

SAFETY DATA SHEET

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



DE / EN

Farbrezepte METALL-EFFEKT Gold

Version	Revision Date:	SDS Number:	Date of last issue: 18.10.2024
4.2	19.02.2025	6002541	Date of first issue: 07.10.2019

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

1.1 Product identifier

Trade name : Farbrezepte METALL-EFFEKT Gold

Unique Formula Identifier (UFI) : 330C-4QGC-901C-9V0X

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

Use of the Sub-
stance/Mixture : Water-borne coatings

Recommended restrictions on use : within adequate application - none

1.3 Details of the supplier of the safety data sheet

Company : Alpina Farben GmbH
Roßdörfer Straße 50
64372 OBER RAMSTADT

Telephone : +498001238887
Telefax : +4961547170632

Website : www.alpina-farben.de
E-mail address Responsible/issuing person : msds@dr-rmi.com

1.4 Emergency telephone

Emergency telephone 1 : +49613284463 GBK GmbH

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Skin sensitization, Category 1 H317: May cause an allergic skin reaction.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms :



SAFETY DATA SHEET

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



DE / EN

Farbrezepte METALL-EFFEKT Gold

Version	Revision Date:	SDS Number:	Date of last issue: 18.10.2024
4.2	19.02.2025	6002541	Date of first issue: 07.10.2019

Signal Word : Warning

Hazard Statements : H317 May cause an allergic skin reaction.

Precautionary Statements : P101 If medical advice is needed, have product container or label at hand.
P102 Keep out of reach of children.

Prevention:
P261 Avoid breathing mist or vapors.
P280 Wear protective gloves.

Response:
P302 + P352 IF ON SKIN: Wash with plenty of water.

Disposal:
P501 Dispose of contents/ container to an approved waste disposal plant.

Hazardous ingredients which must be listed on the label:

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

2.3 Other hazards

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

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

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

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Chemical nature : Emulsion paint, aqueous

Components

Chemical name	CAS-No. EC-No. Index-No. Registration number	Classification	Concentration (% w/w)
bronopol (INN)	52-51-7 200-143-0 603-085-00-8	Acute Tox. 4; H302 Acute Tox. 4; H312 Skin Irrit. 2; H315	$\geq 0,0025$ - $< 0,025$

SAFETY DATA SHEET

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



DE / EN

Farbrezepte METALL-EFFEKT Gold

Version	Revision Date:	SDS Number:	Date of last issue: 18.10.2024
4.2	19.02.2025	6002541	Date of first issue: 07.10.2019

	01-2119980938-15	Eye Dam. 1; H318 STOT SE 3; H335 (Respiratory system) Aquatic Acute 1; H400 Aquatic Chronic 1; H410 M-Factor (Acute aquatic toxicity): 10 M-Factor (Chronic aquatic toxicity): 1	
1,2-benzisothiazol-3(2H)-one	2634-33-5 220-120-9 613-088-00-6 01-2120761540-60	Acute Tox. 4; H302 Skin Irrit. 2; H315 Eye Dam. 1; H318 Skin Sens. 1; H317 Aquatic Acute 1; H400 Aquatic Chronic 2; H411 Acute Tox. 2; H330 M-Factor (Acute aquatic toxicity): 1 M-Factor (Chronic aquatic toxicity): 1 specific concentration limit Skin Sens. 1; H317 >= 0,05 %	>= 0,0025 - < 0,025
2-methylisothiazol-3(2H)-one	2682-20-4 220-239-6 613-326-00-9 01-2120764690-50	Acute Tox. 2; H330 Acute Tox. 3; H311 Acute Tox. 3; H301 Skin Corr. 1B; H314 Eye Dam. 1; H318 Skin Sens. 1A; H317 Aquatic Acute 1; H400 Aquatic Chronic 1; H410 EUH071 M-Factor (Acute aquatic toxicity): 10 M-Factor (Chronic aquatic toxicity): 1	>= 0,0025 - < 0,025

