Potter's Choice Series

SAFETY DATA SHEET (SDS)

Version: 01
Date of Issue:May 14, 2026

According to: Regulation (EC) No. 1272/2008
Regulation (EC) No. 1907/2006

Section 1 – Identification of the Substance/Mixture and of the Company/Undertaking

1.1 Product identifier

Product Name:	Potter's Choice Series
Product Colors:	PC-14 Lapis Flow, PC-13 Serpentine Green, PC-66 Cosmic Oil Spot, PC-1 Saturation Metallic, PC-15 Satin Oribe, PC 2 Saturation Gold, PC-25 Textured Turquoise, PC-26 Blue Lagoon, PC-4 Palladium, PC-40 True Celadon, PC-41 Vert Lustre, PC-42 Seaweed, PC-45 Dark Green, PC-47 Emerald Falls, PC-48 Art Deco Green, PC-49 Frosted Melon, PC-9 Vintage Gold, PC-70 Copper Red, PC-71 Flambe, PC-72 Fire & Ice
Product sizes:	16 oz, 1 gal per color
Product Description:	Colored liquid glaze formulations intended to be applied with a brush, then placed in a kiln for glaze firing.

1.2 Relevant identified uses of the substance or mixture and uses advised against

Relevant identified use(s): The product is intended for general (adults) arts and crafts purposes.

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier: American Art Clay
71 Lower Baggot Street
Dublin, D02 P593, Ireland
Business Phone: 1-800-999-5456
Email: customercare@amaco.com

1.4 Emergency telephone number

Emergency Telephone: Contact the local poison control centre.

Section 2 – Hazard(s) Identification

2.1. Classification of the substance or mixture

According to: Regulation (EC) No. 1272/2008 [CLP]

	Health	Environment [b]	Physical
Classification:	Specific target organ toxicity (single exposure, Category 2, gastrointestinal tract irritation) (H371) Skin sensitization (H317) [a]	Acute aquatic toxicity (Category 1) (H400) Chronic aquatic toxicity (Category 1) (H410)	Not classified
SCL and/or M-factor	N/A	N/A	N/A
Classification Procedure	Weight of evidence	Weight of evidence	Weight of evidence

[a] It should be noted that the skin sensitization classification does not apply to PC-66 Cosmic Oil Spot.

[b] This SDS applies to the product line, as such the environmental classifications listed do not pertain to all colors. It should be noted that some colors may present environmental concerns to a lesser degree (*i.e.*, Category 2 or 3).

2.2. Label elements



Label Pictogram:
Signal Word: Warning
Hazard Statement & Precautions:

Specific target organ toxicity (single exposure, Category 2, gastrointestinal tract) (H371)	**May cause irritation to gastrointestinal tract through oral exposure.** **P260:** Do not breathe mist/vapour/spray. **P264:** Wash hands thoroughly after handling. **P270:** Do not eat, drink or smoke when using this product. **P308 + P311:** IF exposed or concerned: Call a POISON CENTER/ doctor. **P405**: Store locked up. **P501**: Dispose of contents/container in accordance with local/regional/national/ and/or international regulations.
Skin sensitization (H317)	**May cause an allergic skin reaction** **P261:** Avoid breathing mist/vapour/spray. **P272:** Contaminated work clothing should not be allowed out of the workplace. **P280:** Wear protective gloves and protective clothing. **P302 + P352:** IF ON SKIN: Wash with plenty of water. **P333 + P313:** If skin irritation or rash 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/ and/or international regulations.
Acute aquatic toxicity (Category 1) (H400) **Chronic aquatic toxicity (Category 1) (H410)**	**Very toxic to aquatic life with long lasting effects.** **P273:** Avoid release to the environment. **P391:** Collect spillage. **P501:** Dispose of contents/container in accordance with local, regional, national, and/or international regulation.

