

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 11.09.2019

Version number 1

Revision: 10.05.2019

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

1.1 Product identifier

- Trade name: **F 7138 OPAL - ROT**
- Transparente Glasfarbe

· Article number: F 7138

- ### 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 Preparation of ceramic parts and coatings

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier:

Rüger & Günzel GmbH
D 63263 Neu-Isenburg - Dornhofstraße 71
Telefon +49- 61 02 / 812940 - Telefax +49 61 02 / 8129440
E-Mail: info@rgfarben.de

www.rgfarben.de

· Informing department: Product safety department.

1.4 Emergency telephone number:

Mo-Fr. 7.30 - 16.00 Uhr - Tel.+49-6102/812940 // 24h-emergency phone no. +49 151 54 62 77 41
poison emergency call:
or

Beratungsstelle bei Vergiftungen
II. Medizinische Klinik und Polyklinik der Universität Mainz
Langenbeckstr. 1
55131 Mainz
www.giftinfo.uni-mainz.de 06131 - 19240

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

- Classification according to Regulation (EC) No 1272/2008



GHS09 environment

Aquatic Chronic 2 H411 Toxic to aquatic life with long lasting effects.



GHS07

Skin Irrit. 2 H315 Causes skin irritation.

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



GHS07 GHS09

· Signal word Warning

- Hazard statements

H315 Causes skin irritation.

(Contd. on page 2)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 11.09.2019

Version number 1

Revision: 10.05.2019

Trade name: F 7138 OPAL - ROT

(Contd. of page 1)

H411 Toxic to aquatic life with long lasting effects.

Precautionary statements

P264 Wash thoroughly after handling.

P273 Avoid release to the environment.

P280 Wear protective gloves.

P332+P313 If skin irritation occurs: Get medical advice/attention.

P362+P364 Take off contaminated clothing and wash it before reuse.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

Additional information:

EUH014 Reacts violently with water.

2.3 Other hazards
Results of PBT and vPvB assessment
PBT: Not applicable.

vPvB: Not applicable.

SECTION 3: Composition/information on ingredients

3.2 Chemical characterisation: Mixtures
Description:

Glas des Systems Pb-B-Cd-Na-P-K-Si. (CAS-Nr. 65997-17-3). Pigment des Systems CdS-Se. (CAS-Nr. 12626-36-7).

Dangerous components:

CAS: 1314-41-6	Bleiverbindungen ⚠ Unst. Expl., H200; ⚠ Skin Irrit. 2, H315	25-50%
	cadmium compounds, with the exception of cadmium sulphoselenide (xCdS.yCdSe), mixture of cadmium sulphide with zinc sulphide (xCdS.yZnS), mixture of cadmium sulphide with mercury sulphide (xCdS.yHgS), and those specified elsewhere in this Annex ⚠ Aquatic Acute 1, H400; Aquatic Chronic 1, H410; ⚠ Acute Tox. 4, H302; Acute Tox. 4, H312; Acute Tox. 4, H332	10-25%
CAS: 58339-34-7	C.I. pigment red 108 ⚠ Aquatic Chronic 2, H411	2.5-10%

Additional information For the wording of the listed hazard phrases refer to section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures
General information Instantly remove any clothing soiled by the product.

After inhalation Supply fresh air; consult doctor in case of symptoms.

After skin contact

Rinse with warm water.

Instantly rinse with water.

After eye contact Rinse opened eye for several minutes under running water.

After swallowing In case of persistent symptoms consult doctor.

4.2 Most important symptoms and effects, both acute and delayed No further relevant information available.

4.3 Indication of any immediate medical attention and special treatment needed

No further relevant information available.

GB

(Contd. on page 3)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 11.09.2019

Version number 1

Revision: 10.05.2019

Trade name: F 7138 OPAL - ROT

(Contd. of page 2)

SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents**
CO₂, extinguishing powder or water jet. Fight larger fires with water jet.
Use fire fighting measures that suit the environment.
- **For safety reasons unsuitable extinguishing agents** Water with a full water jet.
- **5.2 Special hazards arising from the substance or mixture**
Formation of toxic gases is possible during heating or in case of fire.
- **5.3 Advice for firefighters**
- **Protective equipment:** No special measures required.
- **Additional information**
Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures** Use only in well-ventilated areas.
- **6.2 Environmental precautions:**
Do not allow product to reach sewage system or water bodies.
Dispose of contents/container in accordance with local/regional/national/international regulations.
Do not empty into drains.
- **6.3 Methods and material for containment and cleaning up:**
Do not flush with water or aqueous cleansing agents
- **6.4 Reference to other sections**
Do not handle until all safety precautions have been read and understood.
Wear suitable protective clothing and gloves.
Dispose of contents/container in accordance with local/regional/national/international regulations.

SECTION 7: Handling and storage

- **7.1 Precautions for safe handling**
Take note of emission threshold.
Prevent formation of dust.
Use only in well-ventilated areas.
Handle and open container with care.
- **Information about protection against explosions and fires:** The product is not flammable
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage**
- **Requirements to be met by storerooms and containers:** No special requirements.
- **Information about storage in one common storage facility:** Store away from foodstuffs.
- **Further information about storage conditions:** Store in cool, dry conditions in well sealed containers.
- **Storage class** 13
- **7.3 Specific end use(s)** No further relevant information available.