SAFETY DATA SHEET

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



DE / EN

Farbrezepte METALL-EFFEKT Gold

Version	Revision Date:	SDS Number:	Date of last issue: 18.10.2024
4.2	19.02.2025	6002541	Date of first issue: 07.10.2019

		specific concentration limit Skin Sens. 1A; H317 >= 0,0015 %	
reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	55965-84-9 613-167-00-5 01-2120764691-48	Acute Tox. 3; H301 Acute Tox. 2; H330 Acute Tox. 2; H310 Skin Corr. 1C; H314 Eye Dam. 1; H318 Skin Sens. 1A; H317 Aquatic Acute 1; H400 Aquatic Chronic 1; H410 EUH071 M-Factor (Acute aquatic toxicity): 100 M-Factor (Chronic aquatic toxicity): 100 specific concentration limit Skin Corr. 1C; H314 >= 0,6 % Skin Irrit. 2; H315 0,06 - < 0,6 % Eye Irrit. 2; H319 0,06 - < 0,6 % Skin Sens. 1A; H317 >= 0,0015 % Eye Dam. 1; H318 >= 0,6 %	>= 0,0002 - < 0,0015
Substances with a workplace exposure limit :			
aluminium powder (stabilised)	7429-90-5 231-072-3 013-002-00-1 01-2119529243-45	Flam. Sol. 1; H228	>= 1 - < 10
Poly(oxy-1,2-ethanediyl), .alpha.-hydro-.omega.-hydroxy-	25322-68-3 500-038-2 01-2119958801-32		>= 1 - < 10

For explanation of abbreviations see section 16.

SAFETY DATA SHEET

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



DE / EN

Farbrezepte METALL-EFFEKT Gold

Version	Revision Date:	SDS Number:	Date of last issue: 18.10.2024
4.2	19.02.2025	6002541	Date of first issue: 07.10.2019

SECTION 4: First aid measures

4.1 Description of first-aid measures

- | | | |
|-------------------------|---|--|
| General advice | : | Never give anything by mouth to an unconscious person.
If you feel unwell, seek medical advice (show the label where possible).
Move out of dangerous area.
First aider needs to protect himself. |
| If inhaled | : | Move to fresh air. |
| In case of skin contact | : | Do NOT use solvents or thinners.
In case of contact, immediately flush skin with soap and plenty of water. |
| In case of eye contact | : | If eye irritation persists: Get medical advice/ attention.
IF IN EYES: Rinse cautiously with water for several minutes.
Remove contact lenses, if present and easy to do. Continue rinsing. |
| If swallowed | : | Seek medical advice.
Clean mouth with water and drink afterwards plenty of water.
If swallowed, DO NOT induce vomiting. |

4.2 Most important symptoms and effects, both acute and delayed

- | | | |
|-------|---|--------------------------------------|
| Risks | : | May cause an allergic skin reaction. |
|-------|---|--------------------------------------|

4.3 Indication of any immediate medical attention and special treatment needed

- | | | |
|-----------|---|---------------------------|
| Treatment | : | No information available. |
|-----------|---|---------------------------|

SECTION 5: Firefighting measures

5.1 Extinguishing media

- | | | |
|--------------------------------|---|---|
| Suitable extinguishing media | : | Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Do not use a solid water stream as it may scatter and spread fire. |
| Unsuitable extinguishing media | : | None known. |

5.2 Special hazards arising from the substance or mixture

- | | | |
|---------------------------------------|---|---|
| Specific hazards during fire fighting | : | In case of fire hazardous decomposition products may be produced such as:
Carbon monoxide, carbon dioxide and unburned hydrocar- |
|---------------------------------------|---|---|

SAFETY DATA SHEET

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



DE / EN

Farbrezepte METALL-EFFEKT Gold

Version	Revision Date:	SDS Number:	Date of last issue: 18.10.2024
4.2	19.02.2025	6002541	Date of first issue: 07.10.2019

bons (smoke).