Supplemental Hazard Information: None

2.3. Other hazards

- The product is not expected to be an endocrine disruptor.
- The product is not expected to meet vPvB or PBT criteria in accordance with Regulation (EC) No. 1907/2006, Annex XIII.
- Substances when carried in single or combination packaging containing a net quantity per single or inner packaging of 5 L or less for liquids are not subject to any other provisions of ADR provided the packaging meets the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8. Should the single or inner packaging condition or provisions not be met, transportation restrictions will need to be revisited.
- No other hazards have been identified for this product.

Section 3 – Composition / Information on Ingredients

3.1 Substances

The product is a mixture and not a substance.

3.2 Mixture

Chemical Name	CAS No.	EC No.	% Concentration by weight (w/w) [a]	GHS Hazards
Feldspar	68476-25-5	270-666-7	up to 31.64%	H335: Specific target organ toxicity (single exposure, Category 3, respiratory irritation); H319: Eye irritation (Category 2)
Crystalline silica	14808-60-7	238-878-4	up to 17.33%	H350: Carcinogenicity (Category 1A) (inhalation); H372: Specific target organ toxicity (repeated exposure, Category 1 - causes damage to lungs through prolonged or repeated exposure)
Calcium sodium borate	1319-33-1	603-535-3	up to 15.86%	H360: Reproductive toxicity (Category 1A – may damage fertility or the unborn child); H319: Eye irritation (Category 2)
Manganese dioxide	1313-13-9	215-202-6	up to 13.06%	H332: Acute inhalation Toxicity (Category 4); H302: Acute oral toxicity (Category 4)
Copper carbonate	12069-69-1	235-113-6	up to 5.21%	H302: Acute oral toxicity (Category 4); H319: Eye irritation (Category 2); H332: Acute inhalation toxicity (Category 4); H371: Specific target organ toxicity (single exposure, Category 2 - gastrointestinal tract irritation); H400: Acute aquatic toxicity (Category 1); H410: Chronic aquatic toxicity (Category 1)
Zinc oxide	1314-13-2	215-222-5	up to 4.39%	H371: Specific target organ toxicity (single exposure, Category 2 - gastrointestinal tract irritation); H400: Acute aquatic toxicity (Category 1); H410: Chronic aquatic toxicity (Category 1)
Cupric oxide	1317-38-0	215-269-1	up to 3.42%	H371: Specific target organ toxicity (single exposure, Category 2 - gastrointestinal tract irritation); H400: Acute aquatic toxicity (Category 1; M=100); H410: Chronic aquatic toxicity (Category 1; M=10)
Trimanganese tetraoxide	1317-35-7	215-266-5	up to 1.63%	H361: Reproductive toxicity (Category 2 – (Category 2 – suspected of damaging fertility or the unborn child)
Lithium carbonate	554-13-2	209-062-5	up to 1.50%	H302: Acute oral toxicity (Category 4); H319: Eye irritation (Category 2)
Calcium oxide	1305-78-8	215-138-9	up to 0.63%	H335: Specific target organ toxicity (single exposure, Category 3 – May cause respiratory irritation); H315: Skin irritation (Category 2); H318: Eye damage (Category 1)
2,2,2-(Hexahydro-1,3,5-triazine-1,3,5-triyl)triethanol	4719-04-4	225-208-0	up to 0.20%	H302: Acute oral toxicity (Category 4) H317: Skin sensitization (Category 1; C ≥ 0.1%)
Cuprous oxide	1317-39-1	215-270-7	up to 0.07%	H371: Specific target organ toxicity (single exposure, Category 2 - gastrointestinal tract irritation);

Chemical Name	CAS No.	EC No.	% Concentration by weight (w/w) [a]	GHS Hazards
				H332: Acute inhalation toxicity (Category 4); H302: Acute oral toxicity (Category 4); H318: Eye damage (Category 1); H400: Acute aquatic toxicity (Category 1; M=100); H410: Chronic aquatic toxicity (Category 1; M=10)
2-Aminoethanol	141-43-5	205-483-3	up to 0.01%	H332: Acute inhalation toxicity (Category 4); H312: Acute dermal toxicity (Category 4); H302: Acute oral toxicity (Category 4); H314: Skin corrosion (Category 1B)

[a] Concentration is calculated as a maximum across all colors, rather than by color.