SECTION 8: Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see item 7.

(Contd. on page 4)

GB

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 11.09.2019

Version number 1

Revision: 10.05.2019

Trade name: F 7138 OPAL - ROT

(Contd. of page 3)

· 8.1 Control parameters

· Components with limit values that require monitoring at the workplace:

cadmium compounds, with the exception of cadmium sulphoselenide (xCdS.yCdSe), mixture of cadmium sulphide with zinc sulphide (xCdS.yZnS), mixture of cadmium sulphide with mercury sulphide (xCdS.yHgS), and those specified elsewhere in this Annex

WEL	Long-term value: 0.025 mg/m ³ as Cd, Carc
-----	---

· **Additional information:** The lists that were valid during the compilation were used as basis.

· 8.2 Exposure controls

· Personal protective equipment

· General protective and hygienic measures

Keep away from foodstuffs, beverages and food.

Take off immediately all contaminated clothing

Wash hands during breaks and at the end of the work.

Do not inhale dust / smoke / mist.

Avoid contact with the skin.

Avoid contact with the eyes and skin.

Do not eat, drink or smoke while working.

· **Breathing equipment:** Not necessary if room is well-ventilated.

· Protection of hands:

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

Solvent resistant gloves

· Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· Penetration time of glove material

For the mixture of chemicals mentioned below the penetration time has to be at least > 480 minutes (Permeation according to EN 374).

· Eye protection:

Safety glasses recommended during refilling.

Not required.

SECTION 9: Physical and chemical properties

· 9.1 Information on basic physical and chemical properties

· General Information

· Appearance:

Form: Powder

Colour: Red

· Odour: Odourless

· Odour threshold: Not determined.

· pH-value at 20 °C: 7

· Change in condition

Melting point/freezing point: >540 °C

Initial boiling point and boiling range: Not determined

(Contd. on page 5)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 11.09.2019

Version number 1

Revision: 10.05.2019

Trade name: F 7138 OPAL - ROT

(Contd. of page 4)

· Flash point:	Not applicable
· Inflammability (solid, gaseous)	Not determined.
· Decomposition temperature:	Not determined.
· Self-inflammability:	Product is not selfigniting.
· Explosive properties:	Product is not explosive. Explosive when mixed with oxidising substances.
· Critical values for explosion:	
Lower:	Not determined.
Upper:	Not determined.
· Vapour pressure:	Not applicable.
· Density at 20 °C	3.03 g/cm ³
· Relative density	Not determined.
· Vapour density	Not applicable.
· Evaporation rate	Not applicable.
· Solubility in / Miscibility with Water:	Unsoluble
· Partition coefficient: n-octanol/water:	Not determined.
· Viscosity:	
dynamic:	Not applicable.
kinematic:	Not applicable.
· Solvent content:	
Solids content:	100.0 %
· 9.2 Other information	No further relevant information available.

SECTION 10: Stability and reactivity

- **10.1 Reactivity** No further relevant information available.
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:**
To avoid thermal decomposition do not overheat.
No decomposition if used and stored according to specifications.
Stable up to melting point.
- **10.3 Possibility of hazardous reactions** No dangerous reactions known
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:** No dangerous decomposition products known

SECTION 11: Toxicological information

- **11.1 Information on toxicological effects**
- **Acute toxicity** Based on available data, the classification criteria are not met.

(Contd. on page 6)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 11.09.2019

Version number 1

Revision: 10.05.2019

Trade name: F 7138 OPAL - ROT

(Contd. of page 5)

· **LD/LC50 values that are relevant for classification:**

Components	Type	Value	Species
cadmium compounds, with the exception of cadmium sulphoselenide (xCdS.yCdSe), mixture of cadmium sulphide with zinc sulphide (xCdS.yZnS), mixture of cadmium sulphide with mercury sulphide (xCdS.yHgS), and those specified elsewhere in this Annex			
Oral	LD50	500 mg/kg (ATE)	
Dermal	LD50	1,100 mg/kg (ATE)	
Inhalative	LC50/4 h	1.5 mg/l (ATE)	

· **Primary irritant effect:**

· **Skin corrosion/irritation**

Causes skin irritation.

· **Serious eye damage/irritation** Based on available data, the classification criteria are not met.

· **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.

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

· **STOT-repeated exposure** Based on available data, the classification criteria are not met.

· **Aspiration hazard** Based on available data, the classification criteria are not met.

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.

· **Ecotoxicological effects:**

· **Remark:** Harmless to fish up to the tested concentration

· **Behaviour in sewage processing plants:**

The product can be mechanically separated.

Heavy metal can be dissolved by liquids containing acid or alkali.

Then elimination out of the water through chemical flocculation.

· **Additional ecological information:**

· **General notes:**

The product contains materials that are harmful to the environment.

Do not allow product to reach ground water, water bodies or sewage system, even in small quantities.

Do not allow product to reach ground water, water bodies or sewage system.

