

SAFETY DATA SHEET

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product name: Borax Frit Ground & Dried
Product No: P2953

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

Identified uses: Component used in the formulation of Ceramic Frits, Glazes & Inorganic Pigments.

1.3. Details of the supplier of the safety data sheet

Supplier: PotteryCrafts Ltd.,
Campbell Road,
Stoke on Trent
ST4 4ET
Tel 44 (0)1782 745000
sales@potterycrafts.co.uk

1.4. Emergency telephone number

+44(0)1782 745000

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

CLASSIFICATION ACCORDING TO DIRECTIVE 1999/45/EC OR 67/548/EEC

Not Classified

Human Health

May cause minor irritation on eye contact. Frequent inhalation of dust over a long period of time increases the risk of developing lung diseases. May cause minor irritation on skin contact. The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

2.2. Label elements

Risk Phrases

NC Not Classified.

2.3. Other hazards

Not classified.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

Quartz	<1
CAS-No.: 14808-60-7	EC No : 238-878-4
Classification EC (1272/2008) STOT RE 1 - H372	Classification (67/548/EEC) Xn; R48/20

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

Inhalation

Move the exposed person to fresh air at once. Get medical attention if any discomfort continues.

Ingestion

Do not induce vomiting. Immediately give a couple of glasses of water or milk, provided the victim is fully conscious. Get medical attention if any discomfort continues.

Skin contact

Wash skin with soap and water. Get medical attention if irritation persists after washing.

Eye contact

Rinse with water. Contact physician if discomfort continues.

4.2. Most important symptoms and effects, both acute and delayed

No special requirements.

4.3. Indication of any immediate medical attention and special treatment needed

No special requirements.

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Extinguishing media

Use fire-extinguishing media appropriate for surrounding materials.

5.2. Special hazards arising from the substance or mixture

Unusual Fire & Explosion Hazards

No unusual fire or explosion hazards noted.

Specific hazards

Dust may form an explosive mixture in the atmosphere.

5.3. Advice for firefighters

Special Fire Fighting Procedures

N/A.

Protective equipment for fire-fighters

Use protective equipment appropriate for surrounding materials.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Wear protective clothing as described in Section 8 of this safety data sheet.

6.2. Environmental precautions

Avoid spreading dust or contaminated materials.

6.3. Methods and material for containment and cleaning up

Remove spillage with vacuum cleaner. If not possible, collect spillage with shovel, broom or the like.

6.4. Reference to other sections

For handling advice see section 7. For personal protection see section 8. For waste disposal see section 13.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Do not eat, drink or smoke when using the product. Good personal hygiene is necessary. Wash hands and contaminated areas with water and soap before leaving the work site.

7.2. Conditions for safe storage, including any incompatibilities

Store in a dry place.

7.3. Specific end use(s)

The identified uses for this product are detailed in Section 1.2.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Name	STD	TWA - 8Hrs	STEL -15 Mins	Notes
Borax Frit Ground & Dried		4mg/m ³ resp. dust	=	=

Ingredient Comments

Total Inhalable Dust 10mg/m³ - 8hr TWA Total respirable Dust 4mg/m³ - 8hr TWA

8.2. Exposure controls

Protective equipment



Engineering measures

Provide adequate ventilation, including appropriate local extraction, to ensure that the defined occupational exposure limit is not exceeded.

Respiratory equipment

No specific recommendation made, but protection against nuisance dust must be used when the general level exceeds 10 mg/m³.

Hand protection

For prolonged or repeated skin contact use suitable protective gloves.

Eye protection

Wear dust resistant safety goggles where there is danger of eye contact.

Hygiene measures

Wash hands at the end of each work shift and before eating, smoking and using the toilet. When using do not eat, drink or smoke.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Appearance	Powder, dust
Colour	White/Off White
Odour	Odourless.
Solubility	Insoluble in water
Relative density	Not determined.
Vapour density (air=1)	Not relevant
Evaporation rate	Not applicable.
pH-Value, Conc. Solution	Not determined.
Explosive properties	Not applicable.
Oxidising properties	Not applicable.

9.2. Other information

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

No specific reactivity hazards associated with this product.

10.2. Chemical stability

Stable under normal temperature conditions and recommended use.

10.3. Possibility of hazardous reactions

Hazardous Polymerisation

Not relevant

10.4. Conditions to avoid

Not known.

10.5. Incompatible materials

Materials To Avoid

No incompatible groups noted.

