

according to Regulation (EC) No 1907/2006 (REACH) as amended

BOLZTHERM AW-65

Creation date 19th November 2022

Revision date Version 1.0

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

L.1. Product identifier BOLZTHERM AW-65

Substance / mixture substance

Chemical name Dibenzylbenzene, ar-methyl derivative

CAS number 53585-53-8 EC (EINECS) number 258-649-2

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

Substance's intended use

Heat transferring fluid. Industrial uses. Commercial uses. **The use descriptors**

PC 16 Heat transfer fluids

Substance uses advised against

The product should not be used in ways other than those referred in Section 1. Do not use for private purposes.

1.3. Details of the supplier of the safety data sheet

Supplier

Name or trade name BOLZTHERM GmbH

Address Opelstraße 12, Gronau, 48599

Germany

Phone +49 (0) 2562 93 52 923
E-mail info@bolztherm.com
Web address https://bolztherm.com

Competent person responsible for the safety data sheet

Name BOLZTHERM GmbH E-mail info@bolztherm.com

1.4. Emergency telephone number

GGIZ +49-361-730730; 24 h, Monday - Sunday

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification of the substance in accordance with Regulation (EC) No 1272/2008

The substance is classified as dangerous.

Asp. Tox. 1, H304 Repr. 1B, H360FD

Aguatic Chronic 1, H410 (multiplying factor = 10)

Most serious adverse effects on human health and the environment

May be fatal if swallowed and enters airways. May damage fertility. May damage the unborn child. Very toxic to aquatic life with long lasting effects.

2.2. Label elements

Hazard pictogram





Signal word

Danger

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Dangerous substance

Dibenzylbenzene, ar-methyl derivative (EC: 258-649-2; CAS: 53585-53-8)

Hazard statements

H304 May be fatal if swallowed and enters airways.
H360FD May damage fertility. May damage the unborn child.
H410 Very toxic to aquatic life with long lasting effects.

Precautionary statements

P201 Obtain special instructions before use.
P273 Avoid release to the environment.

P280 Wear protective gloves.

P301+P310 IF SWALLOWED: Immediately call a doctor.

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

P331 Do NOT induce vomiting.

P391 Collect spillage. P405 Store locked up.

P501 Dispose of container to according to local/by regional/according to national/by

international regulations.

2.3. Other hazards

The substance does not have endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605. Substance does not meet the criteria for PBT or vPvB in accordance with Annex XIII of Regulation (EC) No. 1907/2006 (REACH) as amended. Does not contain any PMT or vPvM components.

SECTION 3: Composition/information on ingredients

3.1. Substances

Chemical characterization

The substance specified below.

Identification numbers	Substance name	Content in % weight	Classification according to Regulation (EC) No 1272/2008	Note
CAS: 53585-53-8 EC: 258-649-2	substance main component Dibenzylbenzene, ar-methyl derivative		Asp. Tox. 1, H304 Repr. 1B, H360FD Aquatic Chronic 1, H410 (M=10)	

Full text of all classifications and hazard statements is given in the section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

Do not perform artificial respiration without self-protection (e.g. a mask). Take care of your own safety. If any health problems are manifested or if in doubt, inform a doctor and show him information from this safety data sheet. If unconscious, put the person in the stabilized (recovery) position on his side with his head slightly bent backwards and make sure that airways are free; never induce vomiting. If the person vomits by himself, make sure that the vomit is not inhaled. In life threatening conditions first of all provide resuscitation of the affected person and ensure medical assistance. Respiratory arrest - provide artificial respiration immediately. Cardiac arrest - provide indirect cardiac massage immediately.



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If inhaled

Terminate the exposure immediately; move the affected person to fresh air. Take care of your own safety, do not let the affected person walk! Beware of the contaminated clothes. Depending on the situation, call the medical rescue service and ensure medical treatment considering the frequent need of further observation for at least 24 hours.

If on skin

Take off contaminated clothing. Wash the affected area with plenty of water, lukewarm if possible. Soap, soap solution or shampoo should be used if there is no skin injury. Provide medical treatment if skin irritation persists.

