

Bath Potters' Supplies

MATERIAL SAFETY DATA SHEET

1. Identification of the preparation/Supplier reference

Trade Name	Chaffinch Orange Decorating Slip SLIP/7
Chemical name	Kaolinite, Zircon, Cadmium Orange
Synonyms	Kaolins, ball or china clays
Supplier	Bath Potters' Supplies, Unit 18 4th Avenue, Westfield Trad Est, Radstock, Somerset, BA3 4XE
Emergency numbers	01761 411 077

2. Composition

Component	CAS	EINECS	% of composition
Kaolinite	N/A	N/A	54 - 62%
Micaceous Mineral	N/A	N/A	22 - 26%
Crystalline Silica (Quartz)	14808-60-7	2388784	8 - 12%
Carbonaceous Material	N/A	N/A	N/A
Cadmium/Selenium (CdSeS)	7440-43-9	N/A	N/A
Silica Crystalline (SiO₂)	14808-60-7	N/A	N/A
Zirconium Silicate (ZrO)	1314-24-4	N/A	N/A

This product is a blend of various metal oxides, salts and some other compounds which are interfused by high temperature calcination to form the insoluble finished product which typically does not exhibit the properties of the individual components

The Cadmium is encased in a Zirconium layer which renders the Cadmium insoluble. Cadmium leachability tests performed using ASTM D 5517-03 found that over a 24 hour period on average 96ppm of Cadmium was released into a standard acid solution

3. Health Hazard Identification

Inhalation	In the short term clay dust causes irritation of the respiratory tract, however due to the variable level of quartz in the product, excessive exposure to dust may cause symptoms of chronic lung disease and impaired pulmonary function. Prolonged inhalation of dust containing cobalt may cause serious respiratory illness. Overexposure to Cadmium can result in metallic taste in mouth, headache, shortness of breath, chest pains, weakness, leg pains and fluid in the lung. These symptoms may be delayed, sometimes occurring 4-8 hours after exposure. Long term overexposure to cadmium fumes and dust have been associated with emphysema, bronchitis and kidney damage. Prolonged exposure to respirable crystalline silica can cause Silicosis, a fibrosis of the lungs. Silicosis may be progressive, it may lead to disability and death. Silicosis increases risk of Tuberculosis. Inhaled from occupational sources is classified as carcinogenic to humans.
Ingestion	Product of low solubility in body fluids and likely to be of low acute toxicity.
Eyes	Clays are desiccants and prolonged exposure may cause physical irritation and inflammation. Not a primary irritant, but as with the eyes, any abrasive powder may give rise to irritation. May cause abrasions of the cornea
Skin	

4. First Aid Measures

Inhalation	Remove patient to fresh air, loosen tight clothing and seek medical attention if the volume of dust was great, or if ill-effects develop.
Ingestion	Do not induce vomiting. Rinse mouth with water (provided patient is conscious), and seek medical advice if any ill-effects develop.
Eyes	Wash with copious amounts of water and seek medical attention if irritation persists.
Skin	Wash affected areas with water. If irritation persists, seek medical attention.

5. Fire Fighting Measures

Extinguishing Media	Suitable for surrounding fire conditions. The product is not explosive or combustible. Standard fire fighting techniques only are required, i.e. water, sand, carbon dioxide, chemical foam extinguishers etc.
Special Exposure hazard	None.
Protective equipment	None other than required for surrounding fire conditions.

6. Accidental Release Measures

Leaks & Spills	Clay/water mixtures can be sticky and slippery. Where such a mixture wholly or partly covers a surface used for vehicular or personnel movements, a risk of skidding, slipping or falling exists. Remove dry materials either by a vacuum cleaner fitted with a specific P3 particulate filter, or by damping down and scooping in to a receptacle. Small spillages may be washed into drains with plenty of water (provided effluent consent conditions are complied with).
Protective equipment	Respiratory protective equipment required for the handling of the material in a dry state.

7. Handling & Storage

Handling	Do not eat, drink, or smoke in areas where the material is used. Wash hands/skin thoroughly after handling. Local exhaust ventilation is recommended to comply with occupational exposure limits (refer to Guidance Note EH40 - latest edition)
Storage	Store in sealed packaging (e.g. as supplied) in normal dry conditions.

