level (DNEL)

Reference group Consumer
Route of exposure inhalative
Mode of action Chronic effects
Concentration 367

Concentration 367 mg/m³

Type of value Derived No Effect Level (DNEL)

Reference group Consumer Route of exposure oral

Mode of action Chronic effects

Concentration 4,5 mg/m³

Type of value Derived No Effect Level (DNEL)

Reference group Consumer
Route of exposure inhalative
Mode of action Local effects

Concentration 367 mg/m³

Zinc powder - Zinc dust

Type of value Derived No Effect Level (DNEL)

Reference group Worker
Duration of exposure Long term

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Route of exposure inhalative

Mode of action Systemic effects

Concentration 5 mg/m³

Type of value Derived No Effect Level (DNEL)

Reference group Worker
Duration of exposure Long term
Route of exposure dermal

Mode of action Systemic effects

Concentration 83 mg/kg

Type of value Derived No Effect Level (DNEL)

Reference group Consumer
Duration of exposure Long term
Route of exposure oral

Mode of action Systemic effects

Concentration 0,83 mg/kg

Type of value Derived No Effect Level (DNEL)

Reference group Consumer
Duration of exposure Long term
Route of exposure dermal

Mode of action Systemic effects

Concentration 83 mg/kg

Type of value Derived No Effect Level (DNEL)

Reference group

Duration of exposure

Route of exposure

Mode of action

Consumer

Long term

inhalative

Systemic effects

Concentration 2,5 mg/m³

2-Methoxy-1-methylethyl acetate

Type of value Derived No Effect Level (DNEL)

Reference group Worker
Duration of exposure Long term
Route of exposure dermal

Mode of action Systemic effects

Concentration 796 mg/kg/d

Type of value Derived No Effect Level (DNEL)

Reference group Worker
Duration of exposure Long term
Route of exposure inhalative
Mode of action Systemic effects

Concentration 275 mg/m³

Type of value Derived No Effect Level (DNEL)

Reference group Consumer
Duration of exposure Long term
Route of exposure dermal

Mode of action Systemic effects

Concentration 320 mg/kg/d

Type of value Derived No Effect Level (DNEL)

Reference group Consumer
Duration of exposure Long term

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Route of exposure inhalative

Mode of action Systemic effects

Concentration 33 mg/m³

Type of value Derived No Effect Level (DNEL)

Reference group

Duration of exposure

Route of exposure

Mode of action

Consumer

Long term

inhalative

Local effects

Concentration 33 mg/m³

Type of value Derived No Effect Level (DNEL)

Reference group Consumer
Duration of exposure Long term
Route of exposure oral

Mode of action Systemic effects

Concentration 36 mg/kg/d

Type of value Derived No Effect Level (DNEL)

Reference group

Duration of exposure

Route of exposure

Mode of action

Consentration

Worker

Lifetime
inhalative
Local effects

Concentration 550 mg/m³

Propan-2-ol

Type of value Derived No Effect Level (DNEL)

Reference group Worker
Duration of exposure Long term
Route of exposure inhalative
Mode of action Systemic effects

Concentration 500 mg/m³

Type of value Derived No Effect Level (DNEL)

Reference group Worker
Duration of exposure Long term
Route of exposure dermal

Mode of action Systemic effects

Concentration 888 mg/kg/d

Type of value Derived No Effect Level (DNEL)

Reference group General Population

Duration of exposure Long term
Route of exposure inhalative

Mode of action Systemic effects

Concentration 89 mg/m³

Type of value Derived No Effect Level (DNEL)

Reference group General Population

Duration of exposure

Route of exposure

Confident operation

Long term

dermal

Mode of action Systemic effects

Concentration 319 mg/kg/d

Type of value Derived No Effect Level (DNEL)

Reference group General Population

Duration of exposure Long term

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Route of exposure oral

Mode of action Systemic effects

Concentration 26 mg/kg/d

2-Butoxyethanol

Type of value Derived No Effect Level (DNEL)

Reference group Worker
Duration of exposure Acute
Route of exposure dermal

Mode of action Systemic effects

Concentration 89 mg/kg

Type of value Derived No Effect Level (DNEL)

Reference group Worker
Duration of exposure Short term
Route of exposure inhalative
Mode of action Systemic effects

Concentration 1091 mg/m³

Type of value Derived No Effect Level (DNEL)

Reference group General Population

Duration of exposure

Route of exposure

Mode of action

Consequential

Concentration 147 mg/m³

Type of value Derived No Effect Level (DNEL)