If in eyes

Rinse eyes immediately with a flow of running water, open the eyelids (also using force if needed); remove contact lenses immediately if worn by the affected person. Rinsing should continue at least for 10 minutes.

If swallowed

Rinse the mouth. No vomiting. To consult a doctor immediately.

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

If inhaled

Cough, headache.

If on skin

Not expected.

If in eyes

Not expected.

If swallowed

Irritation, nausea.

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

Symptomatic treatment.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Alcohol-resistant foam, carbon dioxide, powder, water spray jet, water mist.

Unsuitable extinguishing media

Water - full jet.

5.2. Special hazards arising from the substance or mixture

In the event of fire, carbon monoxide, carbon dioxide and other toxic gases may arise. Inhalation of hazardous degradation (pyrolysis) products may cause serious health damage.

5.3. Advice for firefighters

Self-Contained Breathing Apparatus (SCBA) with a chemical protection suit only where personal (close) contact is likely. Use a self-contained breathing apparatus and full-body protective clothing. Do not allow run-off of contaminated fire extinguishing material to enter drains or surface and ground water.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Use personal protective equipment for work. Follow the instructions in the Sections 7 and 8. Do not inhale mist/vapours/spray.

6.2. Environmental precautions

Prevent contamination of the soil and entering surface or ground water. Do not allow to enter drains.



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6.3. Methods and material for containment and cleaning up

Spilled product should be covered with suitable (non-flammable) absorbing material (sand, diatomaceous earth, earth and other suitable absorption materials); to be contained in well closed containers and removed as per the Section 13. In the event of leakage of the substantial amount of the product, inform fire brigade and other competent bodies. After removal of the product, wash the contaminated site with plenty of water. Do not use solvents.

6.4. Reference to other sections

See the Section 7, 8 and 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Do not inhale mist/vapours/spray. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as per Section 8. Observe valid legal regulations on safety and health protection. Avoid release to the environment.

7.2. Conditions for safe storage, including any incompatibilities

Store in tightly closed containers in cold, dry and well ventilated areas designated for this purpose. Store locked up.

Storage class

6.1C - Combustible toxic substances or substances with chronic effect

7.3. Specific end use(s)

not available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters DNEL

Dibenzylbenzene, ar-methyl derivative						
Workers / consumers	Route of exposure	Value	Effect			
Workers	Inhalation	0.259 mg/m ³	Chronic effects systemic			
Workers	Dermal	0.37 mg/kg bw/day	Chronic effects systemic			
Consumers	Inhalation	64 μg/m³	Chronic effects systemic			
Consumers	Dermal	0.185 µg/kg bw/24h	Chronic effects systemic			
Consumers	Oral	18.5 μg/kg/24h	Chronic effects systemic			

PNEC

Dibenzylbenzene, ar-methyl derivative				
Route of exposure	Value			
Freshwater environment	0.014 μg/l			
Marine water	0.014 μg/l			
Freshwater sediment	0.05 mg/kg of dry substance			
Sea sediments	0.005 mg/kg of dry substance			
Soil (agricultural)	2 mg/kg of dry substance			
Microorganisms in sewage treatment	1000 mg/l			



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8.2. Exposure controls

Follow the usual measures intended for health protection at work and especially for good ventilation. This can be achieved only by local suction or efficient general ventilation. Do not eat, drink and smoke during work. Wash your hands thoroughly with water and soap after work and before breaks for a meal and rest. Wear cold insulating gloves and either face shield or eye protection.

Eye/face protection

EN166 - Personal Eye Protection Standard.

Skin protection

Certified protective gloves are to be worn (EN 374). Contaminated skin should be washed thoroughly.

Respiratory protection

Aerosol or fog formation: filter device (full mask or mouthpiece set) with filter: A2, A2/P2, Abek

Thermal hazard

Not available.

