



SAFETY DATA SHEET

3512

CARDINAL RED SUNSHINE ONGLAZE COLOUR

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

Trade Name:	Cardinal Red Sunshine Onglaze Colour
Chemical Name:	-

2. Composition /information on ingredients

Composition	CAS – No.	Common Name	
	65997-17-3	Glass, oxide	
	58339-34-7	C.I. Pigment Red 108	
	12656-57-4	C.I. Pigment Orange 20	
Hazardous Ingredients (Theoretically Calculated):			
Weight (%)	CAS – No.	Common Name	
		Symbol	R-Sentence
15.0 - 40.0	7439-92-1	Lead in Compounds and Frits	
		T	61-62-20/22-33
1.0 - 5.0	7440-43-9	Cadmium (compounds)	
		Xn	20/21/22

3. Hazards Identification

Harmful by inhalation, in contact with skin and if swallowed.

May cause harm to an unborn child.

Possible risk of impaired fertility.

Danger of cumulative effects.

Information referring to C.I. Pigment Red 108:	On contact with strong acids, hydrogen sulphate is produced.
Information referring to C.I. Pigment Orange 20:	On contact with strong acids, hydrogen sulphate is produced.



4. First Aid Measures

General Remarks:	In case of poisoning, refer to Section 2 for information on hazardous ingredients. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
Inhalation:	Bring affected persons out of danger area. Keep warm in a comfortable position and cover with blanket.
Skin Contact:	With continuous skin irritation, consult doctor.
Eye Contact:	Rinse thoroughly immediately with plenty of water for at least 5 minutes keeping eyelid open.
Ingestion:	Have patient rinse out mouth with water. Supply with medical care.
Instructions for physician:	
Inhalation:	After inhaling relevant quantities lung lavage. Control of load by measuring the urine output of the metal. If necessary, treat with complexing agents.
Contact with skin:	If necessary, symptomatic treatment.
Contact with eyes:	If necessary, symptomatic treatment.
Swallowing:	Immediate measures (also by laymen) – Administer a drinking glass of saturated sodium sulphate solution. Physician: Remove poisonous substances from the gastro- intestinal tract. Administer sodium sulphate solution if this has not yet been done: Control of load by measuring the urine output of the metals. If necessary, treat with complexing agents.

5. Fire Fighting Hazards

Suitable Extinguishing Media:	Usual measures for chemical fires.
Special Exposure hazards arising from the substances or preparation itself, combustion products, resulting gases:	Usual measures for chemical fires.
Information referring to C.I. Pigment Red 108:	In case of fire, the following hazardous smoke fumes may be produced - Cadmium Oxide and Sulphur Dioxide.
Information referring to C.I. Pigment Orange 20:	In case of fire, the following hazardous smoke fumes may be produced – Cadmium Oxide and Sulphur Dioxide.
Special protective equipment for fire fighters:	Usual measures for chemical fires.
Information referring to C.I. Pigment Red 108:	In case of fire, wear respirator independent of surrounding area.
Information referring to C.I. Pigment Orange 20:	In case of fire, wear respirator independent of surrounding area.



6. Accidental Release Measure

Personal Precautions:	Do not breathe dust. Keep persons at a distance and stay on the weather side. Wear personal protective equipment.
Environmental Precautions:	Dispose of waste in accordance with the legal regulations issued by the appropriate local and national authorities.
Methods of cleaning up:	Absorb mechanically and collect in a suitable container.
Further Information:	Avoid formation of dust. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

7. Handling & Storage

Handling:	<p>The product should only be handled by trained personnel. Avoid formation of dust; suction of objects is necessary. The product contains substances, which may be dangerous to reproduction. Note employment restrictions for minors and pregnant and lactating women. Keep out of reach of children. Do not breathe dust. Avoid exposure – obtain special instructions before use.</p> <p>Specific information referring to lead: The product should only be handled by trained personnel. Note employment restrictions for minors and for women of child-bearing age.</p> <p>Information referring to cadmium and compounds: The product should only be handled by trained personnel.</p>
Storage:	Keep container dry and tightly sealed – even empties. Store under lock and key or only allow access to technical experts or persons under their authority.
Information referring to C.I. Pigment Red 108:	Do not store together with strong acids.
Information referring to C.I. Pigment Orange 20:	Do not store together with strong acids. The product is slightly water endangering.

