SAFETY DATA SHEET

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

1.1 Product identifier
- Product Name: Colour Surface Hardener.
- Contains Portland cement.

1.2 Relevant identified uses of the substance or mixture and uses advised against
- Use of the substance/mixture: Colouring and hardening the surface of freshly places concrete.
- Use Advised against: No information available.

1.3 Details of the supplier of the safety data sheet
- Name of Supplier: PICS Ltd
- Address of Supplier: Unit 2 & 4
  Red Shute Hill Ind Estate
  Hermitage
  Newbury
  Berkshire
  RG18 9QL
  UK
- Telephone: +44 (0) 1635 202224
- Email: Info@picsuk.com

1.4 Emergency telephone number
- Emergency Telephone: +44 (0) 1635 202224
  (office hours only Mon– Fri 08:00 – 17:30)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture
- Classification (REGULATION (EC) No 1272/2008) [CLP/GHS]: Skin Irrit. 2, H315; Skin Sens. 1B, H317; Eye Dam. 1, H318; STOT SE 3, H335.

2.2 Label elements



- Signal word: Danger

- Hazard statements:
  H315 – Causes skin irritation.
  H317 – Mat cause an allergic skin reaction.
  H318 – Causes serious eye damage.
  H335 – May cause respiratory irritation.

- Precautionary statements
  P260 – Do not breathe dust.
  P264 – Wash thoroughly after handling.
  P280 – Wear protective gloves/protective clothing/eye protection/face protection.
  P302+P352+P333+P313 – IF ON SKIN: Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention.
  P305+P351+P338+P310 – IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTRE or doctor/physician.
  P501 – Dispose of contents/container to an authorised waste collection point.

- Supplemental hazard information (EU)
  EUH203 – Contains chromium (VI). May produce an allergic reaction.

2.3 Other hazards
- Not a PBT according to REACH Annex XIII
- Not a vPvB according to REACH Annex XIII

SECTION 3: Composition/information on ingredients

3.1 Substances

3.2 Mixtures

Chemical Name	Conc.	CAS No.	EC No.	Classification (REGULATION (EC) No 1272/2008) [CLP/GHS]	REACH Registration Number	WEL/OEL
Quartz (SiO2); crystalline silica flour	50-70%	14808-60-7	238-878-4	Not classified	Exempted	Yes
Cement, portland	20-30%	65997-15-1	266-043-4	Skin Irrit. 2, H315; Skin Sens. 1B, H317; Eye Dam. 1, H318; STOT SE 3, H335	01-2119457435-35-XXXX	Yes
Carbon black	< 1%	1333-86-4	215-609-9	Not classified	-	Yes
Iron oxides	< 1%	-	-	Not classified	-	Yes
Titanium Oxide	< 1%	13463-67-7	236-675-5	Not classified	01-2119489379-17-XXXX	Yes
Limestone	< 1%	1317-65-3	215-279-6	Not classified	-	Yes

SECTION 4: First aid measures

4.1 Description of first aid measures

- Contact with eyes: If substance has got into eyes, immediately wash out with plenty of water for several minutes. Irrigate eyes thoroughly whilst lifting eyelids. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical advice/attention.
- Contact with skin: Take off contaminated clothing and wash it before reuse. Wash affected area with plenty of soap and water. If skin irritation occurs: Get medical advice/attention.
- Ingestion: Rinse mouth with water (do not swallow). Do NOT induce vomiting. Get immediate medical advice/attention.
- Inhalation: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Keep warm and at rest, in a half upright position. Loosen clothing. Apply artificial respiration only if patient is not breathing but do not use mouth to mouth resuscitation. Immediately call a POISON CENTRE or doctor/physician.

4.2 Most important symptoms and effects, both acute and delayed

- Contact with eyes: May cause severe damage with formation of corneal ulcers and permanent impairment of vision.
- Contact with skin: May cause and allergic skin reaction. Dry material causes skin irritation, wet material causes skin burns.
- Ingestion: May cause gastro-intestinal irritation. May cause burns to the mouth and throat.
- Inhalation: May cause respiratory tract irritation. May cause breathing difficulty.

4.3 Indication of any immediate medical attention and special treatment needed

- Treat symptomatically.