Environmental exposure controls

Observe usual measures for protection of the environment, see Section 6.2. Collect spillage.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state liquid

Colour data not available

color intensity light
Odour specific

Melting point/freezing point <-35 °C (ISO 3016)

Boiling point or initial boiling point and boiling range 390 °C

Flammability data not available

Lower and upper explosion limit data not available Flash point 200 °C (ISO 2719)

Auto-ignition temperature 500 °C (DIN 51794)
Decomposition temperature data not available
pH data not available

Kinematic viscosity 17 mm²/s at 40 °C Solubility in water insoluble

Partition coefficient n-octanol/water (log value) >6

Vapour pressure <0.1 kPa at 20 °C

Density and/or relative density

Density 1044 kg/m³ at 20 °C Relative vapour density data not available Particle characteristics data not available

9.2. Other information

not available

SECTION 10: Stability and reactivity

10.1. Reactivity

This material is non-reactive under normal environmental conditions.

10.2. Chemical stability

The product is stable under normal conditions.

10.3. Possibility of hazardous reactions

Unknown.



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10.4. Conditions to avoid

The product is stable and no degradation occurs under normal use. Protect against flames, sparks, overheating and against frost.

10.5. Incompatible materials

Protect against strong acids, bases and oxidizing agents.

10.6. Hazardous decomposition products

Not developed under normal uses. Dangerous outcomes such as carbon monoxide and carbon dioxide are formed at high temperature and in fire.

SECTION 11: Toxicological information

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

No toxicological data is available for the substance.

Acute toxicity

Based on available data the classification criteria are not met.

Dibenzylbenzene, ar-methyl derivative						
Route of exposure	Parameter	Method	Value	Exposure time	Species	Sex
Oral	LD50	OECD 401	>5000 mg/kg		Rat (Rattus norvegicus)	BRO
Dermal	LD50	OECD 402	>2000 mg/kg		Rabbit	GRI

Skin corrosion/irritation

No data available for the substance. Based on available data the classification criteria are not met.

Serious eye damage/irritation

No data available for the substance. Based on available data the classification criteria are not met.

Respiratory or skin sensitisation

No data available for the substance. Based on available data the classification criteria are not met.

Germ cell mutagenicity

No data available for the substance. Based on available data the classification criteria are not met.

Carcinogenicity

No data available for the substance. Based on available data the classification criteria are not met.

Reproductive toxicity

May damage fertility. May damage the unborn child.

Dibenzylber	Dibenzylbenzene, ar-methyl derivative						
Effect	Parameter	Method	Value	Result	Species	Sex	
Effects on fertility	NOAEL (P)	OECD 421	250 mg/kg bw/day		Rat (Rattus norvegicus)	F/M	
Effects on fertility	NOEL	OECD 421	250 mg/kg		Rat (Rattus norvegicus)	F/M	
Effects on fertility	NOAEL (F2)	OECD 421	80 mg/kg bw		Rat (Rattus norvegicus)	F/M	



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Dibenzylbenzene, ar-methyl derivative							
Effect	Parameter	Method	Value	Result	Species	Sex	
Developmental toxicity	NOAEL	OECD 414	75 mg/kg		Rabbit	F	
Developmental toxicity	LOAEL	OECD 414	10 mg/kg bw		Rabbit	F	

Toxicity for specific target organ - single exposure

No data available for the substance. Based on available data the classification criteria are not met.

Toxicity for specific target organ - repeated exposure

No data available for the substance. Based on available data the classification criteria are not met.

Repeated dose toxicity

Dibenzylbenzene, ar-methyl derivative							
Route of exposure	Parameter	Result	Method	Value	Exposure time	Species	Sex
Oral	NOAEL	No effect	OECD 408	50 mg/kg	120 days	Rat (Rattus norvegicus)	BRO
Oral	LOAEL	No effect	OECD 408	500 mg/kg	120 days	Rat (Rattus norvegicus)	GRU

Aspiration hazard

May be fatal if swallowed and enters airways.

11.2. Information on other hazards

Endocrine disrupting properties

Based on available data the classification criteria are not met. Does not contain any components that may cause endocrine disruption for humans.

Other information

not available

SECTION 12: Ecological information

12.1. Toxicity

Very toxic to aquatic life with long lasting effects.

