

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

Printing date 25.10.2017

Version number 1

Revision: 25.10.2017

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

1.1 Product identifier

· **Trade name:** **F 3128 HELL - GELB**
 · Säuren- und Laugenbeständige Glasfarbe

· **Article number:** F 3128

· **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**



GHS08 health hazard

Carc. 2 H351 Suspected of causing cancer.
 Repr. 1A H360Df May damage the unborn child. Suspected of damaging fertility.
 STOT RE 1 H372 Causes damage to organs through prolonged or repeated exposure.



GHS09 environment

Aquatic Acute 1 H400 Very toxic to aquatic life.



GHS07

Acute Tox. 4 H302 Harmful if swallowed.
 Acute Tox. 4 H332 Harmful if inhaled.

2.2 Label elements

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

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

(Contd. on page 2)

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

Printing date 25.10.2017

Version number 1

Revision: 25.10.2017

Trade name: F 3128 HELL - GELB

(Contd. of page 1)

Hazard pictograms



GHS07 GHS08 GHS09

Signal word Danger

Hazard-determining components of labelling:

Fritte,Glas des Systems Pb-Si-Al-B, Chemikalie; CAS-Nr 65997-18-4 Class 8.2.REACH Registernummer:01-2119548361-42-0016

Hazard statements

- H302+H332 Harmful if swallowed or if inhaled.
- H351 Suspected of causing cancer.
- H360Df May damage the unborn child. Suspected of damaging fertility.
- H372 Causes damage to organs through prolonged or repeated exposure.
- H400 Very toxic to aquatic life.

Precautionary statements

- P260 Do not breathe dust/fume/gas/mist/vapours/spray.
- P280 Wear protective gloves/protective clothing/eye protection/face protection.
- P301+P312 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.
- P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
- P405 Store locked up.
- P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

Additional information:

Contains lead. Should not be used on surfaces liable to be chewed or sucked by children.

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-Li-Cd-Ti-Si. (CAS-Nr.: 65997-17-3). Pigment des Systems Ti; Cd-ZnS; (CAS-Nr.: 12442-27-2).

Dangerous components:

	Fritte,Glas des Systems Pb-Si-Al-B, Chemikalie; CAS-Nr 65997-18-4 Class 8.2.REACH Registernummer:01-2119548361-42-0016 Carc. 2, H351; Repr. 1A, H360Df; STÖT RE 1, H372; Aquatic Acute 1, H400; Acute Tox. 4, H302; Acute Tox. 4, H332	50-100%
CAS: 8048-07-5	Cadmiumzinksulfid Pigmentgelb Aquatic Chronic 3, H412	10-25%

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

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

- After inhalation** Supply fresh air; consult doctor in case of symptoms.
- After skin contact** Rinse with warm water.

(Contd. on page 3)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 25.10.2017

Version number 1

Revision: 25.10.2017

Trade name: F 3128 HELL - GELB

(Contd. of page 2)

- **After eye contact** Rinse opened eye for several minutes under running water.
- **After swallowing** Inform doctor. Do not give milk or fatty oils.
- **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.

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:** Put on breathing apparatus.
- **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 empty into drains.
- **6.3 Methods and material for containment and cleaning up:** Collect mechanically.
- **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.
Use only in well-ventilated areas.
Prevent formation of dust.
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:** Keep container tightly sealed.
- **Storage class** 6.1 C
- **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)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 25.10.2017

Version number 1

Revision: 25.10.2017

Trade name: F 3128 HELL - GELB

(Contd. of page 3)

· 8.1 Control parameters

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

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

· **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.

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

Store protective clothing separately.

Do not inhale dust / smoke / mist.

Do not eat, drink or smoke while working.

· Breathing equipment:

In case of brief exposure or low pollution use breathing filter apparatus. In case of intensive or longer exposure use breathing apparatus that is independent of circulating air.

Short term filter device:

Filter P2.

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:** Tightly sealed safety glasses.

SECTION 9: Physical and chemical properties

· 9.1 Information on basic physical and chemical properties

· General Information

· Appearance:

Form:	Powder
Colour:	According to product specification
Odour:	Odourless
Odour threshold:	Not determined.

· **pH-value:** Slightly alkaline

· Change in condition

Melting point/freezing point:	>590 °C
Initial boiling point and boiling range:	Not determined

· **Flash point:** Not applicable

· **Inflammability (solid, gaseous)** Not determined.

· Ignition temperature:

Decomposition temperature: Not determined.