SECTION 5: Firefighting measures

5.1 Extinguishing media

- Not flammable. In case of fire use extinguishing media appropriate to surrounding conditions.

5.2 Special hazards arising from the substance or mixture

- Corrosive.

5.3 Advice for firefighters

- Collect contaminated fire extinguishing water separately. This MUST not be discharged into drains. Prevent fire extinguishing water from contaminating surface of ground water.
- No special precautions are required for this product.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

- Rescuers should take suitable precautions to avoid becoming casualties themselves.
- Personal precautions for non-emergency personnel: Do not breathe dust; Avoid contact with skin and eyes; Wear protective clothing as per Section 8; Wash thoroughly after handling.
- Personal precautions for emergency responders: Wear protective clothing as per Section 8.

6.2 Environmental precautions

- Avoid release to the environment.
- Do not allow to enter public sewers and watercourses.
- If polluted water reaches drainage systems or water courses, immediately inform appropriate authorities.

6.3 Methods and material for containment and cleaning up

- Collect as much as possible in clean container for reuse or disposal.
- Dry cement: Use clean-up methods such as vacuum clean-up or vacuum extraction (Industrial portable units, equipped with high efficiency air filters (EPA and HEPA filters, EN 1822-1:2009) or equivalent technique) which do not cause airborne dispersion. Never use compressed air. Alternatively, wipe-up the dust by mopping, wet brushing or by using water sprays or hoses (fine mist to avoid that the dust becomes airborne) and remove slurry. IF not possible, remove by slurrying with water (see wet cement). When wet cleaning or vacuum cleaning is not possible and only dry cleaning with brushes can be done, ensure that the workers wear the appropriate personal protective equipment and prevent dust from spreading. Avoid inhalation of cement and contact with skin. Place spilled materials into a container. Solidify before disposal.
- Wet cement: Clean up wet cement and place in a container. Allow material to dry and solidify before disposal.

6.4 Reference to other sections

- See Section(s) 7, 8 & 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

- Prevent formation of dust.
- Use only outdoors or in a well-ventilated area.
- No respiratory protection is needed if ventilation/extraction is adequate, otherwise wear approved dusk mask.
- Do not eat, drink or smoke when using this product.
- Do not get in eyes, on skin, or on clothing.
- Wear protective gloves.
- Wear goggles giving complete eye protection.
- Wash contaminated clothing before reuse.
- Contaminated work clothing should not be allowed out of the workplace.
- Wash thoroughly after use.

7.2 Conditions for safe storage, including any incompatibilities

- Keep only in the original container
- Keep container tightly closed, in a cool, well ventilated place.
- Opened containers should be carefully resealed and stored in an upright position.

7.3 Specific end use(s)

- Colouring and hardening the surface of freshly placed concrete.

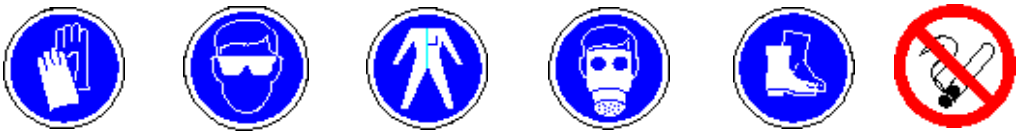
SECTION 8: Exposure controls/personal protection

8.1 Control parameters

- Quartz (SiO2); crystalline silica flour
  WEL (long term) 0.1 mg/m^3 (respirable crystalline silica, UK).
- Cement, portland
  WEL (long term) 0.1 mg/m^3 (inhalable dust UK)
  WEL (long term) 4mg/m^3 (respirable dust UK)
- Carbon black
  WEL (long term) 3.5 mg/m^3 (UK)
  WEL (short term) 7 mg/m^3 (UK)
  DNEL (inhalational) 500 ug/m^3 industry, long term, local effects
  PNEC aqua (freshwater) 1 mg/l
  PNEC aqua (intermittent releases, freshwater) 10 mg/l
  PNEC aqua (marine water) 100 ug/l
  PNEC aqua (intermittent releases, marine water) 1 mg/l
- Iron oxide
  WEL (long term) 1 mg/m^3 (iron salts as Fe, UK)
  WEL (short term) 2mg/m^3 (iron salts Fe, UK)
- Titanium dioxide
  WEL (long term) 10mg/m^3 (total inhalable, UK)
  WEL (long term) 4mg/m^3 (Respirable, UK)

