

SAFETY DATA SHEET- PF 680 (SMOOTH BLACK)

According to regulation (EC) No 2020/878

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

1.1 Product Identifier

Valentine Clays PF 680 (Smooth Black)

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

Use of the substance/mixture

To produce ceramic objects.

1.3 Details of the supplier of the safety data sheet

Valentine Clays LTD

Valentine Way

Stoke on Trent

ST4 2FJ

t: +44 (0)1782 271200

e: sales@valentineclays.co.uk

w: www.valentineclays.co.uk

1.4 Emergency Telephone Number

+44 (0)1782 271200

Section 2: Hazards Identification

2.1 Classification of the substance or mixture

Products contain crystalline silica and therefore are classified as STOT RE2 according to criteria defined in the Regulation EC 1272/2008 and harmful according to criteria defined in Directive 67/548/EEC due to the potential to generate respirable dust. This could arise when the product is allowed to dry out. Particular attention should be given to controlling spillages.

Prolonged/repeated exposure to high concentrations of respirable free crystalline silica dust may cause delayed lung injury (silicosis) The WHO International Agency for Research on Cancer (IARC) evaluation for silica states "Crystalline silica inhaled in the form of quartz or cristobalite from occupational sources is carcinogenic to humans (Group 1)" but additionally notes "carcinogenicity in humans was not detected in all industrial circumstances studies. Carcinogenicity may be dependent on inherent characteristics of crystalline silica or on external factors affecting its biological activity or distribution of polymorphs" (IARC Monograph, Volume 68, 1997).

In June 2003, SCOEL (the EU Scientific Committee on Occupational Exposure Limits) concluded that the main effect in humans of the inhalations of respirable crystalline silica dust is silicosis. "There is sufficient information to conclude that then relative risk of lung cancer is increased in persons with silicosis (and, apparently, not employees without silicosis exposed to silica dust in quarries and in the ceramic industry). Therefore preventing the onset of silicosis will also reduce the cancer risk ..." (SCOEL SUM Doc 94-final, June 2003). So, there is a body of evidence supporting the fact that increased cancer risk would be limited to people already suffering from silicosis. Worker protection against silicosis should be assured by respecting existing regulatory occupational exposure limits and implementing additional risk management measures where required.

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Detailed reviews of the scientific evidence on the health effects of crystalline silica have been published by HSE (Health and Safety Executive UK) in the Hazard Assessment Documents EH75/4 (2002) and EH75/5 (2003). The HSE points out on its website that "Workers exposed to fine dust containing quartz are at risk of developing a chronic and possibly severely disabling lung disease known as silicosis. In addition to silicosis, there is now evidence that heavy and prolonged workplace exposure to dust containing crystalline silica can lead to an increased risk of lung cancer. The evidence suggests that an increased risk of lung cancer is likely to occur only in those workers who have developed silicosis.

2.2 Label Elements

PF680 – CAS No. 1332-58-7



WARNING STOT RE2

Hazard Statements:

R20/22- Harmful by inhalation and ingestion. Prepared clay body contains free silica. If allowed to dry out dust containing respirable silica may be liberated. Danger of serious damage to health by prolonged exposure.

Other Health Effects:

Eyes- Dust will cause transient irritation by abrasion

Skin- Dust may cause irritation by abrasion

Ingestion- With inhalation can cause risk of pneumonia

Inhalation- The dust of this powder can cause respiratory irritation after a long exposure of inhalation. Acute toxicity.

Section 3: Composition/information on ingredients

3.1 Mixtures

<u>Component</u>	<u>CAS</u>	<u>EINECS</u>	<u>% Composition</u>	<u>Concentration Range</u>	<u>Hazard Symbols</u>	<u>R Risk</u>
Quartz	14808-60-7	2388784	-	-	-	-
Manganese Dioxide	1313-13-9	2152026	-	3-7%	XN	R20/22

Section 4: First Aid Measures

4.1 Description of first aid measures

After Inhalation- Remove from exposure to open air, keep warm and rest. If there is difficulty in breathing, give oxygen. Obtain medical attention.

After Ingestion- Wash out mouth with water. DO NOT INDUCE VOMITTING. Obtain medical attention.

After Eye Contact- Immediately flood the eye with plenty of water, for at least 15 minutes, holding the eye open and obtain medical attention

After Skin Contact- Wash skin thoroughly with soap and water. Obtain medical attention if blistering occurs or redness persists.

4.2 Most important symptoms and effects, both acute and delayed

No further relevant information available.

4.3 Indication of any immediate medical attention and special treatment needed

No further relevant information available.

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Section 5: Firefighting Measures

5.1 Extinguishing Media

Suitable extinguishing media

Non-combustible- dry chemical product. Select extinguishing agent appropriate to other materials involved.