Acute toxicity

Dibenzylbenzene, ar-methyl derivative						
Parameter	Value	Exposure time	Species	Environment		
LC50	>0.05 mg/l	96 hours	Fish (Oncorhynchus mykiss)			
EC50	>0.016 mg/l	72 hours	Algae (Selenastrum capricornutum)			
LC50	>0.029 mg/l	48 hours	Daphnia (Daphnia magna)			
NOEC	0.0055 mg/l	32 days	Fish (Oncorhynchus mykiss)			



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Dibenzylbenzene, ar-methyl derivative						
Parameter	Value	Exposure time	Species	Environment		
NOEC	0.0014 mg/l	21 days	Daphnia (Daphnia magna)			

12.2. Persistence and degradability

The following data are available.

Biodegradability

Dibenzylbenzene, ar-methyl derivative							
Parameter Value Exposure time Environment Result							
Hardly biodegradable							

12.3. Bioaccumulative potential

No data available for the substance.

12.4. Mobility in soil

Based on available data the classification criteria are not met. Does not contain any PMT or vPvM components.

12.5. Results of PBT and vPvB assessment

Based on available data the classification criteria are not met. Does not contain any PBT or vPvB components.

12.6. Endocrine disrupting properties

Based on available data the classification criteria are not met. Does not contain any components that may cause endocrine disruption in the environment.

12.7. Other adverse effects

Not available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Hazard of environmental contamination; dispose of the waste in accordance with the local and/or national regulations. Any unused product and contaminated packaging should be put in labelled containers for waste collection and submitted for disposal to a person authorised for waste removal (a specialized company) that is entitled for such activity. Do not empty unused product in drainage systems. The product must not be disposed of with municipal waste. Empty containers may be used at waste incinerators to produce energy or deposited in a dump with appropriate classification. Perfectly cleaned containers can be submitted for recycling.

Waste management legislation

Law on the placing on the market, return and high-quality recycling of packaging (Packaging Act - VerpackG) of June 9th, 2021, valid from January 1st, 2022. Ordinance on the European List of Waste (German Waste Catalogue Ordinance -Verordnung über das Europäische Abfallverzeichnis - AVV). Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste, as amended. Decision 2000/532/EC establishing a list of wastes, as amended.

SECTION 14: Transport information

14.1. UN number or ID number

UN 3082

14.2. UN proper shipping name

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Dibenzylbenzene, ar-methyl derivative)

14.3. Transport hazard class(es)

9 Miscellaneous dangerous substances and articles



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14.4. Packing group

TTT

14.5. Environmental hazards

Gewässergefährdend

14.6. Special precautions for user

Reference in the Sections 4 to 8.

14.7. Maritime transport in bulk according to IMO instruments

not relevant

Additional information

Hazard identification No. UN number

Classification code

Safety signs

90 3082

М6

9+hazardous for the environment



Road transport - ADR

Special provisions 274, 335, 375, 601 Limited quantities 5 L

Limited quantities 5 L Excepted quantities E1

Packaging

Packing instructions P001, IBC03, LP01, R001

Special packing provisions PP1
Mixed packing provisions MP19

Portable tanks and bulk containers

Guidelines T4

Special provisions TP1, TP29

ADR tank

Tank code LGBV
Vehicles for tank carriage AT
Transport category 3
Tunnel restriction code (-)

Special provision for

packages V12 loading, unloading and handling CV13



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Railway transport - RID

Special provisions 274, 335, 375, 601

Packaging

Packing instructions P001, IBC03, LP01, R001

Special packing provisions PP1
Mixed packing provisions MP19

Portable tanks and bulk containers

Guidelines T4

Special provisions TP1, TP29

RID Tanks

Tank code LGBV Transport category 3

Special provision for

packages W12 loading, unloading and handling CW13

Air transport - ICAO/IATA

Packaging instructions for limited amount Y964
Packaging instructions passenger 964
Cargo packaging instructions 964