5.3 Advice for firefighters

Special protective equipment : Wear self-contained breathing apparatus for firefighting if necessary.

Further information : Standard procedure for chemical fires.
The product itself does not burn.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : Use protective shoes or boots with rough rubber sole.
Material can create slippery conditions.
Do not get in eyes, on skin, or on clothing.

6.2 Environmental precautions

Environmental precautions : Prevent further leakage or spillage if safe to do so.
If the product contaminates rivers and lakes or drains inform respective authorities.
Do not flush into surface water or sanitary sewer system.

6.3 Methods and material for containment and cleaning up

Methods for cleaning up : Keep in suitable, closed containers for disposal.
Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).

6.4 Reference to other sections

For further information see Section 7 of the safety data sheet.

, For personal protection see section 8., For disposal considerations see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling : For personal protection see section 8.
No special technical protective measures required.

Hygiene measures : Wash hands before eating, drinking, or smoking. Do not eat, drink or smoke when using this product. Remove contaminated clothing and protective equipment before entering eating areas.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers : Perishable if frozen. To maintain product quality, do not store in heat or direct sunlight. Store at room temperature in the original container. Containers which are opened must be care-

SAFETY DATA SHEET

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



DE / EN

Farbrezepte METALL-EFFEKT Gold

Version	Revision Date:	SDS Number:	Date of last issue: 18.10.2024
4.2	19.02.2025	6002541	Date of first issue: 07.10.2019

fully resealed and kept upright to prevent leakage.

Advice on common storage : Keep away from oxidizing agents and strongly acid or alkaline materials.

Storage class (TRGS 510) : 12

7.3 Specific end use(s)

Specific use(s) : This information is not available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational Exposure Limits

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Basis
aluminium powder (stabilised)	7429-90-5	AGW (Inhalable fraction)	10 mg/m3	DE TRGS 900
	Peak-limit category: 2;(II)			
	Further information: When there is compliance with the OEL and biological tolerance values, there is no risk of harming the unborn child			
		AGW (Alveolate fraction)	1,25 mg/m3	DE TRGS 900
	Peak-limit category: 2;(II)			
	Further information: When there is compliance with the OEL and biological tolerance values, there is no risk of harming the unborn child			
		BM (Alveolar dust fraction)	0,5 mg/m3	DE TRGS 527
Poly(oxy-1,2-ethanediyl), .alpha.-hydro-.omega.-hydroxy-	25322-68-3	AGW (Inhalable fraction)	200 mg/m3	DE TRGS 900
	Peak-limit category: 2;(II)			
	Further information: When there is compliance with the OEL and biological tolerance values, there is no risk of harming the unborn child			
		AGW (Inhalable fraction)	1.000 mg/m3	DE TRGS 900
	Peak-limit category: 8;(II)			
	Further information: When there is compliance with the OEL and biological tolerance values, there is no risk of harming the unborn child			
		AGW (Inhalable fraction)	1.000 mg/m3	DE TRGS 900
	Peak-limit category: 8;(II)			
	Further information: When there is compliance with the OEL and biological tolerance values, there is no risk of harming the unborn child			
		MAK (inhalable fraction)	250 mg/m3	DE DFG MAK
	Further information: Damage to the embryo or foetus is unlikely when the			

SAFETY DATA SHEET

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



DE / EN

Farbrezepte METALL-EFFEKT Gold

Version 4.2 Revision Date: 19.02.2025 SDS Number: 6002541 Date of last issue: 18.10.2024
Date of first issue: 07.10.2019

MAK value or the BAT value is observed

Biological occupational exposure limits

Substance name	CAS-No.	Control parameters	Sampling time	Basis
aluminium powder (stabilised)	7429-90-5	Aluminum: 50 µg/g creatinine (Urine)	In case of long-term exposure: after more than one shift	TRGS 903
		Aluminum: 50 µg/g creatinine (Urine)	end of shift, for long-term exposures after several previous shifts	DE DFG BAT