Reference group Worker
Duration of exposure Long term
Route of exposure dermal

Mode of action Systemic effects

Concentration 125 mg/kg

Type of value Derived No Effect Level (DNEL)

Reference group Worker
Duration of exposure Long term
Route of exposure inhalative
Mode of action Systemic effects

Concentration 98 mg/m³

Type of value Derived No Effect Level (DNEL)

Reference group Consumer
Duration of exposure Acute
Route of exposure dermal

Mode of action Systemic effects

Concentration 89,5 mg/kg

Type of value Derived No Effect Level (DNEL)

Reference group Consumer

Duration of exposure Acute

Route of exposure inhalative

Mode of action Systemic effects

Concentration 426 mg/m³

Type of value Derived No Effect Level (DNEL)

Reference group Consumer Duration of exposure Acute

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Route of exposure oral

Mode of action Systemic effects

Concentration 26.7 mg/kg

Type of value Derived No Effect Level (DNEL)

Reference group Consumer Duration of exposure Acute Route of exposure inhalative Mode of action Local effects

Concentration 147 mg/kg

Type of value Derived No Effect Level (DNEL)

Reference group Consumer Duration of exposure Long term Route of exposure dermal

Mode of action Systemic effects

Concentration 75 mg/kg

Type of value Derived No Effect Level (DNEL)

Reference group Consumer Duration of exposure Long term Route of exposure inhalative

Mode of action Systemic effects

Concentration 59 mg/m³

Type of value Derived No Effect Level (DNEL)

Reference group Consumer Duration of exposure Long term Route of exposure oral

Mode of action Systemic effects

Concentration 6,3 mg/kg

Copper

Derived No Effect Level (DNEL) Type of value

Reference group Worker Duration of exposure Short term Route of exposure dermal

Systemic effects Mode of action Concentration

273 mg/kg

Derived No Effect Level (DNEL) Type of value

Reference group Worker Duration of exposure Short term Route of exposure inhalative Mode of action Systemic effects

Concentration 20 mg/m³

Type of value Derived No Effect Level (DNEL)

Reference group Worker Duration of exposure Long term Route of exposure dermal

Mode of action Systemic effects

Concentration 137 mg/kg

Type of value Derived No Effect Level (DNEL)

Reference group Consumer Duration of exposure Short term

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Route of exposure dermal

Mode of action Systemic effects

Concentration 273 mg/kg

Type of value Derived No Effect Level (DNEL)

Reference group Consumer

Duration of exposure Short term

Route of exposure inhalative

Mode of action Systemic effects

Concentration 20 mg/m³

Predicted No Effect Concentration (PNEC)

Ethyl acetate

Type of value PNEC Type Water

Concentration 0,26 mg/l

Type of value PNEC Type Aquatic

Concentration 0,026 mg/l

Type of value PNEC

Type Freshwater sediment

Concentration 0,34 mg/kg

Type of value PNEC

Type Marine sediment

Concentration 0,034 mg/kg

Type of value PNEC Type Soil

Concentration 0,22 mg/kg

Zinc powder - Zinc dust

Type of value PNEC
Type Freshwater
Concentration 0,020

Concentration 0,0206 mg/l

Type of value PNEC

Type Freshwater sediment

Concentration 117,8 mg/kg

Type of value PNEC Saltwater

Concentration 0,0061 mg/l

Type of value PNEC

Type Sewage treatment plant (STP)

Concentration 0,052 mg/l

Type of value PNEC Type Soil

Concentration 35,6 mg/kg

Type of value PNEC

Type Marine sediment

Concentration 56,5 mg/kg

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2-Methoxy-1-methylethyl acetate

Reference substance 2-Methoxy-1-methylethyl acetate

Type of value PNEC
Type Freshwater
Concentration 0,635

5 mg/l

Type of value PNEC

Type Freshwater sediment

Concentration 3,29 mg/kg

Type of value PNEC Type Soil

Concentration 0,29 mg/kg

Source Literature value

Type of value PNEC

Type Sewage treatment plant (STP)

Concentration 100 mg/l

Source Literature value

Type of value PNEC

Type Marine sediment

Concentration 0,329 mg/kg

Source Literature value

Type of value PNEC
Type Saltwater

Concentration 0,0635 mg/l

Type of value PNEC

Type Water (intermittent release)

Concentration 6,35 mg/l

Propan-2-ol

Type of value PNEC Freshwater

Concentration 140,9 mg/l

Type of value PNEC Saltwater

Concentration 140,9 mg/l

Type of value PNEC

Type Sewage treatment plant (STP)