The other ingredients in the product are either considered non-hazardous or are below their respective GHS cut-off values/concentration limits in the final product and were therefore not disclosed in the SDS.

The product contains crystalline silica (CAS No. 14808-60-7) which may be hazardous when inhaled. Given the nature and physical form of the product (*i.e.,* liquid glaze), airborne respirable particles would not likely be released from the product and therefore the hazard is not relevant to the product. It was assumed that the glaze will not be sanded after it has been fired in the kiln.

	Specific Concentration Limit	Multiplying-Factor	Acute Toxicity Estimate
Potter's Choice Series	N/A	N/A	>2000 mg/kg (oral/dermal) >20 mg/L (inhalation)

Section 4 – First Aid Measures

4.1 Description of first aid measures

Eye contact: No specific first aid measures are required. If irritation occurs, remove contact lenses if present and easy to do – rinse eyes with water. If eye irritation persists: Get medical advice/attention.

Skin contact: IF ON SKIN: Wash with plenty of water. If skin irritation or rash occurs get medical help. Take off contaminated clothing and wash it before reuse.

Inhalation: Inhalation route of exposure is not anticipated with intended use. If exposed to excessive levels of material in the air, move the exposed person to fresh air. Seek medical attention if in doubt.

Ingestion: IF SWALLOWED: Get emergency medical help immediately. Rinse mouth with water. Do NOT induce vomiting. Never give anything by mouth to an unconscious person.

4.2 Most important symptoms and effects, both acute and delayed

- Refer to **Section 11 - Toxicological Information**.

4.3 Indication of any immediate medical attention and special treatment needed

- Not required.

Section 5 – Fire Fighting Measures

5.1 Extinguishing media

Suitable Extinguishing Media: Use extinguishing media suitable for surrounding area if material is involved in a fire (e.g., water fog, foam, dry chemical or carbon dioxide).

Unsuitable Extinguishing Media: None known.

5.2 Special hazards arising from the substance or mixture

Hazardous combustion products:

- Irritating vapours or fumes may form if product is involved in fire.
- Also see **Section 10 - Stability and Reactivity**.

5.3 Advice for firefighters

- Wear a self-contained breathing apparatus to protect against potentially irritating fumes.

Section 6 – Accidental Release Measures

6.1 Personal precautions, protective equipment (PPE) and emergency procedures

Personal Precautions: Ventilate area if spilled in confined space or other poorly ventilated areas. Observe PPE advice in **Section 8 - Exposure Controls/Personal Protection**.

Emergency Procedures: Not available.

6.2 Environmental precautions

Prevent entry and contact with soil, drains, sewers, and waterways. Inform relevant local/regional/national/international authorities.

6.3 Methods and material for containment and cleaning up

Containment/Clean-up Measures: Contain spill if safe to do so. Collect recoverable product and place in a designated container for recycle and/or disposal. Ventilate contaminated area thoroughly. Dispose of contents/container in accordance with local/regional/national/international regulations.

6.4 Reference to other sections

Refer to **Section 8 - Exposure Controls/Personal Protection** and **Section 13** - **Disposal Considerations**.

Section 7– Handling and Storage

7.1 Precautions for safe handling

- Wash hands thoroughly after handling.
- Wash contaminated clothing before reuse.
- Wear protective gloves and face protection.
- Do not breathe mist/vapour/spray
- Do not eat, drink or smoke when using this product.
- Contaminated work clothing should not be allowed out of the workplace.
- Employees should be trained in the safe use and handling of chemical materials.
- Refer to **Section 8 - Exposure Controls/Personal Protection**.

7.2 Conditions for safe storage, including any incompatibilities

- Keep container tightly closed to avoid spills.
- Keep in a cool dry place.
- Collect spillage.
- Store locked up.

7.3 Specific end use(s)

- Refer to **Section 1.2 - Relevant identified uses**.

Section 8– Exposure Controls / Personal Protection

8.1 Control Parameters:

Occupational exposure limits: Only vapours were considered to be foreseeable under conditions of normal use. Airborne particles, such as dust, are not foreseeable under conditions of normal use.