10.6. Hazardous decomposition products

Not known

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Toxicological information

No data recorded.

Inhalation

Prolonged inhalation of high concentrations may damage respiratory system.

Ingestion

No harmful effects expected in amounts likely to be ingested by accident.

Skin contact

Repeated exposure may cause skin dryness or cracking.

Eye contact

May cause temporary eye irritation.

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity

The product is not expected to be hazardous to the environment.

12.1. Toxicity

12.2. Persistence and degradability

Degradability

The product solely consists of inorganic compounds which are not biodegradable.

12.3. Bioaccumulative potential

12.4. Mobility in soil

12.5. Results of PBT and vPvB assessment

12.6. Other adverse effects

SECTION 13: DISPOSAL CONSIDERATIONS

General information

When handling waste, consideration should be made to the safety precautions applying to handling of the product.

13.1. Waste treatment methods

Dispose of waste and residues in accordance with local authority requirements.

SECTION 14: TRANSPORT INFORMATION

General The product is not covered by international regulation on the transport of dangerous goods (IMDG, IATA, ADR/RID).

14.1. UN number

None

14.2. UN proper shipping name

None

14.3. Transport hazard class(es)

None

14.4. Packing group

None

14.5. Environmental hazards

None

14.6. Special precautions for user

None

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

None

SECTION 15: REGULATORY INFORMATION

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

Uk Regulatory References

Health and Safety at Work Act 1974.

Statutory Instruments

The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (S.I 2009 No. 716).

Guidance Notes

Workplace Exposure Limits EH40. Introduction to Local Exhaust Ventilation HS(G)37.

EU Legislation

Dangerous Substance Directive 67/548/EEC. Dangerous Preparations Directive 1999/45/EC. Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, including amendments.

15.2. Chemical Safety Assessment

No chemical safety assessment has been carried out.

SECTION 16: OTHER INFORMATION

General information

#(EN) Examples of ceramic frits belonging to various groups:

Group 1 - frits usually containing elements not included in Annex I of Directive 67/548/EEC and without Pb, Ba, Zn and Cd.

Group 2 - frits usually containing elements not included in Annex I of Directive 67/548/EEC, with Zn and without Pb, Ba or Cd.

Group 3 - frits usually containing elements not included in Annex I of Directive 67/548/EEC, with Ba and without Pb, Zn or Cd.

Group 4 - frits usually containing elements not included in Annex I of Directive 67/548/EEC, with Zn and Ba but without Pb or Cd.

Group 5 - frits usually containing elements not included in Annex I of Directive 67/548/EEC, with Pb or Cd.

Subgroup 5.1 - lead bisilicate frits ($0\% < \text{PbO} \leq 69\%$, $\text{SiO}_2 \geq 30\%$, $\text{Al}_2\text{O}_3 \geq 1\%$).

Subgroup 5.2 - lead borosilicate frits ($40\%-60\% \text{PbO}$, $\text{SiO}_2 > 30\%$, $1\%-20\% \text{B}_2\text{O}_3$).

Group 6 - frits usually containing elements not included in Annex I of Directive 67/548/EEC, with Pb and Zn and/or Ba ($0\% < \text{PbO} \leq 69\%$, $\text{SiO}_2 \geq 30\%$, $\text{Al}_2\text{O}_3 \geq 1\%$).

Group 7 - frits usually containing elements not included in Annex I of Directive 67/548/EEC, with Cd and other elements such as Zn, Ba and Pb ($0\% < \text{PbO} \leq 69\%$, $\text{CdO} \leq 5\%$, $\text{SiO}_2 \geq 30\%$, $\text{Al}_2\text{O}_3 \geq 1\%$).

Group 8 - frits with lead expressed as PbO percentage, frits usually containing elements not included in Annex I of Directive 67/548/EEC, without a minimum of 30% of SiO₂ and/or without a minimum of 1% of Al₂O₃.

Group 9 - coloured frits usually containing elements not included in Annex I of Directive 67/548/EEC and metallic oxides in Annex I of Directive 67/548/EEC.

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Revision 5

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SDS No. 000

Safety Data Sheet Status Approved.

Date 17/04/2026

Risk Phrases In Full

NC Not classified.

R48/20 Harmful : Danger of serious damage to health by prolonged exposure through Inhalation.

Hazard Statements in full.

H372 Causes damage to organs<< Organs>> through prolonged or repeated Exposure if inhaled.

Disclaimer

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.