Concentration 2251 mg/l

Type of value PNEC

Type Freshwater sediment

Concentration 552 mg/kg

Type of value PNEC

Type Marine sediment

Concentration 552 mg/kg

Type of value PNEC Type Soil

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Concentration 28 mg/kg

2-Butoxyethanol

Type of value PNEC
Type Freshwater

Concentration 8,8 mg/l

Type of value PNEC Type Soil

Concentration 2,8 mg/kg

Type of value PNEC

Type Freshwater sediment

Concentration 34,6 mg/kg

Type of value PNEC

Type Sewage treatment plant (STP)

Concentration 463 mg/l

Type of value PNEC Saltwater

Concentration 0,88 mg/l

Type of value PNEC

Type Marine sediment

Concentration 3,46 mg/kg

Copper

Type of value PNEC Type Soil

Concentration 65,5 mg/kg

Type of value PNEC Freshwater

Concentration 0,0078 mg/l

Type of value PNEC

Type Freshwater sediment

Concentration 87 mg/kg

Type of value PNEC Saltwater

Concentration 0,0052 mg/l

Type of value PNEC

Type Marine sediment

Concentration 676 mg/kg

Type of value PNEC

Type Sewage treatment plant (STP)

Concentration 0,230 mg/l

8.2. Exposure controls

Exposure controls

Provide adequate ventilation. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of

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particulates and solvent vapour below the OEL, suitable respiratory protection must be worn.

General protective and hygiene measures

Observe the usual precautions for handling chemicals. Keep away from food, drink and animal feedingstuffs. Do not inhale gases/vapours/aerosols. Avoid contact with skin and eyes. Wash hands and / or face before breaks and after work. Take off dirty, soaked clothes immediately. Wash soiled clothing before re-use. Store work clothing separately.

Respiratory protection

If workers could be exposed to concentrations above the exposure limit they should use a respirator to EN 140, fitted with a filter suitable for both particulates and vapours, to EN 14387, with an assigned protection factor of at least 10 (e.g. A2P3). Selection of any respiratory protective equipment should ensure that it is adequate to reduce exposure to protect the worker's health and is suitable for the wearer, task and environment, including consideration of the facial features of the wearer.

Hand protection

There is no one glove material or combination of materials that will give unlimited resistance to any individual or combination of chemicals.

Use gloves tested according to EN 374. For prolonged or repeated handling, use Appropriate Material Butyl rubber

Material thickness > 0,7 mm Breakthrough time > 30 min

The breakthrough time must be greater than the end use time of the product.

The instructions and information provided by the glove manufacturer on use, storage, maintenance and replacement must be followed.

Gloves should be replaced regularly and if there is any sign of damage to the glove material.

The performance or effectiveness of the glove may be reduced by physical/ chemical damage and poor maintenance.

Barrier creams may help to protect the exposed areas of the skin, they should however not be applied once exposure has occurred.

Barrier creams may help to protect the exposed areas of the skin, they should however not be applied once exposure has occurred.

Eye protection

Use safety eyewear tested according to EN 166 designed to protect against splash of liquids.

Body protection

Personnel should wear anti-static clothing made of natural fibre or of high temperature resistant synthetic fibre. Cotton or cotton/synthetic overalls or coveralls are normally suitable.

Environmental exposure controls

Do not allow to enter drains or water courses. If the legally prescribed emission limits are exceeded, a suitable exhaust air purification system must be installed.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state Aerosol
Colour red
Odour solvent-like

Melting point

Remarks Not applicable due to nature of the product

Freezing point

Remarks Not applicable due to nature of the product

Boiling point or initial boiling point and boiling range

Reference substance Ethyl acetate

Value appr. 76 °C

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Pressure 1.013 hPa

Source Literature value

Flammability

Extremely flammable aerosol.

Upper and lower explosive limits

Reference substance Propan-2-ol Lower explosion limit

%(V) appr. 2

Reference substance Propan-2-ol

Upper explosion limit %(V) appr. 12,1

Source Literature value

Flash point

°C Value 0

Auto-ignition temperature

°C Value 425 appr.

Source Literature value

Decomposition temperature

Remarks not determined

pH value

Remarks Not applicable

Remarks substance/mixture is non-soluble (in water)

Viscosity Remarks

> Remarks not determined

Solubility(ies)

Remarks Not applicable due to nature of the product

Partition coefficient n-octanol/water (log value)

Not applicable due to nature of the product Remarks

Vapour pressure

Remarks Not applicable due to nature of the product

Density and/or relative density

Value 0,75 g/cm³

Temperature 20 °C

Relative vapour density

Value 1

Particle characteristics

Remarks Not applicable due to nature of the product

9.2. Other information

Other information

The physical specifications are approximate values and refer to the used safety relevant component(s).