8. Exposure Control/Personal protective Equipment

Engineering controls	Adequate ventilation should be provided so that Occupational Exposure Limits are not exceeded. Local Exhaust Ventilation is recommended. Good-housekeeping practices should be followed to prevent roads, walkways, etc., becoming coated with clay/water mixtures, and to keep the ambient dust level low.
Personal protective equipment	Where LEV is not practicable and exposure is likely to be excessive, approved respiratory protection to CEN standards prEN 140, 141, 143 or 149 should be worn. Protective gloves and overalls, which do not retain dust, are recommended for prolonged contact.

9. Physical & Chemical properties

Appearance & Odour	Orange Liquid
Flash point (°C)	Not applicable
Flammability	Not applicable
Explosive properties	Non-explosive
Oxidising properties	Non-oxidising
Specific gravity	2.5 - 2.6
pH value	5.2
Melting point (°C)	N/A

10. Stability & Reactivity

Chemical stability	The material is stable
Conditions/materials to avoid	Contact with moisture will hydrate and degrade the dry form of the product.
Hazardous decomposition products	None known
Hazardous polymerisation products	None known

11. Toxicology Information

Acute toxicology	LD ₅₀ Oral	Not known
	LD ₅₀ Dermal	Not known
	LD ₅₀ Inhalation	Not known
Health effects	Prolonged or repeated inhalation of dry dust (crystalline silica) above Occupational Exposure Standards, may result in chronic lung damage (silicosis).	

12. Ecological information

Ecotoxicity	Chemically inert, and does not react readily with most common substances at room temperatures and pressures.
Persistence	Product is soluble in water

13. Disposal

Dispose in accordance with current waste Disposal regulations (for UK - Control of Pollution (Special Waste) Regulations 1996). Landfill is the most appropriate method. Small amounts may be washed into trade effluent drains, provided effluent conditions are complied with.

14. Transport Information

UN/SI No.		None
UN Class		Not classified
Packing group		Not classified
Road	UK	Not classified
ADR		Not classified
Sea	IMO	Not classified
Air	ICAO	Not classified

15. Regulatory information

EC Supply Labelling	None required by directive 88/379/EEC		
R-Phrases	None required		
S-Phrases	Optional safety phrases;		
	S20/21	When using do not eat, drink or smoke.	
	S22/23	Do not breath dust or fumes/spray	
	S38	In case of insufficient ventilation wear suitable respiratory equipment.	
	Mg/m ³ 8 hr TWA		% in product

UK Occupational exposures limits*

Kaolinite	- inhalable			
	- respirable	10		
Micaceous mineral	- inhalable	5		
Quartz		10	54 – 62%	
			ditto	
	- respirable	1		
	- inhalable	0.3	8 – 10%	22 – 26%
	- respirable	0.1	ditto	ditto

* Refer to HSE Guidance note EH40

In accordance with the H.S.E. Approved Code of Practice for CHIP, the recipient is reminded of their obligations under both the Health and Safety at Work Act (HSWA) and the Control of Substances Hazardous to Health Regulations (COSHH), and that the information in any safety data sheet does not constitute the user's assessment of workplace risk.

16. Other information

General industrial hygiene practices are recommended when handling and using this product.

COSHH ACOP:	H.S.C. Approved Code of Practice for the Control of Substances Hazardous to Health Regulations 1994.
CHIP 96:	Chemicals (Hazard Information and Packaging for Supply) Regulations 1996.
CHIP SDS ACOP:	H.S.C. Approved Code of Practice for Safety Data Sheets in accordance with regulation 6 of the CHIP regulations.
HSE EH40:	HSE Guidance note EH40 on Occupational Exposure Limits, to be used in conjunction with the COSHH regulations.

The information contained in this safety data sheet has been prepared using the best available information. However, in view of technical developments this may alter.

The material must only be used for its stated purpose and the information contained within this data sheet is offered solely for use in the evaluation of this product in respect of safety, health and environmental hazards.

Due to the many factors outside our control when using this product we cannot accept liability for any injury, accident, loss or damage caused through its use.