Marine transport - IMDG

EmS (emergency plan) F-A, S-F Marine pollutant Yes

SECTION 15: Regulatory information

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

Prevention Act. Ordinance on facilities for handling water-endangering substances (AwSV) of April 18, 2017. Act for the Protection of Working Youth (Youth Employment Protection Act - JArbSchG). Ordinance on the Protection Against Hazardous Substances (Hazardous Substances Ordinance - GefStoffV). Technical Instructions for Air Quality Control. Act for the Protection Against Dangerous Substances (Chemicals Act - ChemG). Ordinance on the Protection of the Climate from Changes due to the Emission of Certain Fluorinated Greenhouse Gases (Chemicals Climate Protection Ordinance - ChemKlimaschutzV). Act on the Implementation of Occupational Safety Measures to Improve the Safety and Health Protection of Workers at Work. Regulation (EC) No. 1907/2006 of the European Parliament and the Council of December 18, 2006, concerning the Registration, Evaluation, Authorization, and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC, and repealing Regulation (EC) No. 793/93 of the Council, Commission Regulation (EC) No. 1488/94, Council Directive 76/769/EEC, and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC, and 2000/21/EC, as amended. Regulation (EC) No. 1272/2008 of the European Parliament and the Council, as amended. Commission Regulation (EU) 2020/878 of June 18, 2020, amending Annex II of Regulation, Authorization, and Restriction of Chemicals (REACH).

REACH - List of Substances Subject to Authorization (Article 59): Not applicable

Regulation (EC) No. 1005/2009 on substances that deplete the ozone layer: Not applicable

Regulation (EU) 2019/1021 on Persistent Organic Pollutants (recast): Not applicable

Regulation (EC) No. 649/2012 of the European Parliament and the Council on the export and import of dangerous chemicals: Not applicable



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REACH - List of Substances Subject to Authorization (Annex XIV): Not applicable

Relevant Provisions of the European Union (EU) Restrictions under REACH, Annex XVII

Name: Dibenzylbenzene, ar-methyl derivative

"Name according to the list: this product meets the criteria for classification according to Regulation No.

1272/2008/EC" Restriction: R3

Name: Dibenzylbenzene, ar-methyl derivative

"Name according to the list: substances in tattoo inks and permanent makeup"

Restriction: R75

R3.

1. Must not be used in:

Decorative items intended to produce light or color effects (through phase change), such as mood lamps and ashtravs.

Jokes or tricks.

Games for one or more participants, or products intended for use as such, including for decoration.

- 2. Products that do not meet the requirements of paragraph 1 must not be placed on the market.
- 3. Must not be placed on the market if they contain a dye unless for tax reasons and/or perfume, provided they can be used as fuel in decorative oil lamps for the general public and their aspiration is classified as dangerous, marked with H304.
- 4. Decorative oil lamps intended for public sale must not be placed on the market unless they meet the European standard for decorative oil lamps (EN 14059).
- 5. Regardless of other Union provisions on classification, labeling, and packaging of substances and mixtures, suppliers must ensure that the following requirements are met before placing products on the market: a) Oil lamps filled with substances marked with H304 for public sale must be labeled clearly, legibly, and indelibly with: "Lamps filled with this liquid must be stored out of the reach of children" and from December 1, 2010: "Even a small sip of lamp oil or sucking on a wick can cause life-threatening lung damage."
- b) Liquid grill starters marked with H304 for public sale must include the following labeling from December 1, 2010: "Even a small sip of liquid grill starter can cause life-threatening lung damage."
- c) Oil lamps and grill starters marked with H304 for public sale will be packaged in black, opaque containers with a maximum capacity of 1 liter starting from December 1, 2010.