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

Substance name	End Use	Routes of exposure	Potential health effects	Value
aluminium powder (stabilised)	Consumers	Ingestion	Long-term systemic effects	7,90 mg/kg bw/day
	Consumers	Ingestion	Long-term systemic effects	3,95 mg/kg bw/day
	Workers	Inhalation	Long-term systemic effects	3,72 mg/m3
	Workers	Inhalation	Long-term local effects	3,72 mg/m3
	Workers	Inhalation	Long-term local effects	3,72 mg/m3
Poly(oxy-1,2-ethanediyl), .alpha.-hydro-.omega.-hydroxy-	Consumers	Inhalation	Long-term systemic effects	0,10 mg/m3
	Consumers	Ingestion	Long-term systemic effects	0,06 mg/kg bw/day
	Consumers	Skin contact	Long-term systemic effects	0,12 mg/kg bw/day
	Workers	Inhalation	Long-term systemic effects	0,42 mg/m3
	Workers	Skin contact	Long-term systemic effects	0,24 mg/kg bw/day
bronopol (INN)	Consumers	Skin contact	Acute systemic effects	4,20 mg/kg bw/day
	Consumers	Skin contact	Long-term systemic effects	1,40 mg/kg bw/day
	Consumers	Inhalation	Acute systemic effects	3,70 mg/m3
	Consumers	Skin contact	Long-term local effects	8,00 µg/cm2
	Consumers	Ingestion	Acute systemic effects	1,10 mg/kg bw/day
	Consumers	Skin contact	Acute local effects	8,00 µg/cm2
	Consumers	Inhalation	Long-term systemic effects	1,20 mg/m3
	Consumers	Inhalation	Acute local effects	1,30 mg/m3

SAFETY DATA SHEET

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



DE / EN

Farbrezepte METALL-EFFEKT Gold

Version 4.2 Revision Date: 19.02.2025 SDS Number: 6002541 Date of last issue: 18.10.2024
Date of first issue: 07.10.2019

	Consumers	Inhalation	Long-term local effects	1,30 mg/m ³
	Consumers	Ingestion	Long-term systemic effects	0,35 mg/kg bw/day
	Workers	Inhalation	Acute systemic effects	12,30 mg/m ³
	Workers	Inhalation	Acute local effects	4,20 mg/m ³
	Workers	Inhalation	Long-term systemic effects	4,10 mg/m ³
	Workers	Inhalation	Long-term local effects	4,20 mg/m ³
	Workers	Skin contact	Acute systemic effects	7,00 mg/kg bw/day
	Workers	Skin contact	Acute local effects	13,00 µg/cm ²
	Workers	Skin contact	Long-term systemic effects	2,30 mg/kg bw/day
	Workers	Skin contact	Long-term local effects	13,00 µg/cm ²

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

Substance name	Environmental Compartment	Value
aluminium powder (stabilised)	Sewage treatment plant	20 mg/l
	Fresh water	74,9 µg/l
Poly(oxy-1,2-ethanediyl), .alpha.-hydro-.omega.-hydroxy-	Fresh water sediment	188 mg/kg dry weight (d.w.)
	Sea water	0,0188 mg/l
	Sea sediment	188 mg/kg dry weight (d.w.)
	Fresh water	0,188 mg/l
	Soil	52,264 mg/kg dry weight (d.w.)
	Intermittent use/release	1,88 mg/l
	Sewage treatment plant	72,92 mg/l
bronopol (INN)	Sea sediment	0,00328 mg/kg dry weight (d.w.)
	Fresh water sediment	0,041 mg/kg dry weight (d.w.)
	Sewage treatment plant	0,43 mg/l
	Soil	0,5 mg/kg dry weight (d.w.)
	Intermittent use/release	0,0025 mg/l
	Sea water	0,0008 mg/l
	Fresh water	0,01 mg/l

