



SAFETY DATA SHEET

3514

FERN GREEN SUNSHINE ONGLAZE COLOUR

1. Identification of substance/preparation and of the company undertaking

Trade Name:	Fern Green Sunshine Onglaze Colour
Use of the substance/Preparation	Ceramic coating suited for firing, for glass and ceramics

2. Composition /information on ingredients

Chemical nature	Product contains: Glass/frit Inorganic Pigment
Lead oxide in glasses/pigments	Concentration: 20% - 30%
CAS-No: 1317-36-8	EC-No: 215-267-0
Symbol(s): T	R-pharse(s) R61, R62, R20/22, R33
C.I. Pigment Yellow 35	Concentration: 5% - 7%
CAS-No: 8048-07-5	EC-No: 232-466-8
Symbol(s):	R-pharse(s): R52/53
Cadmium oxide in glasses/pigments	Concentration: 1% - 3%
CAS-No: 1306-19-0	EC-No: 215-146-2
Symbol(s): Xn	R-pharse(s): R20/21/22
Zirconium dioxide	Concentration 1% - 3%
CAS-No: 1314-23-4	EC-No: 215-227-2
Cadmium sulfoselenide orange	Concentration 0.1 – 0.2%
CAS-No: 12656-57-4	EC-No: 235-758-3
Symbol(s): N	R-pharse(s): R51/53

3. Hazards Identification

May cause harm to unborn child.
Also harmful by inhalation, in contact with skin and if swallowed.
Danger of cumulative effects.
Possible risk of impaired fertility



4. First Aid Measures

General advice	Remove contaminated or saturated clothing. Bring affected person out of danger area. Place person on side in stable position if unconscious. Employ mouth-to-mouth resuscitation if breathing ceases.
Inhalation	Take affected persons out into the fresh air. In case of discomfort consult doctor immediately
Skin contact	Wash off immediately with soap and plenty of water. Remove contaminated or saturated clothing.
Eye contact	With eye held open, thoroughly rinse immediately with plenty of water for at last 10 minutes
Ingestion	Make affected person vomit but only if he is fully conscious. Have patient rinse out mouth with water. Have patient drink plenty of water in small sips. Call a physician immediately
Notes to physician	No own experience available.

5. Fire Fighting Hazards

Suitable extinguishing media	The product itself does not burn.
Extinguishing media which must not be used for safety reasons	None known
Specific hazards during fire fighting	No information available
Special protective equipment for fire-fighters	Standard procedure for chemical fires.
Further information	Water used to extinguish fire should not enter drainage systems, soil, or stretches of water. Ensure there are sufficient retaining facilities for water used to extinguish fire. Contaminated fire-extinguishing water must be disposed of in accordance with the regulations issued by the appropriate local authorities.

6. Accidental Release Measure

Personal precautions	Evacuate personnel to safe areas. Ensure adequate ventilation. Wear personal protective equipment; see section 8 Avoid dust formation.
Environmental precautions	Prevent penetration into soil, stretches of water and drainage systems.
Methods for cleaning up	Pick up mechanically and collect in a suitable



	container, Avoid formation of dust.
Additional advice	Dispose of contaminated material as waste in accordance with section 13.

7. Handling & Storage

Safe handling advice	Avoid production of dust. Do not breathe dust. The product should only be handled by trained personnel. Store substances and preparations classified as T or T+ under lock and key or only allow access to technical experts or persons under their authority. The product contains substances, which may be dangerous to reproduction, category 3. Comply with employment limitations for youths, pregnant women and nursing mothers.
Advice on protection against fire explosion	No data available
Requirements for storage areas and containers	Keep containers tightly closed in dry, cool and well-ventilated place. No special storage conditions required.
Further information	Product is water-pollutive. Observe the national and local regulations concerning handling and storage
Advice on common storage	Keep away from food, drink and animal feeding stuffs. Keep away from tobacco products.
German storage class	6.1B (Classification by producer in accordance with VCI scheme)

