

SECTION 1: Identification of the substance/mixture and of the company/undertaking· **1.1 Product identifier**· Trade name **REVELL EMAIL COLOR METALLICS**
Nr. 90; 91; 99· **Article number:**Dreisol:
R3200-9190; R3200-9191; R3200-9199
Revell-Nr.:
32190; 32191; 32199· **1.2 Relevant identified uses of the substance or mixture and uses advised against**

No further relevant information available.

· **Application of the substance / the mixture toy lacquer**· **1.3 Details of the supplier of the safety data sheet**· **Manufacturer/Supplier:**Dreisol Coatings GmbH & Co.KG.
Industriestraße 4
D-32361 Pr. Oldendorf-Bad Holzhausen

Tel.: +49(0)5742-9300-0(Zentrale)

Fax : +49(0)5742-9300-49

E-Mail: mail@dreisol.de<http://www.dreisol.de>Revell GmbH
Henschelstr. 20-30
D-32257 Bünde

Tel.: +49(0)5223-965-0

<http://www.revell.de>· **Informing department:**department product safety
e-mail adress of competent person:

Tel.: +49(0)5742/9300-41

sdb@dreisol.de· **1.4 Emergency telephone number:** Poison Information Centre (GIZ-Nord): Tel.: +49(0)551-19240**SECTION 2: Hazards identification**· **2.1 Classification of the substance or mixture**· **Classification according to Regulation (EC) No 1272/2008**

GHS02 flame

Flam. Liq. 3 H226 Flammable liquid and vapour.



GHS07

STOT SE 3 H336 May cause drowsiness or dizziness.

· **2.2 Label elements**· **Labelling according to Regulation (EC) No 1272/2008**

The product is classified and labelled according to the CLP regulation.

· **Hazard pictograms**

GHS02 GHS07

· **Signal word** Warning

(Contd. on page 2)

EG-Material Safety Data Sheet
according to 1907/2006/EC, Article 31

Printing date 15.03.2018

version: 21

Revision: 15.03.2018

Trade name REVELL EMAIL COLOR METALLICS
Nr. 90; 91; 99

(Contd. of page 1)

- **Hazard-determining components of labelling:**
Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, <2% aromatics*
- **Hazard statements**
H226 Flammable liquid and vapour.
H336 May cause drowsiness or dizziness.
- **Precautionary statements**
P102 Keep out of reach of children.
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P240 Ground/bond container and receiving equipment.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P405 Store locked up.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.
- **Additional information:**
EUH066 Repeated exposure may cause skin dryness or cracking.
Contains N,N'-ethane-1,2-diylbis(12-hydroxyoctadecan-1-amide). May produce an allergic reaction.
- **Labelling of packages where the contents do not exceed 125 ml**
- **Hazard pictograms**



GHS02 GHS07

- **Signal word** Warning
- **Hazard-determining components of labelling:**
Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, <2% aromatics*
- **Hazard statements**
H336 May cause drowsiness or dizziness.
- **Precautionary statements**
P102 Keep out of reach of children.

SECTION 3: Composition/information on ingredients

- **3.2 Chemical characterisation: Mixtures**
- **Description:** Paint mixture based of acryl polymeric with the following components.
- **Dangerous components:**

EC number: 919-857-5	Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, <2% aromatics* ⚠ Flam. Liq. 3, H226 ⚠ Asp. Tox. 1, H304 ⚠ STOT SE 3, H336	50-100%
CAS: 7429-90-5 EINECS: 231-072-3	aluminium powder (stabilised) ⚠ Flam. Sol. 1, H228	7-10%

(Contd. on page 3)

EG-Material Safety Data Sheet

according to 1907/2006/EC, Article 31

Printing date 15.03.2018

version: 21

Revision: 15.03.2018

Trade name REVELL EMAIL COLOR METALLICS
Nr. 90; 91; 99

(Contd. of page 2)

CAS: 107-98-2 EINECS: 203-539-1	1-methoxypropan-2-ol ⚠ Flam. Liq. 3, H226 ⚠ STOT SE 3, H336	7-10%
CAS: 108-65-6 EINECS: 203-603-9	2-methoxy-1-methylethyl acetate ⚠ Flam. Liq. 3, H226	7-10%
CAS: 123-26-2	N,N'-ethane-1,2-diylbis(12-hydroxyoctadecan-1-amide) ⚠ Skin Sens. 1B, H317 Aquatic Chronic 3, H412	0.3-0.5%

· **Additional information**

*) Benzene content is less than 0.1% (EINECS-No. 200-753-7). It is P. Note
 The wording of the listed risk phrases refer to section 16.