8.2 Exposure controls

Personal protective equipment

Eye/face protection : DGUV Regulation 112-192 - Use of eye and face protection

Goggles

Hand protection

SAFETY DATA SHEET

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



DE / EN

Farbrezepte METALL-EFFEKT Gold

Version	Revision Date:	SDS Number:	Date of last issue: 18.10.2024
4.2	19.02.2025	6002541	Date of first issue: 07.10.2019

Material : Nitrile rubber
Glove thickness : 0,2 mm
Protective index : Class 3

Remarks : Before removing gloves clean them with soap and water.
Wear suitable gloves tested to EN374.
DGUV Regulation 112-195 - Use of protective gloves

Skin and body protection : Safety shoes
Long sleeved clothing

Choose body protection according to the amount and concentration of the dangerous substance at the work place.

Skin should be washed after contact.

Remove and wash contaminated clothing before re-use.
During spray application: impervious clothing

Respiratory protection : No personal respiratory protective equipment normally required.

DGUV Regulation 112-190 - Use of breathing equipment

During spray application: Do not breathe spray dust. Use A2/P2 combination filter for paint spraying.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state : liquid

Color : gold

Odor : No data available

Melting point/freezing point : ca. 0 °C

Boiling point/boiling range : ca. 100 °C

Upper explosion limit / Upper flammability limit : not determined

Lower explosion limit / Lower : not determined

SAFETY DATA SHEET

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



DE / EN

Farbrezepte METALL-EFFEKT Gold

Version	Revision Date:	SDS Number:	Date of last issue: 18.10.2024
4.2	19.02.2025	6002541	Date of first issue: 07.10.2019

flammability limit

Flash point : Not applicable

Autoignition temperature : not determined

Decomposition temperature : Not applicable

pH : 6,9
Concentration: 100 %

Viscosity
Viscosity, dynamic : No data available

Solubility(ies)
Water solubility : completely miscible

Partition coefficient: n-
octanol/water : Not applicable

Vapor pressure : ca. 23,4 hPa (20 °C)

Relative density : not determined

Density : 1,0580 g/cm³

Relative vapor density : Not applicable

9.2 Other information

Explosives : Not applicable

Oxidizing properties : Not applicable

Flammability (liquids) : The product is not flammable.

SAFETY DATA SHEET

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



DE / EN

Farbrezepte METALL-EFFEKT Gold

Version	Revision Date:	SDS Number:	Date of last issue: 18.10.2024
4.2	19.02.2025	6002541	Date of first issue: 07.10.2019

SECTION 10: Stability and reactivity

10.1 Reactivity

No decomposition if stored and applied as directed.

10.2 Chemical stability

No decomposition if stored and applied as directed.

10.3 Possibility of hazardous reactions

Hazardous reactions : No decomposition if stored and applied as directed.

10.4 Conditions to avoid

Conditions to avoid : Protect from frost, heat and sunlight.

10.5 Incompatible materials

Materials to avoid : Incompatible with acids and bases.
Incompatible with oxidizing agents.

10.6 Hazardous decomposition products

No decomposition if stored and applied as directed.

SECTION 11: Toxicological information

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

Acute toxicity

Not classified based on available information.

Components:

bronopol (INN):

Acute oral toxicity : LD50 (Rat, female): 324 mg/kg
Method: OECD Test Guideline 425
GLP: yes

Acute dermal toxicity : LD50 (Rat, male): 1.600 mg/kg

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

Acute oral toxicity : LD50 (Rat): 532 mg/kg

Acute inhalation toxicity : LC50 (Rat): 0,4 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist

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

2-methylisothiazol-3(2H)-one:

SAFETY DATA SHEET

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



DE / EN

Farbrezepte METALL-EFFEKT Gold

Version	Revision Date:	SDS Number:	Date of last issue: 18.10.2024
4.2	19.02.2025	6002541	Date of first issue: 07.10.2019

Acute oral toxicity : LD50 (Rat): 120 mg/kg

Acute inhalation toxicity : LC50 (Rat): 0,145 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist

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

Acute oral toxicity : LD50 (Rat): 66 mg/kg
Method: OECD Test Guideline 401

Acute inhalation toxicity : LC50 (Rat): 0,17 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Method: OECD Test Guideline 403

Acute dermal toxicity : LD50 (Rat): > 141 mg/kg
Method: OECD Test Guideline 402

Skin corrosion/irritation

Not classified based on available information.