Chemical Name	CAS No.	European Union Occupational exposure limits	
		TWA	STEL
Crystalline silica [listed as silica, crystalline, respirable dust (Cristobalite, Quartz, Tridymite, Tripoli)]	14808-60-7	0.1 mg/m^3	N/A
Calcium oxide	1305-78-8	1 mg/m^3 (Respirable fraction)	4 mg/m^3 (Respirable fraction, 15 minutes average value)
Manganese dioxide (listed as manganese and inorganic compounds)	1313-13-9	0.2 mg/m^3 (Inhalable fraction)	N/A
2-Aminoethanol	141-43-5	2.5 mg/m^3 (skin)	7.6 mg/m^3 (skin, 15 minutes average value)

8.2 Exposure Controls:

Appropriate engineering controls

- No special requirements under ordinary conditions of use and with adequate ventilation. Mechanical ventilation or local exhaust ventilation may be required.

8.3 Personal Protective Equipment

Note: Consider the concentration and amount of product at the workplace when selecting PPE. Use protective equipment as required.

Respiratory: Under normal conditions of use, respirator is not usually required. Use appropriate respiratory protection if exposure to dust particles, mist or vapors is likely. Consult with an industrial hygienist to determine the appropriate respiratory protection for your specific use of this material. A respiratory protection program compliant with all applicable regulations must be followed whenever workplace conditions require the use of a respirator.

Eyes/Face: If contact is likely, safety glasses with side shields are recommended.

Hands: Use good industrial hygiene practices to avoid skin contact. If contact with the material may occur, wear chemically protective gloves.

Body/Skin: Gloves, coveralls, apron, boots as necessary to minimize contact. Do not wear rings, watches or similar apparel that could entrap the material.

Thermal Hazards: None known.

Environmental Exposure Controls: Not available.

Hygiene measures: Observe good industrial hygiene practices. Avoid contact with skin. Contaminated work clothing should not be allowed out of the workplace and should be washed before reuse. When using the product do not eat, drink or smoke.

Section 9 – Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

Note: The data below are typical values and do not constitute a specification.

Appearance: **Physical state:** **Color:** **Odor/Odor threshold:**	 Liquid See **Section 1.1** Not available	**Partition Coefficient** **n-octanol/water:** **Auto-ignition temperature:**	 Not available Not available
pH (as supplied):	Not available	**Decomposition temperature:**	Not available
Melting/freezing point:	Not available	**Dynamic viscosity:**	Not available
Boiling point/range:	Not available	**Molecular weight:**	Not available
Flash point:	Not applicable	**Taste:**	Not available
Evaporation rate:	Not available	**Explosive properties:**	Not available
Flammability:	Not available	**Oxidizing properties:**	Not available
Upper/lower explosive limits:	Not available	**Surface tension:**	Not available
Vapor pressure:	Not available	**Volatile component:**	Not available
Water solubility:	Not available	**Gas group:**	Not available
Vapor density (Air = 1):	Not available	**pH (as solution):**	Not available
Specific gravity (Water = 1):	Not available	**VOC:**	Not available
Relative density:	Not available	**Particle size range:**	Not available

9.2.1 Information with Regard to Physical Hazard Classes

Explosives	Not available
Flammable gases	Not available
Aerosols	Not available
Oxidising gases	Not available
Gases under pressure	Not available
Flammable liquids	Not available
Flammable solids	Not available
Self-reactive substances and mixtures	Not available
Pyrophoric liquids	Not available
Pyrophoric solids	Not available
Self-heating substances and mixtures	Not available
Substances and mixtures, which emit flammable gases in contact with water	Not available
Oxidising liquids	Not available
Oxidizing solids	Not available
Organic peroxides	Not available
Corrosive to metals	Not available
Desensitised explosives	Not available

9.2.2 Other Safety Characteristics

Mechanical sensitivity	Not available
Self-accelerating polymerisation temperature	Not available
Formation of explosible dust/air mixtures	Not available
Acid/alkaline reserve; (e) evaporation rate	Not available
Miscibility	Not available
Conductivity	Not available
Corrosiveness	Not available
Gas group	Not available
Redox potential	Not available
Radical formation potential	Not available
Photocatalytic properties	Not available

Section 10 – Stability and Reactivity

10.1 Reactivity

- This material is not considered to be reactive under normal handling and storage conditions.