- Limestone
  WEL (long term) 10mg/m^3 (inhalable dust, UK)
  WEL (long term) 4mg/m^3 (respirable dust, UK)

8.2 Exposure controls
- Selection and use of personal protective equipment should be based on a risk assessment of exposure potential.
- If practical, engineering controls should be provided where airborne concentrations exceeded exposure limits.
- No respiratory protection is needed if ventilation/extraction is adequate, otherwise wear approved dust mask.
- Where a reusable half mask respirator is required, use EN 140 mask and EN 143 particle filter, or EN 1827.
- Where a full face mask respirator is required, use EN 136, with particle filter EN 143.
- Wear goggles giving complete eye protection.
- Wear protective gloves. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and standard EN 374.
- The selection of a suitable glove depends on work conditions and whether the product is present on its own or in combination with other substances. Breakthrough time is dependent on the characteristics of the brand of glove used and the supplier should be consulted.
- Use a suitable barrier cream to protect skin.
- Wear suitable protective clothing.
- Wear boots.
- Contaminated work clothing should not be allowed out of the workplace.
- Contaminated clothing should be laundered before reuse.
- Use good person hygiene practices.
- Do not eat, drink or smoke when using the product.
- Wash thoroughly after handling.
- Ensure eyewash stations and safety showers are nearby.



SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties
- Appearance: Coloured; powder.
- Odour: None.
- Odour threshold: No information available.
- pH: 12 – 14 (aqueous solution)
- Melting point/freezing point: >1250°C (cement)
- Initial boiling point and range: No information available.
- Flashpoint: No information available.
- Evaporation rate: No information available.
- Flammability (solid gas): Not flammable.
- Upper/lower flammability or explosive limits: Not applicable.
- Vapour pressure: Not applicable.
- Vapour density: Not applicable.
- Relative density: 2.8 – 3.2.
- Solubility(ies): Negligible in water.
- Partition Coefficient (n-Octanol/Water): Not applicable.
- Autoignition temperature: No information available.
- Decomposition temperature: No information available.
- Viscosity: No information available.
- Explosive properties: Non-explosive.
- Other oxidising properties: Not oxidising.

9.2 Other information
- No information available.

SECTION 10: Stability and reactivity

10.1 Reactivity
- No hazardous reactions known if used for its intended purpose.

10.2 Chemical stability
- Considered stable under normal conditions.

10.3 Possibility of hazardous reactions
- No hazardous reactions know if used for its intended purpose.

10.4 Conditions to avoid
- Avoid formation of dust.
- Keep away from moist air or water.

10.5 Incompatible materials
- Incompatible with aluminium.
- Incompatible with acid.
- Incompatible with ammonia solution.
- Incompatible with oxidizing substances.

10.6 Hazardous decomposition products
- Refractories containing crystalline silica may, after service, contain more or less crystalline silica. Care must be taken to avoid and/or control dust from demolition. If in doubt of the proper protection, seek advice from a safety professional.

SECTION 11: Toxicological information

11.1 Information on toxicological effects
- Acute toxicity: Based on available data, the classification criteria are not met.
- Skin corrosion/irritation: Causes skin irritation. Classification based on calculation and concentration thresholds.
- Serious eye damage/irritation: Causes serious eye damage. Classification based on calculation and concentration of thresholds.
- Respiratory or skin sensitisation: May cause an allergic skin reaction. Classification based on calculation and concentration thresholds.
- Germ cell mutagenicity: No evidence of mutagenic effects.
- Carcinogenicity: No evidence of carcinogenic effects.
- Reproductive toxicity: No evidence of reproductive effects.
- Specific target organ toxicity (STOT) – single exposure: STOT SE 3. May cause respiratory irritation. Classification based on calculation and concentration thresholds.
- Specific target organ toxicity (STOT) – repeated exposure: Based on available data, the classification criteria are not met. Long term exposure to crystalline silica can cause silicosis.
- Aspiration hazard: Based on available data, the classification criteria are not met.
- Contact with eyes: May cause severe damage with formation of corneal ulcers and permanent impairment of vision.
- Contact with skin: Dry material causes skin irritation, wet material causes skin burns. May cause dermatitis.
- Ingestion: May cause burns to mouth and throat. May cause gastro-intestinal irritation. Causes nausea/vomiting.
- Inhalation: Effect may vary from irritation of the nasal mucous membrane to severe lung irritation. Long term exposure to crystalline silica can cause silicosis.