SECTION 4: First aid measures

- **4.1 Description of first aid measures**
- **General information** Remove contaminated, saturated clothing immediately.
- **After inhalation**
 Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.
 In case of unconsciousness bring patient into stable side position for transport.
- **After skin contact**
 Instantly wash with water and soap and rinse thoroughly.
 If skin irritation continues, consult a doctor.
- **After eye contact**
 Rinse opened eye for several minutes under running water. If symptoms persist, consult doctor.
- **After swallowing** Do not induce vomiting; instantly call for medical help.

SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents** CO₂, sand, extinguishing powder. Do not use water.
- **For safety reasons unsuitable extinguishing agents** Water.
- **5.2 Special hazards arising from the substance or mixture**
 Fire will produce dense black smoke. Exposure to decomposition products may cause a health hazards.
- **5.3 Advice for firefighters**
- **Protective equipment:** Wear self-contained breathing apparatus.
- **Additional information**
 Cool closed containers exposed to fire with water.
 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**
 Remove all sources of ignition. Provide adequate ventilation. Refer to protective measurer, listed in sections 7 and 8.
- **6.2 Environmental precautions:**
 Do not allow product to enter into sewerage systems or water bodies.
 Inform respective authorities in case of product reaches water or sewage systems.

(Contd. on page 4)

EG-Material Safety Data Sheet
according to 1907/2006/EC, Article 31

Printing date 15.03.2018

version: 21

Revision: 15.03.2018

Trade name REVELL EMAIL COLOR METALLICS
Nr. 90; 91; 99

(Contd. of page 3)

- **6.3 Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
- **6.4 Reference to other sections**
See Section 7 for information on safe handling
See Section 8 for information on personal protection equipment.
See Section 13 for information on disposal.

SECTION 7: Handling and storage

- **7.1 Precautions for safe handling**
Ensure good ventilation/exhaustion at working place.
Keep containers tightly sealed.
- **Information about protection against explosions and fires:**
Protect against electrostatic charges.
Keep ignition sources away - Do not smoke.
Vapours are heavier than air and may spread along floors. Vapours may form explosive mixture with air.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage**
- **Requirements to be met by warehouses and containers:** Store only in the original container.
- **Information about storage in one common storage facility:**
Keep away from foodstuffs, beverages and food.
- **Further information about storage conditions:** Protect from heat and direct sunlight.
- **Storage class 3**
- **7.3 Specific end use(s)** No further relevant information available.

SECTION 8: Exposure controls/personal protection

- **Additional information about design of technical systems:**
Provide adequate ventilation. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction.
- **8.1 Control parameters**

Components with critical values that require monitoring at the workplace:

107-98-2 1-methoxypropan-2-ol

WEL (Great Britain)	Short-term value: 560 mg/m ³ , 150 ppm Long-term value: 375 mg/m ³ , 100 ppm Sk
IOELV (European Union)	Short-term value: 568 mg/m ³ , 150 ppm Long-term value: 375 mg/m ³ , 100 ppm Skin

108-65-6 2-methoxy-1-methylethyl acetate

WEL (Great Britain)	Short-term value: 548 mg/m ³ , 100 ppm Long-term value: 274 mg/m ³ , 50 ppm Sk
IOELV (European Union)	Short-term value: 550 mg/m ³ , 100 ppm Long-term value: 275 mg/m ³ , 50 ppm Skin

(Contd. on page 5)

Trade name REVELL EMAIL COLOR METALLICS
Nr. 90; 91; 99

(Contd. of page 4)