10.2 Chemical stability

- This material is considered stable under normal handling and storage conditions.

10.3 Possibility of hazardous reactions

- Not expected to occur under normal handling and storage conditions.

10.4 Conditions to avoid

- Exposure to high temperatures
- Strong acids
- Strong bases
- Strong oxidisers

10.5 Incompatible materials

- Strong acids
- Strong bases
- Strong oxidisers
- Strong reducing agents.

10.6 Hazardous decomposition products

- Thermal decomposition or combustion may generate smoke, carbon monoxide, carbon dioxide, and other products of incomplete combustion. Irritating and toxic substances may be emitted upon combustion, burning, or decomposition of dry solids.

Section 11 – Toxicological Information

11.1. Information on hazard classes:

Likely routes of exposure: Skin contact, incidental ingestion, inhalation of vapors.
Potential signs and symptoms: None expected under conditions of normal use.

Acute oral toxicity:	Manganese dioxide (CAS No. 1313-13-9), copper carbonate (CAS No. 12069-69-1), lithium carbonate (CAS No. 554-13-2), 2,2,2-(hexahydro-1,3,5-triazine-1,3,5-triyl)triethanol (CAS No. 4719-04-4), cuprous oxide (CAS No. 1317-39-1), and 2-aminoethanol (CAS No. 141-43-5) have been classified for acute oral toxicity (Category 4); however, the product is practically non-toxic based on available animal and human use data. The oral ATE for the whole product is >2000 mg/kg.
Acute dermal toxicity:	2-Aminoethanol (CAS No. 141-43-5) has been classified for acute dermal toxicity (Category 4); however, the product is practically non-toxic based on available animal and human use data. The dermal ATE for the whole product is >2000 mg/kg.
Acute inhalation toxicity:	Manganese dioxide (CAS No. 1313-13-9), copper carbonate (CAS No. 12069-69-1), cuprous oxide (CAS No. 1317-39-1), and 2-aminoethanol (CAS No. 141-43-5) have been classified for acute inhalation toxicity (Category 4); however, the product is practically non-toxic based on available animal and human use data. The inhalation ATE for the whole product is >20 mg/L (vapors).

Skin corrosion/irritation: Calcium oxide (CAS No. 1305-78-8) has been classified for skin irritation (Category 2). 2-Aminoethanol (CAS No. 141-43-5) has been classified for skin corrosion (Category 2B). Product classification is not warranted for skin effects based on the concentration of these ingredients in the product. The ingredients >1% in the product are not skin irritants based on human and/or animal studies.

Serious eye damage/irritation: Feldspar (CAS No. 68476-25-5), calcium sodium borate (CAS No. 1319-33-1), copper carbonate (CAS No. 12069-69-1), and lithium carbonate (CAS No. 554-13-2) have been classified for eye irritation (Category 2). Calcium oxide (CAS No. 1305-78-8), and cuprous oxide (CAS No. 1317-39-1) have been classified for eye damage (Category 1). Product classification is not warranted for eye effects based on the concentration of the hazardous ingredients in the product, a review of available data, and the nature/physical form of the product (*i.e.*, liquid glaze). The other ingredients >1% in the product are not eye irritants based on human and/or animal studies.

Respiratory or skin sensitization: 2,2,2-(Hexahydro-1,3,5-triazine-1,3,5-triyl)triethanol (CAS No. 4719-04-4) has been classified for skin sensitization (Category 1; C ≥ 0.1%). Product classification is warranted for skin sensitization based on the concentration of the hazardous ingredient in the product. The other ingredients >0.1% in the product are not sensitizing to the skin based on human and/or animal studies.