(Contd. on page 5)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 25.10.2017

Version number 1

Revision: 25.10.2017

Trade name: F 3128 HELL - GELB

(Contd. of page 4)

· Self-inflammability:	Product is not selfigniting.
· Explosive properties:	Product is not explosive.
· Critical values for explosion:	
Lower:	Not determined.
Upper:	Not determined.
· Vapour pressure:	Not applicable.
· Density	Not determined
· 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.
· 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**
Harmful if swallowed or if inhaled.
- **LD/LC50 values that are relevant for classification:**

Components	Type	Value	Species
Fritte, Glas des Systems Pb-Si-Al-B, Chemikalie; CAS-Nr 65997-18-4 Class 8.2.REACH Registernummer:01-2119548361-42-0016			
Oral	LD50	500 mg/kg (ATE)	
Inhalative	LC50/4 h	1.5 mg/l (ATE)	

- **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.
- **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.

(Contd. on page 6)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 25.10.2017

Version number 1

Revision: 25.10.2017

Trade name: F 3128 HELL - GELB

(Contd. of page 5)

- **Carcinogenicity**
Suspected of causing cancer.
- **Reproductive toxicity**
May damage the unborn child. Suspected of damaging fertility.
- **STOT-single exposure** Based on available data, the classification criteria are not met.
- **STOT-repeated exposure**
Causes damage to organs through prolonged or repeated exposure.
- **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
Very toxic for fish
- **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.
Very 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.

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)
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.
- **Waste disposal key number:**
18715 (Verpackungsmaterial mit schädlichen Verunreinigungen oder Restinhalten, vorwiegend anorganisch)

-GB-

(Contd. on page 7)

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

Printing date 25.10.2017

Version number 1

Revision: 25.10.2017

Trade name: F 3128 HELL - GELB

(Contd. of page 6)

SECTION 14: Transport information

· **14.1 UN-Number**

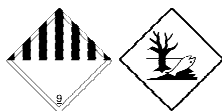
· **ADR** UN3077
2811 / 2291
· **IMDG, IATA** UN3077

· **14.2 UN proper shipping name**

· **ADR** 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (orange lead, cadmium compounds)
· **IMDG** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (orange lead, cadmium compounds), MARINE POLLUTANT
· **IATA** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (orange lead, cadmium compounds)

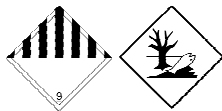
· **14.3 Transport hazard class(es)**

· **ADR**



· **Class** 9 (M7) Miscellaneous dangerous substances and articles.
· **Label** 9

· **IMDG, IATA**



· **Class** 9 Miscellaneous dangerous substances and articles.
· **Label** 9

· **14.4 Packing group**

· **ADR, IMDG, IATA** III

· **14.5 Environmental hazards:**

Product contains environmentally hazardous substances: orange lead, cadmium compounds

· **Marine pollutant:**

Yes
Symbol (fish and tree)

· **Special marking (ADR):**

Symbol (fish and tree)

· **Special marking (IATA):**

Symbol (fish and tree)

· **14.6 Special precautions for user**

Warning: Miscellaneous dangerous substances and articles.

· **Kemler Number:**

90

· **EMS Number:**

F-A,S-F

· **Segregation groups**

Heavy metals and their salts (including their organometallic compounds)

· **Stowage Category**

A

· **Stowage Code**

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.

(Contd. on page 8)

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

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Version number 1

Revision: 25.10.2017

Trade name: F 3128 HELL - GELB

(Contd. of page 7)

· **Transport/Additional information:**

· **ADR**

· **Limited quantities (LQ)**

5 kg

· **Excepted quantities (EQ)**

Code: E1

Maximum net quantity per inner packaging: 30 g

Maximum net quantity per outer packaging: 1000 g

· **Transport category**

3

· **Tunnel restriction code**

E

· **IMDG**

· **Limited quantities (LQ)**

5 kg

· **Excepted quantities (EQ)**

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. (ORANGE LEAD,
CADMIUM COMPOUNDS), 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 E1** 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** 200 t

· **National regulations**

· **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**

H302 Harmful if swallowed.

H332 Harmful if inhaled.

H351 Suspected of causing cancer.

H360Df May damage the unborn child. Suspected of damaging fertility.

H372 Causes damage to organs through prolonged or repeated exposure.

H400 Very toxic to aquatic life.

H412 Harmful 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.

(Contd. on page 9)

GB

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

Printing date 25.10.2017

Version number 1

Revision: 25.10.2017

Trade name: F 3128 HELL - GELB

(Contd. of page 8)

Acute toxicity - oral
 Acute toxicity - inhalation
 Carcinogenicity
 Reproductive toxicity
 Specific target organ toxicity (repeated exposure)
 Hazardous to the aquatic environment - short-term
 (acute) aquatic hazard

The classification of the mixture is generally based on the calculation method using substance data according to 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

Acute Tox. 4: Acute toxicity – Category 4

Carc. 2: Carcinogenicity – Category 2

Repr. 1A: Reproductive toxicity – Category 1A

STOT RE 1: Specific target organ toxicity (repeated exposure) – Category 1

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

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

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