· DNELs

Hydrocarbons, C9-C11, n-Alkane, Isoalkane, Cycloalkane, <2% Aromaten

Oral	DNEL	300 mg/kg/day (General population, long-term exposure)
Dermal	DNEL	300 mg/kg/day (General population, long-term exposure) 300 mg/kg/day (Workers, long-term exposure)
Inhalative	DNEL	900 mg/m ³ (General population, long-term exposure) 1500 mg/m ³ (Workers, long-term exposure)

107-98-2 1-methoxypropan-2-ol

Oral	DNEL	3.3 mg/kg/day (General population, long-term exposure)
Dermal	DNEL	18.1 mg/kg/day (General population, long-term exposure) 50.6 mg/kg/day (Workers, long-term exposure)
Inhalative	DNEL	43.9 mg/m ³ (General population, long-term exposure) 369 mg/m ³ (Workers, long-term exposure)

108-65-6 2-methoxy-1-methylethyl acetate

Oral	DNEL	1.6 mg/kg/day (General population, long-term exposure)
Dermal	DNEL	54.8 mg/kg/day (General population, long-term exposure) 153.5 mg/kg/day (Workers, long-term exposure)
Inhalative	DNEL	33 mg/m ³ (General population, long-term exposure) 275 mg/m ³ (Workers, long-term exposure)

1330-20-7 xylene, mixed isomers, pure

Oral	DNEL	1.6 mg/kg/day (General population, long-term exposure)
Dermal	DNEL	108 mg/kg/day (General population, long-term exposure) 180 mg/kg/day (Workers, long-term exposure)
Inhalative	DNEL	14.8 mg/m ³ (General population, long-term exposure) 77 mg/m ³ (Workers, long-term exposure) (Einatmung, akut) 289 mg/m ³ (Workers, short-term exposure) 174 mg/m ³ (General population, short-term exposure)

· PNECs

107-98-2 1-methoxypropan-2-ol

PNEC	2.47 mg/kg (soil) 100 mg/L (sewage treatment plant) 4.17 mg/kg (sediment (marine water)) 1 mg/L (marine water) 41.6 mg/kg (sediment (freshwater)) 10 mg/L (Frischwasser)
------	---

108-65-6 2-methoxy-1-methylethyl acetate

PNEC	0.29 mg/kg (soil) 100 mg/L (sewage treatment plant) 0.329 mg/kg (sediment (marine water)) 0.0635 mg/L (marine water) 3.29 mg/kg (sediment (freshwater))
------	---

(Contd. on page 6)

EG-Material Safety Data Sheet

according to 1907/2006/EC, Article 31

Printing date 15.03.2018

version: 21

Revision: 15.03.2018

Trade name **REVELL EMAIL COLOR METALLICS**
Nr. 90; 91; 99

(Contd. of page 5)

	0.635 mg/L (freshwater)
124-68-5 2-amino-2-methylpropanol	
PNEC	342.9 mg/L (activated sludge) (EC50 3h)
1330-20-7 xylene, mixed isomers, pure	
PNEC	2.31 mg/kg (soil)
	6.58 mg/L (sewage treatment plant)
	12.46 mg/kg (sediment (marine water))
	0.327 mg/L (marine water)
	12.46 mg/kg (sediment (freshwater))
	0.327 mg/L (freshwater)

- **8.2 Exposure controls**
- **Personal protective equipment**
- **General protective and hygienic measures**
Instantly remove any spoiled and impregnated garments.
After skin contact clean with water and soap or use appropriate detergents . Do not use organic solvent.
Keep away from foodstuffs, beverages and food.
- **Breathing equipment:**
In case of brief exposure or low pollution use breathing filter apparatus. In case of intensive or longer exposure use breathing apparatus, independent of circulating air.
Filter A/P2.
- **Protection of hands:**
The instructions and information provided by the glove manufacturer on use, storage, maintenance and replacement must be followed. Barrier creams may help to protect the exposed areas of the skin.
- **Material of gloves**
Nitrile rubber or fluorine rubber (0.4 mm). Breakthrough time > 480min with full contact. Notice., The information provided by the glove manufacturer to permeability and breakthrough times and the specific workplace conditions When cracking or change in color, shape or elasticity, the gloves should be changed immediately.
- **Eye protection:** Tightly sealed safety glasses.
- **Body protection:** Protective work clothing.