Mutagenicity: The ingredients >0.1% in the product are not mutagenic based on human and/or animal studies.

Carcinogenicity: Crystalline silica (airborne, unbound particles of respirable size) (CAS No. 14808-60-7) has been classified for carcinogenicity (Category 1). Crystalline silica is also listed as a carcinogen by IARC (Group 1), NTP, and ACGIH. Product classification is not warranted for carcinogenicity based on a review of available data and the nature/physical form of the product (*i.e.*, liquid glaze). It was assumed that the glaze will not be sanded after it has been fired in the kiln. The other ingredients >0.1% in the product are not carcinogenic based on human and/or animal studies and with respect to the IARC, NTP, and ACGIH.

Reproductive Toxicity: Calcium sodium borate (CAS No. 1319-33-1) has been classified for reproductive toxicity (Category 1A -may damage fertility or the unborn child). Trimanganese tetraoxide (CAS No. 1317-35-7) has been classified for reproductive toxicity (Category 2 - suspected of damaging fertility or the unborn child). Product classification is warranted for reproductive toxicity given the concentration of the hazardous ingredients in the product. The other ingredients >0.1% in the product are not reproductive toxicants based on human and/or animal studies.

Specific target organ toxicity (single exposure): Cupric oxide (CAS No. 1317-38-0), copper carbonate (CAS No. 12069-69-1), zinc oxide (CAS No. 1314-13-2), and cuprous oxide (CAS No. 1317-39-1) have been classified for specific target organ toxicity (single exposure, Category 2 – gastrointestinal tract irritation). Product classification is warranted for gastrointestinal irritation based on the concentration of cupric oxide, copper carbonate, and cuprous oxide present in the product. Feldspar (CAS No. 68476-25-5) and calcium oxide (CAS No. 1305-78-8) have been classified for specific target organ toxicity (single exposure, Category 3 - may cause respiratory irritation). Product classification is not warranted for this effect based on the nature/physical form of the product (*i.e.*, liquid glaze). The other ingredients >1% in the product are not specific target organ toxicity (single exposure) toxicants based on human and/or animal studies.

Specific target organ toxicity (repeated exposure):	Crystalline silica (CAS No. 14808-60-7) has been classified for specific target organ toxicity (repeated exposure, Category 1; causes damage to lungs through prolonged or repeated exposure via inhalation). Product classification is not warranted for specific target organ toxicity given the concentration of crystalline silica in the product and the nature/physical form of the product (*i.e.*, liquid glaze). The other ingredients >1% are not specific target organ toxicity (repeated exposure) toxicants based on human and/or animal studies.
Aspiration hazard:	The ingredients >1% in the product are not aspiration hazards based on human and/or animal studies.

11.2 Information on other hazards

11.2.1 Endocrine disrupting properties

- This product is not expected to be endocrine disrupting.

11.2.2 Information on other hazards

- No other hazards to note.

References:

ECHA (European Chemicals Agency). 2026. REACH Registered Substances Database. https://chem.echa.europa.eu/

IARC (International Agency for Research on Cancer). 2025. Agents Classified by the IARC Monographs, Volumes 1–129. https://monographs.iarc.who.int/list-of-classifications/

NTP (National Toxicology Program). 2021. Report on Carcinogens, Fifteenth Edition.; Research Triangle Park, NC: U.S. Department of Health and Human Services, Public Health Service. https://ntp.niehs.nih.gov/go/roc15

Section 12 – Ecological Information

12.1 Toxicity

- Product is classified for acute and chronic aquatic toxicity (Category 1). It should be noted that some colors may present environmental concerns to a lesser degree (*i.e.*, Category 2 or 3).