SECTION 10: Stability and reactivity

10.1. Reactivity

No hazardous reactions when stored and handled according to prescribed instructions.

10.2. Chemical stability

Stable at temperatures below 50 °C.

10.3. Possibility of hazardous reactions

Keep away from oxidising agents, strongly alkaline and strongly acid materials in order to avoid

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exothermic reactions.

10.4. Conditions to avoid

Protect from heat and direct sunlight. When exposed to high temperatures may produce hazardous decomposition products. Avoid damage to the aerosol containers, for example by falling down. Never pierce aerosol containers, even after use. Avoid high concentrations of solvent vapours. Observe the notes on ventilation (section 8).

10.5. Incompatible materials

Oxidising agents, strongly alkaline substances, Strongly acidic substances

10.6. Hazardous decomposition products

See chapter 5.2 (Firefighting measures - Special hazards arising from the substance or mixture). No decomposition during or intended use (see section 1).

SECTION 11: Toxicological information

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

Acute oral toxicity

ATE > 2.000 mg/kg Method calculated value (Regulation (EC) No. 1272/2008)

Acute oral toxicity (Components)

Zinc powder - Zinc dust

Species rat

LD50 > 2000 mg/kg

2-Butoxyethanol

ATE 1200 mg/kg

Acute dermal toxicity

ATE > 2.000 mg/kg
Method calculated value (Regulation (EC) No. 1272/2008)

Acute inhalational toxicity

ATE > 20 mg/l

Administration/Form Vapors

Method calculated value (Regulation (EC) No. 1272/2008)

ATE > 5 mg/l

Administration/Form Dust/Mist

Method calculated value (Regulation (EC) No. 1272/2008)

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

Acute inhalative toxicity (Components)

Zinc powder - Zinc dust

Species rat

LC50 5,41 mg/l

Duration of exposure 4 h

Administration/Form Dust/Mist

Skin corrosion/irritation

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

Skin corrosion/irritation (Components)

2-Methoxy-1-methylethyl acetate

Species rabbit evaluation non-irritant

Serious eye damage/irritation

evaluation irritant

Remarks The classification criteria are met.

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Sensitization

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

Sensitization (Components)

2-Butoxyethanol

Route of exposure dermal guinea pig evaluation non-sensitizing

Mutagenicity

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

Reproductive toxicity

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

Carcinogenicity

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

Specific Target Organ Toxicity (STOT)

Single exposure

Remarks The classification criteria are met. evaluation May cause drowsiness or dizziness.

Repeated exposure

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

Aspiration hazard

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

11.2 Information on other hazards

Endocrine disrupting properties with respect to humans

The product does not contain a substance that has endocrine disrupting properties with respect to humans.

Experience in practice

Exposure to component solvents vapours concentration in excess of the stated occupational exposure limit may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on kidney, liver and central nervous system. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness. Solvents may cause some of the above effects by absorption through the skin. Repeated or prolonged contact with the mixture may cause removal of natural fat from the skin resulting in non-allergic contact dermatitis and absorption through the skin. The liquid splashed in the eyes may cause irritation. Ingestion may cause nausea, diarrhoea and vomiting.

Other information

There are no data available on the mixture itself.

The mixture has been assessed following the additivity method of the CLP Regulation (EC) No 1272/2008 and classified for toxicological hazards accordingly.

SECTION 12: Ecological information

12.1. Toxicity

General information

There are no data available on the mixture itself.Do not allow to enter drains or water courses.The mixture has been assessed following the summation method of the CLP Regulation (EC) No 1272/2008 and is classified for eco-toxicological properties accordingly. See Sections 2 and 3 for details.

12.2. Persistence and degradability

General information

There are no data available on the mixture itself.

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12.3. Bioaccumulative potential

General information

There are no data available on the mixture itself.

Partition coefficient n-octanol/water (log value)

Remarks Not applicable due to nature of the product

12.4. Mobility in soil

General information

There are no data available on the mixture itself.

12.5. Results of PBT and vPvB assessment

General information

There are no data available on the mixture itself.

Results of PBT and vPvB assessment

The product contains no PBT substances The product contains no vPvB substances.

12.6 Endocrine disrupting properties

Endocrine disrupting properties with respect to the envrionment

The product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms.

12.7. Other adverse effects

General information

There are no data available on the mixture itself.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations for the product

Do not allow to enter drains or water courses.

Wastes and emptied containers should be classified in accordance with relevant national regulation.