SECTION 9: Physical and chemical properties

- **9.1 Information on basic physical and chemical properties**

- **General Information**

- **Appearance:**

Form:	Fluid
Colour:	Silver-coloured
Smell:	Benzen-like
Odour threshold:	Not determined.

- **Change in condition**

Initial boiling point and boiling range: 119 °C

- **Flash point:** 35 °C (DIN/ISO 3679)

- **Inflammability (solid, gaseous)** Not applicable.

(Contd. on page 7)

EG-Material Safety Data Sheet
according to 1907/2006/EC, Article 31

Printing date 15.03.2018

version: 21

Revision: 15.03.2018

Trade name **REVELL EMAIL COLOR METALLICS**
Nr. 90; 91; 99

(Contd. of page 6)

· Ignition temperature:	200 °C (DIN 51794)
· Decomposition temperature:	Not determined.
· Self-inflammability:	Product is not self-igniting.
· Explosive properties:	Product is not explosive. However, formation of explosive air/steam mixtures is possible.
· Critical values for explosion:	
Lower:	0,6 Vol %
Upper:	10,8 Vol %
· Steam pressure at 20 °C:	3,1 hPa
· Density at 20 °C	0,830-1,100 g/cm ³ (DIN 51757)
· Relative density	Not determined.
· Vapour density	Not determined.
· Evaporation rate	Not determined.
· Solubility in / Miscibility with Water:	Not miscible or difficult to mix
· Viscosity: dynamic:	Not determined.
kinematic at 20 °C:	70-95 s (DIN 53211/4)
· or at 23 °C:	47-63 s (ISO 2431-1993/6 mm)
· Solvent content:	
Organic solvents:	53-68 %
Water:	0,0 %
Solids content:	32-47 %
· 9.2 Other information	No further relevant information available.

SECTION 10: Stability and reactivity

- **10.1 Reactivity** No further relevant information available.
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:**
Strong oxidizing agent.
Strong acids and bases
- **10.6 Hazardous decomposition products:**
such as carbon monoxide and dioxide, smoke, oxides of nitrogen etc.

SECTION 11: Toxicological information

- **11.1 Information on toxicological effects**
- **Acute toxicity**
There are no data available on the preparation itself.
The mixture is classified under Regulation No 1272/2008 = CLP (EU-GHS) Regulation and the toxicological hazards. See Section 3 and 15 for details.
- **Primary irritant effect:**
- **Skin corrosion/irritation** Based on available data, the classification criteria are not met.
- **Serious eye damage/irritation** Based on available data, the classification criteria are not met.

(Contd. on page 8)

Printing date 15.03.2018

version: 21

Revision: 15.03.2018

Trade name REVELL EMAIL COLOR METALLICS
Nr. 90; 91; 99

(Contd. of page 7)

- **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.
- **Other observations:**
Exposure to component solvents vapours concentration in excess of the stated occupational exposure limit may result in adverse health effect such as mucous membrane and respiratory system irritation and adverse effect on kidney, liver and central nervous system.
Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness.
Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin resulting in non-allergic contact dermatitis and absorption through the skin. Repeated or prolonged skin contact may lead to allergic contact dermatitis.
The liquid splashed in the eyes may cause irritation and reversible damage.
- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**
- **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
- **Carcinogenicity** Based on available data, the classification criteria are not met.
- **Reproductive toxicity** Based on available data, the classification criteria are not met.
- **STOT-single exposure**
May cause drowsiness or dizziness.
- **STOT-repeated exposure** Based on available data, the classification criteria are not met.
- **Aspiration hazard** Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

- **12.1 Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **12.2 Persistence and degradability** No further relevant information available.
- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:**
Water hazard class 1 (Self-assessment): slightly hazardous for water.
Do not allow undiluted product or large quantities of it to reach ground water, water bodies or sewage system.
- **12.6 Other adverse effects** No further relevant information available.