Chemical Name	CAS No.	Species	Value
Cupric oxide [a] Cuprous oxide [a]	1317-38-0 1317-39-1	*Oncorhynchus mykiss, Pimephales promelas, Lepomis macrochirus, Brachydanio rerioand, Cyprinus carpio*	$L(E)C_{50}$ = 34.4 µg Cu/L
		Oncorhynchus mykiss, Pimephales promelas, Lepomis macrochirus, Brachydanio rerioand, Cyprinus carpio	NOEC= 14.9 µg Cu/L
Copper carbonate	12069-69-1	-	LC_{50}: 34.4 µg Cu/L
			NOEC: 14.9 µg Cu/L
Zinc oxide	1314-13-2	*Raphidocelis Subcapitata Pseudokirchneriella subcapitata*	ERV (acute): pH 6.08: 308 µg Zn/L pH 8.0: 41 µg Zn/L ERV (chronic): pH 6.0: 118 µg Zn/L pH 8.0: 11 µg Zn/L

[a] According to Regulation (EC) No. 1272/2008 (CLP), M=100 for acute aquatic effects and M=10 for chronic aquatic effects.

12.2Persistence and degradability

- Cupric oxide (CAS No. 1317-38-0), cuprous oxide (CAS No. 1317-39-1), copper carbonate (CAS No.12069-69-1), and zinc oxide (CAS No. 1314-13-2) are metal/inorganic substances. Testing is not conducted for inorganic substances.

12.3 Bioaccumulative potential

- Copper is an essential nutrient for all living organisms. Copper ions are homeostatically controlled in all organisms, and the control efficiencies increase with trophic chain.

12.4 Mobility in Soil

- Cupric oxide (CAS No. 1317-38-0), cuprous oxide (CAS No. 1317-39-1), and copper carbonate (CAS No.12069-69-1), have low soil mobility [Kd= 2120 L/kg (log Kp (pm/w) = 3.33).
- Zinc oxide (CAS No. 1314-13-2) has very low soil mobility (log Kp (pm/w) = 3.24).

12.5 Results of PBT and vPvB assessment

- Cupric oxide (CAS No. 1317-38-0), cuprous oxide (CAS No. 1317-39-1), copper carbonate (CAS No.12069-69-1), and zinc oxide (CAS No. 1314-13-2) are metal/inorganic substances. PBT and vPvB assessment does not apply.

12.6 Endocrine disrupting properties

- No data available for the product.

12.7 Other adverse effects

- No further data available.

References:

ECHA (European Chemicals Agency). 2026. REACH Registered Substances Database. https://chem.echa.europa.eu/

Section 13 – Disposal Considerations

13.1 Waste treatment methods

Preparing wastes for disposal: Use product for its intended purpose or recycle if possible. Waste should not be disposed of by release to sewers. Dispose of waste in accordance with local, regional, national, and/or international regulations.

Contaminated Packaging: Container packaging is not expected to exhibit hazards.

Section 14 – Transport Information

Note: This product is not regulated as dangerous goods for transport. Substances when carried in single or combination packaging containing a net quantity per single or inner packaging of 5 L or less for liquids are not subject to any other provisions of ADR provided the packaging meets the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8. Should the single or inner packaging condition or provisions not be met, transportation restrictions will need to be revisited.

Review classification requirements before shipping materials at elevated temperatures.

14.1 UN number	Not applicable
14.2 UN proper shipping name	Not applicable
14.3 Transport hazard class(es):	Not applicable
14.4 Packing group	Not applicable
14.5 Environmental hazards	None
14.6 Special precautions for user	None
14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	Not applicable

Special precautions for use: Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage

Section 15 – Regulatory Information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

Note: The information that was used to confirm the compliance status of this product may deviate from the chemical information shown in **Section 3**.

European Union

Seveso Directive (2012/18/EU): 2,3,7,8 TCDD (CAS No. 1746-01-6) is listed in Annex I, Part 2 as a named dangerous substance with an upper tier requirement of 0.001 tonnes. Methanol (CAS No. 67-56-1) is listed in Annex I, Part 2 as a named dangerous substance with a lower tier requirement of 500 tonnes and an upper tier requirement of 5000 tonnes. No other ingredients in this product are listed.
Regulation (EC) No. 2024/590, Annex I and II: No ingredients in this product are listed.
Regulation (EC) No. 649/2012, Annex I, Parts I-III: Cadmium (listed as cadmium and its compounds), arsenic (listed as arsenic compounds), and mercury (listed as mercury compounds) are listed in Annex I, Part 1 as a chemical subject to export notification procedure. The other ingredients in this product are not listed.
Regulation (EC) No. 2019/1021, Annex I: No ingredients in this product are listed.
Substances of Very High Concern (SVHC): Contains no ingredients on the REACH SVHC Candidate List at concentrations greater than 0.1% w/w.