The European Waste Catalogue classification of this product, when disposed of as waste is

EWC waste code 08 01 11* waste paint and varnish containing organic solvents or other

dangerous substances

If this product is mixed with other wastes, the original waste product code may no longer apply and the appropriate code should be assigned.

For further information contact your local waste authority.

Disposal recommendations for packaging

Using information provided in this safety data sheet, advice should be obtained from the relevant waste authority on the classification of empty containers.

Empty containers must be scrapped or reconditioned.

Not emptied containers are hazardous waste.

EWC waste code 15 01 10* packaging containing residues of or contaminated by

dangerous substances

SECTION 14: Transport information

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	Land transport ADR/RID	Marine transport IMDG/GGVSee	Air transport ICAO/IATA
Tunnel restriction code	D		
14.1. UN number	1950	1950	1950
14.2. UN proper shipping name	AEROSOLS	AEROSOLS	Aerosols, flammable
14.3. Transport hazard class(es)	2	2.1	2.1
Label	8	0	8
14.4. Packing group	-	-	-
Limited Quantity	1	11	
Transport category	2		
14.5. Environmental hazards	-		

Information for all modes of transport

14.6. Special precautions for user

Transport within the user's premises:

Always transport in closed containers that are upright and secure.

Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Other information

14.7 Maritime transport in bulk according to IMO instruments

Not applicable

SECTION 15: Regulatory information ***

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

Major-accident categories acc. 96/82/EC

Category	9.11	Dangerous for environment	200.000	kg	500.000	kg
Category	8	Extremely flammable	10.000	kg	50.000	kg

VOC ***

VOC (EU) 84,08 % VOC (EU) 630,6 g/

Other regulations, restrictions and prohibition regulations

The product complies with the requirements of the Persistent Organic Pollutants Regulation 2019/1021.

The product complies with the requirements of Regulation 1005/2009 on substances that deplete the ozone layer.

The product is not subject to Regulation 649/2012 on the export and import of dangerous chemicals.

Other information

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The product does not contain substances of very high concern (SVHC).

15.2. Chemical safety assessment

For this preparation a chemical safety assessment has not been carried out.

SECTION 16: Other information

Hazard statements listed in Chapter 3

H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.

H336 May cause drowsiness or dizziness.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects. Toxic to aquatic life with long lasting effects. H411

CLP categories listed in Chapter 3

Acute Tox. 4 Acute toxicity, Category 4

Aquatic Acute 1 Hazardous to the aquatic environment, acute, Category 1 Aquatic Chronic 1 Hazardous to the aquatic environment, chronic, Category 1 Aquatic Chronic 2 Hazardous to the aquatic environment, chronic, Category 2

Eve Irrit. 2 Eye irritation, Category 2 Flammable liquid, Category 2 Flam. Liq. 2 Flam. Liq. 3 Flammable liquid, Category 3 Skin Irrit. 2 Skin irritation, Category 2

STOT SE 3 Specific target organ toxicity - single exposure, Category 3

Abbreviations

ADR: Accord européen relatif au transport international des marchandises Dangereuses par Route RID: Règlement concernant le transport international ferroviaire de marchandises dangereuses

GGVSee: Gefahrgutverordnung See

IMDG: International Maritime Code for Dangerous Goods

ICAO: International Civil Aviation Organization IATA: International Air Transport Association

CAS: Chemical Abstracts Service

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

EmS: Emergency Schedules

AICS: Australian Inventory of Chemical Substances MITI: Ministry of International Trade and Industry (Japan)

TSCA: Toxic Substances Control Act (USA)

VOC: Volatile Organic Compound

LD: Lethal dose

LC: Lethal concentration

SVHC: Substances of very high concern

DNEL: Derived no effect level

PNEC: Predicted no effect concentration

UN: United Nations

OEL: Occupational exposure limit

Supplemental information

Relevant changes compared with the previous version of the safety data sheet are marked with: *** This information is based on our present state of knowledge. However, it should not constitute a quarantee for any specific product properties and shall not establish a legally valid relationship. The information in this Safety Data Sheet is based on the present state of knowledge and current

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legislation.

It provides guidance on health, safety and environmental aspects of the product and should not be construed as any guarantee of technical performance or suitability for particular applications.

The product should not be used for purposes other than those shown in Section 1 without first referring to the supplier and obtaining written handling instructions.

As the specific conditions of use of the product are outside the supplier's control, the user is responsible for ensuring that the requirements of relevant legislation are complied with.

The information contained in this safety data sheet does not constitute the user's own assessment of workplace risks, as required by other health and safety legislation.