SECTION 13: Disposal considerations

- **13.1 Waste treatment methods**
- **Recommendation**
Must not be disposed of together with household garbage. Do not allow product to enter into sewage systems.
- **European waste catalogue**
The waste key numbers are not only product separating essentially application-oriented. The waste key number valid for the application can be taken from the European waste catalogue.
Refer to Community provisions relating to waste in Europe. Note that national or regional provisions may be in force.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.

GB

(Contd. on page 9)

Printing date 15.03.2018


version: 21

Revision: 15.03.2018

Trade name **REVELL EMAIL COLOR METALLICS**
Nr. 90; 91; 99

(Contd. of page 8)

SECTION 14: Transport information

· 14.1 UN-Number	Void
· ADR, ADN, IMDG	Void
· IATA	UN1263
· 14.2 UN proper shipping name	Void
· ADR, ADN, IMDG	Void
· IATA	PAINT
· 14.3 Transport hazard class(es)	
· ADR, ADN, IMDG	
· Class	Void
· IATA	
	
· Class	3 Flammable liquids.
· Label	3
· 14.4 Packing group	
· ADR, IMDG	Void
· IATA	III
· 14.5 Environmental hazards:	
· Marine pollutant:	No
· 14.6 Special precautions for user	Not applicable.
· 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code	Not applicable.
· Transport/Additional information:	
· ADR	
· Remarks:	> 450 ltr.: UN-1263 PAINT, 3, III, (D/E)
· Transport in accordance with ADR/RID, IMDG and ICAO/IATA.	
· IMDG	
· Remarks:	> 30 ltr.: UN-1263 PAINT, 3, III
· UN "Model Regulation":	Void

SECTION 15: Regulatory information

- 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
- Directive 2012/18/EU
- Named dangerous substances - ANNEX I None of the ingredients is listed.
- Seveso category P5c FLAMMABLE LIQUIDS
- Qualifying quantity (tonnes) for the application of lower-tier requirements 5,000 t
- Qualifying quantity (tonnes) for the application of upper-tier requirements 50,000 t

(Contd. on page 10)

EG-Material Safety Data Sheet according to 1907/2006/EC, Article 31

Printing date 15.03.2018

version: 21

Revision: 15.03.2018

Trade name **REVELL EMAIL COLOR METALLICS**
Nr. 90; 91; 99

(Contd. of page 9)

- **REGULATION (EC) No 1907/2006 ANNEX XVII** Conditions of restriction: 3
- **National regulations**
- **Water hazard class:** Water hazard class 1 (Self-assessment): slightly hazardous for water.
- **VOC value EC %:** 69.64 %
- **VOC (EU)** 598.2 g/l
- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

The information of this SDS is based on the present state of our knowledge and on current EU and national laws. The product is not to be used for other purposes than those specified under section 1 without first obtaining written handling instruction. It is always the responsibility of the user to take all necessary steps in order to fulfil the demand laid down in the local rules and legislation. The information in this SDS is meant as a description of the safety requirements of our product : it is not to be considered as a guarantee of the products' properties.

· **Relevant phrases**

Danger notes of the contents substances listed under item 3.

H226 Flammable liquid and vapour.

H228 Flammable solid.

H304 May be fatal if swallowed and enters airways.

H317 May cause an allergic skin reaction.

H336 May cause drowsiness or dizziness.

H412 Harmful to aquatic life with long lasting effects.

· **Department issuing data specification sheet:** department product safety

· **Abbreviations and acronyms:**

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

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

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

DNEL: Derived No-Effect Level (REACH)

PNEC: Predicted No-Effect Concentration (REACH)

Flam. Liq. 3: Flammable liquids – Category 3

Flam. Sol. 1: Flammable solids – Category 1

Skin Sens. 1B: Skin sensitisation – Category 1B

STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

Asp. Tox. 1: Aspiration hazard – Category 1

Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3

· *** Data compared to the previous version altered.**

Paragraphs, which were changed compared to the former version, are marked with "*" on the left margin.