R75:

1. Substances must not be placed on the market in mixtures intended for tattooing purposes, and mixtures containing such substances must not be used for tattooing purposes after January 4, 2022, if the substance or substances in question are present under the following conditions: a) for substances classified as carcinogenic category 1A, 1B, or 2, or as germ cell mutagenic substances category 1A, 1B, or 2 in Annex VI Part 3 of Regulation (EC) No. 1272/2008, if the concentration of the substance in the mixture is at least 0.00005 weight percent; b) for substances classified as reproductive toxicants category 1A, 1B, or 2 in Annex VI Part 3 of Regulation (EC) No. 1272/2008, if the concentration of the substance in the mixture is at least 0.001 weight percent; c) for substances classified as skin sensitizers category 1, 1A, or 1B in Annex VI Part 3 of Regulation (EC) No. 1272/2008, if the concentration of the substance in the mixture is at least 0.001 weight percent; d) for substances classified as skin corrosive substances category 1A, 1B, or 1C, as skin irritants category 2, as serious eye-damaging substances category 1, or as eye irritants category 2 in Annex VI Part 3 of Regulation (EC) No. 1272/2008, if the concentration of the substance in the mixture: i) is at least 0.1 weight percent for use solely as a pH regulator, and ii) is at least 0.01 weight percent in all other cases; e) for substances listed in Annex II of Regulation (EC) No. 1223/2009 (*1), if the concentration of the substance in the mixture is at least 0.00005 weight percent; f) for substances for which Annex IV Column g (Type of product, body parts) of Regulation (EC) No. 1223/2009 specifies at least one of the following conditions: i) 'rinse-off products', ii) 'do not use in products applied to mucous membranes', iii) 'do not use in eye products', if the concentration of the substance in the mixture is at least 0.00005 weight percent; g) for substances for which Annex IV Column h (Maximum



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concentration in the ready-to-use preparation) or Column i (Other) of Regulation (EC) No. 1223/2009 specifies a condition, if the substance is present in the mixture in a concentration or manner that does not correspond to the condition specified in the relevant column; h) for substances listed in Annex 13 of this Annex, if the substance is present in the mixture in at least the concentration established as the limit for that substance in the mentioned annex.

- 2. For the purposes of this entry, the use of a mixture "for tattooing purposes" means injecting or introducing the mixture into the skin, mucous membrane, or eyeball of a person by any method (including methods commonly referred to as permanent makeup, cosmetic tattooing, microblading, and micropigmentation), with the aim of creating a marking or design on the person's body.
- 3. If a substance not listed in Annex 13 meets several of the points in paragraph 1 (letters a to g), the strictest concentration limit set out under the relevant letters shall apply to that substance. If a substance listed in Annex 13 also meets at least one of the points in paragraph 1 (letters a to g), the concentration limit set out in paragraph 1 letter h shall apply to that substance.
- 4. Notwithstanding the above, paragraph 1 does not apply until January 4, 2023, for the following substances: a) Pigment Blue 15:3 (CI 74160, EC No. 205-685-1, CAS No. 147-14-8); b) Pigment Green 7 (CI 74260, EC No. 215 -524-7, CAS No. 1328-53-6).
- 5. If Annex VI Part 3 of Regulation (EC) No. 1272/2008 is amended after January 4, 2021, by the classification or reclassification of a substance in such a way that the substance falls under paragraph 1 letter a, b, c, or d of this entry, or it falls under a different letter than before, and the effective date of the first classification or reclassification is after the date specified in paragraph 1 or paragraph 4 of this entry, this change shall be treated for the purposes of this entry as if it came into effect on the effective date of the first classification or reclassification.
- 6. If Annex II or Annex IV of Regulation (EC) No. 1223/2009 is amended after January 4, 2021, by the inclusion of a substance or by changing the entry for the substance, so that the substance falls under paragraph 1 letters e, f, or g of this entry or falls under another of these letters than before, and the change becomes effective after the date specified in paragraph 1 or paragraph 4 of this entry, the change shall be treated for the purposes of this entry as if it came into effect 18 months after the adoption of the legislative act that brought about the change.
- 7. Suppliers placing a mixture for tattooing purposes on the market must ensure that it is labeled after January 4, 2022, with the following information: a) The indication "Mixture for use in tattoos or permanent makeup"; b) A reference number for the unique identification of the batch; c) A list of ingredients according to the nomenclature in the glossary of common ingredient names introduced by Article 33 of Regulation (EC) No. 1223/2009 or, if no common ingredient name is available, the IUPAC name. If no common ingredient name and no IUPAC name are available, the CAS and EC number. The ingredients must be listed in descending order by weight or volume of the ingredients at the time of formulation. "Ingredient" means any substance added during formulation and present in the mixture for tattooing purposes. Impurities are not considered ingredients. If the designation of a substance used as an ingredient under this entry must already be indicated on the label according to Regulation (EC) No. 1272/2008, it does not need to be listed again according to this Regulation; d) The additional indication "pH regulator" for substances to which paragraph 1 letter d subparagraph i applies; e) The indication "Contains nickel. May cause allergic reactions." if the mixture contains nickel below the concentration limit according to Annex 13; f) The indication "Contains Chromium (VI). May cause allergic reactions." if the mixture contains Chromium (VI) below the concentration limit according to Annex 13; g) Safety instructions for use, as far as they are not already required by Regulation (EC) No. 1272/2008 to be listed on the label. The information must be clearly visible, legible, and permanently affixed. The information must be in the official languages of the Member States in which the mixture is placed on the market, unless the affected Member States specify otherwise. If required by the size of the packaging, the information referred to in subparagraph 1 (except letter a) can be included in the instructions for use instead. Before using a mixture for tattooing purposes, the person using the mixture must provide the person undergoing the procedure with the information mentioned in this paragraph, as indicated on the packaging or in the instructions for use.
- 8. Mixtures that do not carry the indication "Mixture for use in tattoos or permanent makeup" must not be used for tattooing purposes.
- 9. This entry does not apply to substances that are gaseous at 20 °C and a pressure of 101.3 kPa, or that produce a vapor pressure above 300 kPa at 50 °C, except for formaldehyde (CAS No. 50-00-0, EC No. 200-001-8).