Serious eye damage/eye irritation

Not classified based on available information.

Respiratory or skin sensitization

Skin sensitization

May cause an allergic skin reaction.

Respiratory sensitization

Not classified based on available information.

Germ cell mutagenicity

Not classified based on available information.

Carcinogenicity

Not classified based on available information.

Reproductive toxicity

Not classified based on available information.

STOT-single exposure

Not classified based on available information.

STOT-repeated exposure

Not classified based on available information.

Aspiration toxicity

Not classified based on available information.

SAFETY DATA SHEET

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



DE / EN

Farbrezepte METALL-EFFEKT Gold

Version	Revision Date:	SDS Number:	Date of last issue: 18.10.2024
4.2	19.02.2025	6002541	Date of first issue: 07.10.2019

11.2 Information on other hazards

Endocrine disrupting properties

Not classified based on available information.

Product:

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

SECTION 12: Ecological information

12.1 Toxicity

Components:

bronopol (INN):

M-Factor (Acute aquatic toxicity) : 10

M-Factor (Chronic aquatic toxicity) : 1

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

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 2,2 mg/l
Exposure time: 96 h
Method: OECD Test Guideline 203

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia): 3,27 mg/l
Exposure time: 48 h
Method: OECD Test Guideline 202

Toxicity to algae/aquatic plants : EC50 (Selenastrum capricornutum (green algae)): 0,11 mg/l
Exposure time: 72 h
Method: OECD Test Guideline 201

M-Factor (Acute aquatic toxicity) : 1

M-Factor (Chronic aquatic toxicity) : 1

2-methylisothiazol-3(2H)-one:

M-Factor (Acute aquatic toxicity) : 10

M-Factor (Chronic aquatic toxicity) : 1

SAFETY DATA SHEET

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



DE / EN

Farbrezepte METALL-EFFEKT Gold

Version	Revision Date:	SDS Number:	Date of last issue: 18.10.2024
4.2	19.02.2025	6002541	Date of first issue: 07.10.2019

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

M-Factor (Acute aquatic toxicity) : 100

M-Factor (Chronic aquatic toxicity) : 100

Poly(oxy-1,2-ethanediyl), .alpha.-hydro.-omega.-hydroxy-:

Toxicity to fish : LC50 (Poecilia reticulata (guppy)): > 100 mg/l
Exposure time: 96 h
Remarks: Information taken from reference works and the literature.

12.2 Persistence and degradability

No data available

12.3 Bioaccumulative potential

Components:

bronopol (INN):

Partition coefficient: n-octanol/water : log Pow: 0,15 (23 °C)
pH: 4,9

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

Partition coefficient: n-octanol/water : log Pow: 0,63 - 0,76
pH: 7

2-methylisothiazol-3(2H)-one:

Partition coefficient: n-octanol/water : log Pow: -0,486 (25 °C)
pH: 7

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

Partition coefficient: n-octanol/water : log Pow: <= 0,75
Method: OECD Test Guideline 117

Poly(oxy-1,2-ethanediyl), .alpha.-hydro.-omega.-hydroxy-:

Partition coefficient: n-octanol/water : log Pow: -0,698

12.4 Mobility in soil

No data available

SAFETY DATA SHEET

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



DE / EN

Farbrezepte METALL-EFFEKT Gold

Version	Revision Date:	SDS Number:	Date of last issue: 18.10.2024
4.2	19.02.2025	6002541	Date of first issue: 07.10.2019