SECTION 12: Ecological information

12.1 Toxicity
- Based on available data, the classification criteria are not met.

12.2 Persistence and degradability
- Not readily biodegradable.

12.3 Bioaccumulative potential
- No information available.

12.4 mobility in soil
- No information available.

12.5 Results of the PBT and vPvB assessment
- Not a PBT according to REACH Annex XIII.
- Not a vPvB according to REACH Annex XIII.

12.6 Other adverse effects
- May cause adverse effects in the aquatic environment due to high pH.

SECTION 13: Disposal considerations

13.1 Waste treatment methods
- For disposal, harden with water and dispose of the hardener product as concrete waste.
- Disposal should be in accordance with local, state or national legislation.
- Dispose of contents/container to an authorised waste collection point.

13.2 Classification
- The waste must be identified according to the list of wastes (2000/532/EC)

SECTION 14: Transport information

Not classified as hazardous transport.

14.1 UN number:

- UN No.: Not applicable.

14.2 UN proper shipping name

- Proper Shipping Name: Not applicable.

14.3 Transport hazard class(es)

- Hazard Class: Not applicable.

14.4 Packing group:

- Packing group: Not applicable.

14.5 Environmental hazards

- Not applicable.

14.6 Special precautions for user

- No special precautions are required for this product

14.7 Transport in bulk according to Annex II of Marpol and the IBC code

- Not applicable

14.8 Road/Rail (ADR/RID)

- Proper shipping name: Not applicable.
- ADR UN No.: Not applicable.
- ADR hazard class: Not applicable.
- ADR packing group: Not applicable.
- Tunnel code: Not applicable.

14.9 Sea (IMDG)

- Proper shipping name: Not applicable.
- IMDG UN No.: Not applicable.
- IMDG Hazard Class: Not applicable.
- IMDG Pack Group: Not applicable.

14.10 Air (ICAO/IATA)

- Proper Shipping Name: Not applicable.
- ICAO UN No.: Not applicable.
- ICAO Hazard Class: Not applicable.
- ICAO Packing Group: Not applicable.

SECTION 15: Regulatory information

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

- This safety data sheet is provided in compliance with REACH Regulation (EC) No 1907/2006 as amended by regulation (EU) 2015/830.
- Regulation (EC) No. 1272/2008 on the classification, labelling and packaging of substances and mixtures (CLP Regulation) applies in Europe.

15.2 Chemical Safety Assessment

- A REACH chemical safety assessment has not been carried out.

SECTION 16: Other information

The above information is believed to be correct but does not purport to be all inclusive and shall only be used as a guide. The company will not be held liable for any damage resulting from handling or from contact with this product.

- Sources of data: Information from published literature and internal company data.
- Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:
  Skin Irrit. 2, H315: Classification based on calculation and concentration thresholds.
  Skin Sens. 1B, H317; Classification based on calculation and concentration thresholds.
  Eye Dam. 1, H318; Classification based on calculation and concentration thresholds.
  STOT SE 3, H335: Classification based on calculation and concentration thresholds.
- Text not given with phrase codes where they are used elsewhere in this safety data sheet:
  H315: Causes skin irritation.
  H317: May cause an allergic skin reaction.
  H318: Causes serious eye damage.
  H335: May cause respiratory irritation

- Acronyms
  CAS: Chemical Abstracts Service
  DNEL: Derived No-Effect Level
  EC: European Community
  EC50: Effective Concentration, 50%
  GHS: Globally Harmonised System
  LC50: Lethal Concentration, 50%
  LD50: Lethal Dose, 50%
  NOAEL: No Observed Adverse Effect Level
  OEL: Occupational Exposure Limit
  PBT: Persistent, Bioaccumulative and Toxic
  PNEC: Predicted No-Effect Concentration
  REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals
  STOT RE: Specific Target Organ Toxicity Repeated Exposure
  STOT SE: Specific Target Organ Toxicity Single Exposure
  vPvB: Very Persistent and very Bioaccumulative
  WEL: Workplace Exposure Limit

--End of Safety Data Sheet--