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10. This entry does not apply to the placing on the market of a mixture for tattooing purposes or to the use of a mixture for tattooing purposes if it is exclusively placed on the market or used exclusively as a medical device or accessory of a medical device under Regulation (EU) 2017/745. If the mixture is potentially not exclusively placed on the market or used as a medical device or accessory, the requirements of Regulation (EU) 2017/745 and this Regulation apply cumulatively.

List of Substances Subject to Authorization (REACH, Annex XIV) / SVHC Candidate List Not listed.

Seveso III: Directive 2012/18/EU of the European Parliament and Council on the Control of Major Accident Hazards Involving Dangerous Substances:

E1 ENVIRONMENTAL HAZARDS

Water Framework Directive (WFD)

Name: Dibenzylbenzene, ar-methyl derivative

Name according to the List: Substances and preparations, or their degradation products, whose carcinogenic or mutagenic properties or steroidogenic, thyroid, reproductive, or other functions of the endocrine system-disturbing properties have been proven in or through water.

Listed in: Non-exhaustive list of key pollutants

Regulation on Persistent Organic Pollutants (POP)

Not listed.

TA-Luft Air (Germany)

Number: 5.2.5

Substance Group: Organic substances

Class: I

Concentration: ≥ 25 wt.-% Mass flow: 0.5 kg/h

Mass concentration: 50 mg/m³

Note: The mass flow of 0.50 kg/h or the mass concentration of 50 mg/m³ must not be exceeded, each specified

as total carbon (except for dust-form organic substances).

Number: 5.2.7.1.3

Substance Group: Reproductive toxic substances

Class: I

Concentration: ≥ 25 wt.-%

Mass flow: -

Mass concentration: -

Note: Subject to the emission minimization requirement.

Number: 5.2.7.2

Substance Group: Hardly degradable, easily accumulating, and highly toxic organic substances

Concentration: ≥ 25 wt.-%

Mass flow: -

Mass concentration: -

Note: Subject to the emission minimization requirement.

National regulations (Germany)

WGK Water hazard class: WGK 3 - highly hazardous to water



according to Regulation (EC) No 1907/2006 (REACH) as amended

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15.2. Chemical safety assessment

A chemical safety assessment has been carried out for this substance by the supplier.

More information

Observe employment restrictions under the law on the protection of mothers at work, in training and during studies (Maternity Protection Act - MuSchG).

Observe employment restrictions under Directive 94/33/EC on the protection of young people at work or stricter national provisions, where applicable.