8. Exposure Control/Personal Protection

Additional Instructions for technical installation:	When processing the product, the air in the workplace should be regularly monitored and employees exposed to the product should be given a regular medical check-up.
Specific Information referring to lead:	In accordance with current information a risk of



			embryonic damage is likely in pregnant women. Damage cannot be excluded even when the special limit values of TLV tolerance value are observed.
Cadmium products:			Specific information (UK): Maximum Exposure Limit (MEL): 0.05 mg / m³ 8 hour TWA (long term). For the purposes of industrial medical surveillance, the value of 15 micrograms / in whole blood or urine is recommended in Germany as a maximum value.
Values of maximum admissible concentration (MAK):			
ml / m³	0.1000	mg / m³ referring to lead in compounds and frits (G)	
ml / m³	2.0000	mg / m³ referring to tin (G)	
ml / m³	5.0000	mg / m³ referring to zirconium (G)	
Values of maximum admissible concentration (TRK):			
ml / m³	0.0150	mg / m³ referring to cadmium (compounds).	
Personal Protection:			
General Protection:		Wash face / hands before break and end of work. Avoid exposure – obtain special instructions before use.	
Respiratory Protection:		If maximum admissible concentration value at the workplace is exceeded, apply ref. To BS2091 Dust: B.	
Eye Protection:		The usual precautionary measures for dealing with chemicals should be observed.	
Skin Protection:		No particular protective equipment required, if no further advice is following.	
Hand Protection:		No particular protective equipment required, if no further advice is following.	

9. Physical & Chemical Properties

Physical State:	Powder
Colour:	Red
Odour:	Not Applicable



10. Stability & Reactivity

Conditions to avoid:	No dangerous reactions are known to occur with correct handling and storage.
Information referring to C.I. Pigment Red 108:	Decomposition begins at 500°C.
Information referring to C.I. Pigment Orange 20:	Decomposition begins at 500°C.
Materials to avoid:	(If applicable, information referring to individual components of the product is given below).
Information referring to C.I. Pigment Red 108:	On contact with strong acids, hydrogen sulphate is produced.
Information referring to C.I. Pigment Orange 20:	On contact with strong acids, hydrogen sulphate is produced.
Hazardous decomposition:	(If applicable, information referring to individual components of the product is given below).
Information referring to C.I. Pigment Red 108:	Formation of Cadmium Oxide and Sulphur Dioxide if heated above decomposition temperature.
Information referring to C.I. Pigment Orange 20:	Formation of Cadmium Oxide and Sulphur Dioxide if heated above decomposition temperature.

11. Toxicological Information

Immediate effects, data for substance (or effects of certain components in preparations):	Specific Information for this product is not available.
Chronic effects from short and long term exposure:	May cause harm to unborn child. Possible risk or impaired fertility.
Specific information referring to lead:	Classification as embryotoxic (teratogenic) R(E), category 1: Substance which is known to be embryotoxic (adverse to development) in humans.
Human:	To date, handling this product has not been known to cause any detrimental effects.
Information referring to C.I. Pigment Red 108:	Primary irritative effect to skin – Non- irritant (rabbit, OECD 404). Primary irritative effect to eyes – Non- irritant (rabbit, OECD 405).
Information referring to C.I. Pigment Orange 20:	Primary irritative effect to skin – Non- irritant (rabbit, OECD 404). Primary irritative effect to eyes – Non- irritant (rabbit, OECD 405).



12. Ecological Information

Data for elimination (persistence and degradability):	Mechanically separable in water treatment plants.
Behaviour in environmental compartments:	Product is slightly water- pollutive. Do not allow run off to enter storm drains.
Ecological effects:	Product not investigated.

13. Disposal Considerations

Look for Community provisions relating to waste. National or regional provisions may be in force.	
Product (substance or preparation)	
Surface waste for specially controlled waste or mono waste site	
Waste No:	31433 referring to Germany
Waste Name:	Glass and ceramic waste with harmful contaminants.
Uncleaned contaminated packaging.	
Waste Code:	18715 referring to Germany
Designation of waste:	Packing material with harmful contaminations or residues, mainly inorganic.

14. Transport Information

Dangerous goods regulations	RID / ADR / IMDG – Code / ICAO – TI.
Land Transport ADR/RID (Interstate / Intrastate)	Not Restricted
Inland Navigation ADN	For inland navigation consultation necessary.
Sea Transport IMDG	Not restricted.
Air Transport ICAO-TI and IATA-DGR	Not restricted.
Water endangering class (Germany):	1
RQ (Reportable Quantity – USA):	

15. Regulatory Information

Information on the label according to the Directives of EEC:		
Symbol(s) and indication(s) of danger:	T	Toxic
Hazardous Ingredient(s) for labelling, containing:	Lead in compounds and frits Cadmium (compounds)	
R - Phrases	R20/21/22	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 – Phrases	S2	Keep out of reach of children.
	S22	Do not breathe dust.
	S45	In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
	S53	Avoid exposure – Obtain special instructions before use.
Any other national measures that may be relevant (ref. Annex II Directive 88/379/EEC).		
The safety data sheet is produced considering new directives of EEC. Missing or differing labelling may occur during transitional stages until all countries take over these regulations in their national jurisdiction.		
Lead containing preparation:	"Containing lead. Do not use for painting articles which can be chewed or sucked by children."	
Water endangering class:	(Germany) 1 (Provisional self – classification).	

16. Other Information

The data presented here corresponds to the present state of our knowledge and experience and are intended to describe our product with respect to possible safety demands. We imply with this however no guarantee of properties or description of qualities.