8. Exposure Control/Personal Protection

Lead oxide in glasses/pigments	
CAS-No: 1317-36-8	EC-No: 215-267-0
Control parameters 0.10mg/m ³ (total inhalable dust)	Related to: as Pb: MAK
C.I. Pigment Yellow 35	
CAS-No: 8048-07-5	EC-No: 232-466-8
Cadmium oxide in glasses/pigments	
CAS-No. 1306-19-0	EC-No: 215-146-2
0,015 mg/m ³ (Total dust)	Related to: as Cd: TRK
Zirconium dioxide	
CAS-No. 1314-23-4	EC-No: 215-227-2
2,50 mg/m ³ (Total dust)	Related to: as Zr: MAK
Engineering measures	If possible, use material transfer/filling, metering and blending plants that are closed. Eventual



	aspiration in case of dusts, Technical protection measures have always priority over personal protection equipment.
Personal protective equipment	
Respiratory protection	If workplace exposure limit is exceeded apply, Respirator with P3 particle filter.
Hand protection	Wear protective gloves made of the following materials: nitrile rubber
Eye protection	Wear basket-shaped glasses or safety goggles with side shields.
Skin and body protection	Safety shoes
Hygiene measures	When using do not smoke. When using do not eat or drink. Wash hands before breaks and immediately after handling the product. Do not breathe dust or spray mist. Avoid contact with skin, eyes and clothing. Keep working clothes separate.
Protective measures	Handle in accordance with good industrial hygiene and safety practice.
Environmental exposure controls	No data available

9. Physical & Chemical Properties

Form	Powder
Colour	Green
Odour	Odourless

10. Stability & Reactivity

Conditions to avoid	No Data available
Materials to avoid	No data available
Hazardous decomposition products	No data available

11. Toxicological Information

Acute toxicity	Harmful if swallowed Harmful by inhalation Harmful in contact with skin
Chronic toxicity/Subacute toxicity	Possible risk of impaired fertility. May cause harm to the unborn child.
Skin irritation	Powder can cause localised skin irritation in folds of the skin or under the tight clothing
Eye irritation	No data available
Sensitization	No data available
Acute oral toxicity	



Frits, chemicals (WGK 2)	LD50 rat > 2.000,00 mg/kg
C.I Pigment Yellow 35	LD50 rat > 5.100,00 mg/kg

12. Ecological Information

Persistence and degradability	
Biodegradability	The methods for determining biodegradability are not applicable to inorganic substances.
Physico-chemical removability	No data available
Behaviour in environmental compartments	
Mobility	No data available
Ecotoxicity effects	Specific information for this product is not available. (If, applicable, information referring to individual components of the product is given below).
Toxicity to fish	
Frits, chemicals (WGK 2)	LC50 Fish: > 1.000,00mg/l/96h
C.I. Pigment Yellow 35	LC50 Fish: > 1.000,00mg/l
Toxicity to daphnia	
Frits, chemicals (WGK 2)	EC50 Daphnia: > 100,00mg/l /48h
C.I. Pigment Yellow 35	EC50 Daphnia: 20,00 mg/l/48h
Toxicity to algae	
Frits, chemicals (WGK 2)	IC50 algal: > 1.000,00 mg/l / 72h
Further information on ecology	
Further information	No data available.

13. Disposal Considerations

Product	Dispose of as special waste in compliance with local and national regulations. Do not contaminate ponds, waterways or ditches with chemical or used container. In agreement with the waste code must be determined regional waste disposal authority or company.
Uncleaned packaging	If there is product residue in the emptied container, follow directions for handling on the container's label. Dispose of as unused product.

14. Transport Information

Further information	Not classified as dangerous in the meaning of transport regulations.
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15. Regulatory Information

Labelling according to EEC Directive Statutory basis/list	1999/45/EC	
Hazard-defining component(s)	Lead oxide in glasses/pigments Cadmium oxide in glasses/pigments	
Symbol(s):	T	Toxic
R-phrase(s)	R20/21/22	Also harmful by inhalation, in contact with skin and if swallowed.
	R33	Danger of cumulative effects.
	R61	May cause harm to unborn child
	R62	Possible risk of impaired fertility.
S-phrase(s)	S22	Do not breathe dust.
	S35	This material and its container must be disposed of in a safe way.
	S36/37	Wear suitable protective clothing and gloves.
	S45	In case of accident or if you feel unwell, seek medical advice immediately (show label where possible).
	S53	Avoid-exposure-obtain special instructions before use.
National legislation (Germany) Other regulations	The employment limitations under the regulations to the protection from hazardous materials of pregnant women and young mother's guideline and the protection of young persons act are to be observed.	



16. Other Information

Risk phrase (R phrase) texts

Lead oxide in glasses/pigments

R61	May cause harm to the unborn child.
R62	Possible risk of impaired fertility.
R20/22	Also harmful by inhalation and if swallowed.
R33	Danger of cumulative effects.

C.I. Pigment Yellow 35

R52/53	Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
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Cadmium oxide in glasses/ pigments

R20/21/22	Harmful by inhalation, in contact with skin and if swallowed.
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Cadmium sulfoselenide orange

R51/53	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
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