The components of this product are listed on the following inventories:

TCSI: On the list or in compliance

TSCA: All substances are listed as active on the TSCA inventory

AICS: On the list or in compliance

DSL: All components of this product are on the Canadian

DSL list

ENCS: On the list or in compliance ISHL: On the list or in compliance KECI: On the list or in compliance PICCS: On the list or in compliance IECSC: On the list or in compliance

SECTION 16: Other information

A list of standard risk phrases used in the safety data sheet

H304 May be fatal if swallowed and enters airways.
H360FD May damage fertility. May damage the unborn child.
H410 Very toxic to aquatic life with long lasting effects.

Guidelines for safe handling used in the safety data sheet

P201 Obtain special instructions before use.
P273 Avoid release to the environment.

P280 Wear protective gloves.

P301+P310 IF SWALLOWED: Immediately call a doctor.

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

P331 Do NOT induce vomiting.

P391 Collect spillage.
P405 Store locked up.

P501 Dispose of container to according to local/by regional/according to national/by

international regulations.

Other important information about human health protection

The product must not be - unless specifically approved by the manufacturer/importer - used for purposes other than as per the Section 1. The user is responsible for adherence to all related health protection regulations.

Key to abbreviations and acronyms used in the safety data sheet

ADR European agreement concerning the international carriage of dangerous goods

by road

AGW Occupational Exposure Limits

Aquatic Chronic Hazardous to the aquatic environment (chronic)

Asp. Tox. Aspiration hazard
BCF Bioconcentration Factor
CAS Chemical Abstracts Service

CLP Regulation (EC) No 1272/2008 on classification, labelling and packaging of

substance and mixtures

EC Identification code for each substance listed in EINECS

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EC50 Concentration of a substance when it is affected 50 % of the population

EINECS European Inventory of Existing Commercial Chemical Substances

EmS Emergency plan EU European Union

EuPCS European Product Categorisation System IATA International Air Transport Association

IBC International Code For The Construction And Equipment of Ships Carrying

Dangerous Chemicals

ICAO International Civil Aviation Organization
IMDG International Maritime Dangerous Goods
IMO International Maritime Organization

INCI International Nomenclature of Cosmetic Ingredients
ISO International Organization for Standardization
IUPAC International Union of Pure and Applied Chemistry

LC50 Lethal concentration of a substance in which it can be expected death of 50% of

the population

LD50 Lethal dose of a substance in which it can be expected death of 50% of the

population

LOAEL Lowest observed adverse effect level log Kow Octanol-water partition coefficient MAK Maximum workplace concentration NOAEL No observed adverse effect level NOEC No observed effect concentration

NOEL No observed effect level
OEL Occupational Exposure Limits

PBT Persistent, bioaccumulative and toxic

PMT Persistent, mobile and toxic

ppm Parts per million

REACH Registration, Evaluation, Authorisation and Restriction of Chemicals

Repr. Reproductive toxicity

RID Agreement on the transport of dangerous goods by rail

UN Four-figure identification number of the substance or article taken from the UN

Model Regulations

UVCB Substances of unknown or variable composition, complex reaction products or

biological materials

VOC Volatile organic compounds

vPvB Very persistent and very bioaccumulative

vPvM Very persistent and very mobile

Training guidelines

Inform the personnel about the recommended ways of use, mandatory protective equipment, first aid and prohibited ways of handling the product.

Recommended restrictions of use

not available

Information about data sources used to compile the Safety Data Sheet

REGULATION (EC) No. 1907/2006 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL (REACH) as amended. REGULATION (EC) No. 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL as amended. Data from the manufacturer of the substance / mixture, if available - information from registration dossiers.

More information



according to Regulation (EC) No 1907/2006 (REACH) as amended

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Classification procedure - calculation method.

Statement

The safety data sheet provides information aimed at ensuring safety and health protection at work and environmental protection. The provided information corresponds to the current status of knowledge and experience and complies with valid legal regulations. The information should not be understood as guaranteeing the suitability and usability of the product for a particular application.



) UHLEN BROCK