Extinguishing media that must not be used for safety reasons

None known.

5.2 Special Hazards arising from the substance mixture

Avoid the formation of dust clouds.

Additional Information

No further relevant information available.

Section 6: Accidental Release Measures

6.1 Personal Precautions, protective equipment and emergency procedures

No information available.

6.2 Environmental Precautions

No special environmental precautions required.

6.3 Methods and material for containment and cleaning up

Avoid creating a dust. Sweep preferably vacuum up and collect in suitable containers for recovery or disposal.

Section 7: Handling and Storage

7.1 Precautions for safe handling

Advice of Safe Handling

Avoid creating dust.

Advice on protection against fire and explosion

No special measures required.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Store the product in a dry and not enclosed space, in order to keep the humidity as much as possible.

Further Information on Storage Requirements

No special requirements.

7.3 Specific end use(s)

No further relevant information available.

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Section 8: Exposure Controls/ Personal Protection

8.1 Occupational Exposure Standards

Contains Crystalline Silica 5g/ m³ as MnO₂ (air).

8.2 Engineering Control Measures

Use of the basic principles of Industrial Hygiene will enable this material to be used safely.

8.3 Respiratory Protection

Dust respirator if conditions are dusty.

8.4 Hand Protection

Gloves

8.5 Eye Protection

Use eye protection

8.6 Body Protection

Normal work wear. Overall or apron.

8.7 Protection During Application

In all cases of protective equipment, the user must ensure that the equipment complies with the relevant standard. If there is any doubt the user should show this data sheet to the supplier of the equipment to ensure the correct equipment is available.

Section 9: Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

Form- Prepared clay body has a soft and pliable consistency and contains 18-20% water. It may also be sold as a granulate of much lower moisture content (5%)

Colour- Normally brown or black (Colours vary as pugged or pressed plastic clay body, or as a dry powder)

Odour- Odourless

pH- Not specified

Water Solubility- Negligible

9.2 Stability and Reactivity

Dangerous products in decomposition at 550°C the MnO₂ turns to Mn₂O₃ due to small oxygen quantities being freed. At 800°C the Mn₂O₃ turns to Mn₃O₄ by freeing more oxygen.

9.3 Chemical Stability

No decomposition if stored normally.

9.4 Possibility of hazardous reactions

No dangerous reaction known under conditions of normal use.

9.5 Conditions to avoid

None.

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9.6 Incompatible materials

Materials to avoid H202, H2505.

9.7 Hazardous decomposition products

No further relevant information available.

Section 11: Toxicological Properties

11.1 Product

The MnO₂ is a poison for intravenous injection.

11.2 Irritancy (Eyes)

The material is an irritant to the eyes.

11.3 Irritancy (Skin)

The degree of irritation was insufficient to warrant labelling as a skin irritant.

Section 12: Ecological Information

Manufactured with natural minerals and oxides.

Section 13: Waste Disposal

13.1 Waste treatment methods

None specified.

Section 14: Transport Information

14.1 ADR/RID (Description)

Not classified for Conveyance Purposes.

Section 15: Regulatory Information

15.1 Labelling Information

Not classified

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Section 16: Other Information

16.1 Uses and Restriction

Prepared clay body is used for the manufacture of Ceramics.

16.2 Additional Information

The product contains respirable silica in the form of quartz and in some cases cristobalites. Prolonged exposure to dust can give rise to fibrosis of the lungs commonly known as silicosis.

16.3 Third Party Materials

Insofar as material not manufactured or supplied by Valentine Clays are used in conjunction with, or instead of VC materials, it is the responsibility of the customer itself, to obtain from the manufacturer or supplier, all technical data and other properties relating to these and other materials and to obtain all necessary information relating to them. No liability can be accepted in respect of the use of VC materials in conjunction with other materials.

16.4 Liability

Such information is to the best of Valentine Clays knowledge and belief accurate and reliable. However, no representation, warranty or guarantee is made as to its accuracy, reliability or completeness. It is the user's responsibility to satisfy itself as to the suitability and completeness of such information for their own particular use.

Section 17: National Legislation

17.1 UK Legislation

SI 1993/1746: Chemicals (Hazard Information and Packaging) Regulations 1993.

Environmental Protection (Duty of Care) Regulation 1992 SI 2839.

Carriage of Dangerous Goods by Road and Rail Regulation 1994.

Control of Pollution Act 1974.

Environmental Protection Act 1990.

Highly Flammable Liquids and Petroleum Spirit Regulations 1972.

EH 40 Occupational Exposure Limits

SI 1988/1657: The Control of Substances Hazardous to Health Regulations

Note: This is not an exhaustive list and users should satisfy themselves that they comply with all relevant National Regulations.

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