Germany:

Wassergefährdungsklasse (water hazard class): WGK 3 – Schwach wassergefährdend (severe hazard to waters).

International:

IARC: Crystalline silica (CAS No. 14808-60-7) (listed as silica dust, crystalline, in the form of quartz or cristobalite), benzene (CAS No. 71-43-2), 2,3,7,8 TCDD (CAS No. 1746-01-6) (listed as 2,3,7,8-tetrachlorodibenzo-para-dioxin), arsenic (listed as arsenic and inorganic arsenic compounds), cadmium (listed as cadmium and cadmium compounds), chromium [listed as chromium (VI) compounds], and nickel compounds are listed as Group 1, carcinogenic to humans. Silicon carbide (CAS No. 409-21-2) (listed as silicon carbide whiskers) is listed as Group 2A, probably carcinogenic to humans. Titanium dioxide (CAS No. 13463-67-7), cobalt [listed as cobalt (II) oxide], and lead are listed as Group 2B, possibly carcinogenic to humans. Iron oxide (CAS No. 1309-37-1) (listed as ferric oxide), silicon dioxide (CAS No. 7631-86-9) (listed as silica, amorphous), calcium silicate (CAS No. 13983-17-0) (listed as wollastonite), hematite (CAS No. 1317-60-8), chromium (listed as chromium (III) compounds), and mercury (listed as mercury and inorganic mercury compounds) are listed as Group 3, unclassifiable as to carcinogenicity in humans. No other ingredients in this product are classified with respect to carcinogenicity.

15.2 Chemical Safety Assessment

- None available for the ingredients in this product.

Section 16 – Other Information

List of acronyms and abbreviations:

ACGIH: American conference of Governmental Hygenists	M-factor: Multiplying factor
ADR: Agreement concerning the International Carriage of Dangerous Goods by Road	N/A: Not applicable
ATE: Acute Toxicity Estimate	NOEC: No Observed Effect Concentration
CAS: Chemical Abstract Service Number	NTP: National Toxicology Program
CLP: Classification, Labelling and Packaging Regulation (EC) No. 1272/2008	PBT: Persistent, Bioaccumulative and Toxic
EC: European Commission	PPE: Personal Protective Equipment
EC_{50}: Median effective concentration	REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals
ECHA: European Chemicals Agency	SCL: Specific Concentration Limit
ERV: Ecotoxicity Reference Value	SDS: Safety Data Sheet
EU: European Union	STEL: Short-Term Exposure Limit
IARC: International Agency for Research on Cancer	SVHC: Substances of Very High Concern
IBC: International Bulk Chemical	TLV: Threshold limit value
GHS: Global Harmonized System	TWA: Time-weighted average
LC_{50}: Lethal Concentration 50%	UN: United Nations

Kd: Measures the amount of chemical substance adsorbed onto soil per amount of water	vPvB: very Persistent, very Bioaccumulative
log Kp: Soil–water partitioning coefficient	WGK: Wassergefährdungsklasse
MARPOL: Maritime Pollution	

References:

ECHA (European Chemicals Agency). 2026. REACH Registered Substances Database. https://chem.echa.europa.eu/

IARC (International Agency for Research on Cancer). 2025. Agents Classified by the IARC Monographs, Volumes 1–129. https://monographs.iarc.who.int/list-of-classifications/

NTP (National Toxicology Program). 2021. Report on Carcinogens, Fifteenth Edition.; Research Triangle Park, NC: U.S. Department of Health and Human Services, Public Health Service. https://ntp.niehs.nih.gov/go/roc15

Disclaimer:

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

Revision Indicator: This is a new Safety Data Sheet.

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