12.5 Results of PBT and vPvB assessment

Product:

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

12.6 Endocrine disrupting properties

Product:

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

12.7 Other adverse effects

Product:

Additional ecological information : An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product	: Materials and all related packaging must be disposed of in a safe way in accordance with the full requirements of the local, regional, national and international authorities.
	Washing water must not be discharged into the sewage system or the environment.
Contaminated packaging	: Only completely emptied containers should be given for recycling.
Waste Code	: used product 080112, waste paint and varnish other than those mentioned in 08 01 11*

SECTION 14: Transport information

14.1 UN number or ID number

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

SAFETY DATA SHEET

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



DE / EN

Farbrezepte METALL-EFFEKT Gold

Version	Revision Date:	SDS Number:	Date of last issue: 18.10.2024
4.2	19.02.2025	6002541	Date of first issue: 07.10.2019

IMDG : Not regulated as a dangerous good

IATA : Not regulated as a dangerous good

14.2 UN proper shipping name

ADN : Not regulated as a dangerous good

ADR : Not regulated as a dangerous good

RID : Not regulated as a dangerous good

IMDG : Not regulated as a dangerous good

IATA : Not regulated as a dangerous good

14.3 Transport hazard class(es)

ADN : Not regulated as a dangerous good

ADR : Not regulated as a dangerous good

RID : Not regulated as a dangerous good

IMDG : Not regulated as a dangerous good

IATA : Not regulated as a dangerous good

14.4 Packing group

ADN : Not regulated as a dangerous good

ADR : Not regulated as a dangerous good

RID : Not regulated as a dangerous good

IMDG : Not regulated as a dangerous good

IATA (Cargo) : Not regulated as a dangerous good

IATA (Passenger) : Not regulated as a dangerous good

14.5 Environmental hazards

Not regulated as a dangerous good

14.6 Special precautions for user

Remarks : Not classified as dangerous in the meaning of transport regulations.

14.7 Maritime transport in bulk according to IMO instruments

Not applicable for product as supplied.

SECTION 15: Regulatory information

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

REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, : Conditions of restriction for the following entries should be considered:

SAFETY DATA SHEET

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



DE / EN

Farbrezepte METALL-EFFEKT Gold

Version	Revision Date:	SDS Number:	Date of last issue: 18.10.2024
4.2	19.02.2025	6002541	Date of first issue: 07.10.2019

mixtures and articles (Annex XVII)

Number on list 75, 3

N-(4-chloro-2,5-dimethoxyphenyl)-2-
[[2,5-dimethoxy-4-
[(phenyla-
mino)sulphonyl]phenyl]azo]-3-
oxobutyramide (Number on list 75)

If you intend to use this product as
tattoo ink, please contact your ven-
dor.

REACH - Candidate List of Substances of Very High
Concern for Authorization (Article 59). : None

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

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

REACH - List of substances subject to authorisation
(Annex XIV) : None

Seveso III: Directive 2012/18/EU of the Euro-
pean Parliament and of the Council on the
control of major-accident hazards involving
dangerous substances. Not applicable

Water hazard class (Germa- : WGK 1 slightly water endangering
ny) Classification according to AwSV, Annex 1 (5.2)

. : BSW20 Coating materials, water-based

Volatile organic compounds : Directive 2010/75/EU of 24 November 2010 on industrial
emissions (integrated pollution prevention and control)
Volatile organic compounds (VOC) content: 0,06 %

Volatile organic compounds : Directive 2004/42/EC
< 0.1 %
< 1 g/l

Other regulations:

Take note of Law on the protection of mothers at work, in education and in studies (Maternity
Protection Act - MuSchG).

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

SAFETY DATA SHEET

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



DE / EN

Farbrezepte METALL-EFFEKT Gold

Version	Revision Date:	SDS Number:	Date of last issue: 18.10.2024
4.2	19.02.2025	6002541	Date of first issue: 07.10.2019

15.2 Chemical Safety Assessment

A Chemical Safety Assessment is not required for this mixture.