Also poisonous for fish and plankton in water bodies.

Toxic for aquatic organisms

· **12.5 Results of PBT and vPvB assessment**

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

· **12.6 Other adverse effects** No further relevant information available.

GB

(Contd. on page 7)

Safety data sheet
 according to 1907/2006/EC, Article 31

Printing date 11.09.2019

Version number 1

Revision: 10.05.2019

Trade name: F 7138 OPAL - ROT

(Contd. of page 6)

SECTION 13: Disposal considerations

· **13.1 Waste treatment methods**

· **Recommendation**

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

After prior treatment product has to be landfilled under adherence to the regulations pertaining to the disposal of particularly hazardous waste.

· **Waste disposal key number:** 55515 (Pigmente und Farbstoffe anorganisch)

· **European waste catalogue**

08 02 99 wastes not otherwise specified

· **Uncleaned packagings:**

· **Recommendation:** Disposal must be made according to official regulations.

· **Waste disposal key number:**

18715 (Verpackungsmaterial mit schädlichen Verunreinigungen oder Restinhalten, vorwiegend anorganisch)

SECTION 14: Transport information

· **14.1 UN-Number**

· **ADR, IMDG, IATA**

UN3077

· **14.2 UN proper shipping name**

· **ADR**

3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (cadmium compounds, C.I. pigment red 108)

· **IMDG**

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (cadmium compounds, C.I. pigment red 108), MARINE POLLUTANT

· **IATA**

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (cadmium compounds, C.I. pigment red 108)

· **14.3 Transport hazard class(es)**

· **ADR**



· **Class**

9 (M7) Miscellaneous dangerous substances and articles.

· **Label**

9

· **IMDG, IATA**



· **Class**

9 Miscellaneous dangerous substances and articles.

· **Label**

9

(Contd. on page 8)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 11.09.2019

Version number 1

Revision: 10.05.2019

Trade name: F 7138 OPAL - ROT

(Contd. of page 7)

· 14.4 Packing group · ADR, IMDG, IATA	III
· 14.5 Environmental hazards: · Marine pollutant: · Special marking (ADR): · Special marking (IATA):	Product contains environmentally hazardous substances: cadmium compounds Yes Symbol (fish and tree) Symbol (fish and tree) Symbol (fish and tree)
· 14.6 Special precautions for user · Kemler Number: · EMS Number: · Stowage Category · Stowage Code	Warning: Miscellaneous dangerous substances and articles. 90 F-A,S-F A SW23 When transported in BK3 bulk container, see 7.6.2.12 and 7.7.3.9.
· 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code	Not applicable.
· Transport/Additional information:	
· ADR · Limited quantities (LQ) · Excepted quantities (EQ) · Transport category	5 kg Code: E1 Maximum net quantity per inner packaging: 30 g Maximum net quantity per outer packaging: 1000 g 3
· IMDG · Limited quantities (LQ) · Excepted quantities (EQ)	5 kg Code: E1 Maximum net quantity per inner packaging: 30 g Maximum net quantity per outer packaging: 1000 g
· UN "Model Regulation":	UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (CADMIUM COMPOUNDS, C.I. PIGMENT RED 108), 9, III

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**
 - O1 Substances or mixtures with hazard statement EUH014
 - E2 Hazardous to the Aquatic Environment
- **Qualifying quantity (tonnes) for the application of lower-tier requirements** 100 t
- **Qualifying quantity (tonnes) for the application of upper-tier requirements** 500 t
- **REGULATION (EC) No 1907/2006 ANNEX XVII** Conditions of restriction: 63

· **Regulation (EU) No 649/2012**

CAS: 1314-41-6 | Bleiverbindungen

Annex I Part I

(Contd. on page 9)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 11.09.2019

Version number 1

Revision: 10.05.2019

Trade name: F 7138 OPAL - ROT

CAS: 58339-34-7	C.I. pigment red 108	(Contd. of page 8)
		Annex I Part 1

- **National regulations**

- **Technical instructions (air):**

Class	Share in %
I	10-25

- **Water hazard class:** Water danger class 3 (Self-assessment): extremely hazardous for water.

- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

These data are based on our present knowledge. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Relevant phrases**

H200 Unstable explosives.

H302 Harmful if swallowed.

H312 Harmful in contact with skin.

H315 Causes skin irritation.

H332 Harmful if inhaled.

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.

- **Classification according to Regulation (EC) No 1272/2008**

The classification of the mixture is generally based on the calculation method using substance data according to Regulation (EC) No 1272/2008.

Skin corrosion/irritation	The classification of the mixture is generally based on
Hazardous to the aquatic environment - long-term	the calculation method using substance data according to
(chronic) aquatic hazard	Regulation (EC) No 1272/2008.

- **Department issuing data specification sheet:** Environment protection department.

- **Contact:** Hr. Frank Bauer

- **Abbreviations and acronyms:**

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

ICAO: International Civil Aviation Organisation

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)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Unst. Expl.: Explosives – Unstable explosive

Acute Tox. 4: Acute toxicity – Category 4

Skin Irrit. 2: Skin corrosion/irritation – Category 2

Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1

Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard – Category 1

Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2