SECTION 16: Other information

Full text of H-Statements

H228	: Flammable solid.
H301	: Toxic if swallowed.
H302	: Harmful if swallowed.
H310	: Fatal in contact with skin.
H311	: Toxic in contact with skin.
H312	: Harmful 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.
H335	: May cause respiratory irritation.
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.

Full text of other abbreviations

Acute Tox.	: Acute toxicity
Aquatic Acute	: Short-term (acute) aquatic hazard
Aquatic Chronic	: Long-term (chronic) aquatic hazard
Eye Dam.	: Serious eye damage
Flam. Sol.	: Flammable solids
Skin Corr.	: Skin corrosion
Skin Irrit.	: Skin irritation
Skin Sens.	: Skin sensitization
STOT SE	: Specific target organ toxicity - single exposure
DE DFG BAT	: Germany. MAK BAT Annex XIII
DE DFG MAK	: Germany. MAK BAT Annex IIa
DE TRGS 527	: Germany. TRGS 527 - Activities with nanomaterials
DE TRGS 900	: Germany. TRGS 900 - Occupational exposure limit values.
TRGS 903	: TRGS 903 - Biological limit values
DE DFG MAK / MAK	: MAK value
DE TRGS 527 / BM	: Assessment scale
DE TRGS 900 / AGW	: Time Weighted Average

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - Agreement concerning the International Carriage of Dangerous Goods by Road; AIIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA - European Chemicals Agency; EC-Number - European Community number; ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No

SAFETY DATA SHEET

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



DE / EN

Farbrezepte METALL-EFFEKT Gold

Version	Revision Date:	SDS Number:	Date of last issue: 18.10.2024
4.2	19.02.2025	6002541	Date of first issue: 07.10.2019

Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; SVHC - Substance of Very High Concern; TCSI - Taiwan Chemical Substance Inventory; TECI - Thailand Existing Chemicals Inventory; TRGS - Technical Rule for Hazardous Substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative

Further information

Other information : No exposure scenario communication is required for this product according to REACH Regulation No. 1907/2006 EC. Communication of Uses is not required in accordance with REACH Article 31(1)(a) - registered substances / mixtures do not meet the criteria for classification as hazardous in accordance with Regulations 1272/2008 EC or 1999/45/EC.

Sources of key data used to compile the Material Safety Data Sheet : ECHA WebSite
ACGIH (American Conference of Government Industrial Hygienists). 2014 TLVs and BEIs. Threshold Limit Values (TLVs) for chemical substances and physical agents and Biological Exposure Indices (BEIs) with Seventh Edition documentation.
2014 ACGIH, Cincinnati OH
NIOSH - Registry of toxic effects of chemical substances
ECDIN - Environmental Chemicals Data and Information Network - Joint Research Centre, Commission of the European Communities
SAX'S - Dangerous properties of industrial materials
GESTIS - Database on hazardous substances - Institut für Arbeitsschutz der Deutschen Gesetzlichen Unfallversicherung (IFA, Institute for Occupational Safety and Health of the German Social Accident Insurance)
Toxnet - Toxicology Data Network

Classification of the mixture:

Skin Sens. 1 H317

Classification procedure:

Calculation method

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

SAFETY DATA SHEET

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



DE / EN

Farbrezepte METALL-EFFEKT Gold

Version	Revision Date:	SDS Number:	Date of last issue: 18.10.2024
4.2	19.02.2025	6002541	Date of first issue: 07.10.2019

REACH Information

According to our legal obligation we implement the Regulation (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH). We will adjust and update our safety data sheets on a regular base in accordance with the information of our up-stream-suppliers. As usual we will inform you about the adjustments.

Regarding to the REACH regulation we would like to point out that DAW as a downstream user will not register on behalf of our company. We will rely on information from our suppliers. As soon as new information is available our safety data sheets will be amended accordingly.

DE / EN