

In compliance with Regulation (EC) 1907/2006 & amendment

Revision date

Cristobalite Flour

12.08.2022

| | IDENTIFICATION OF THE | SUBSTANCE AND OF THE COMPANY |
|-------|---|---|
| 1.1 | Product Identifier: | |
| | Name | Cristobalite flour |
| | Reach Registration No. | Exempted in accordance with Annex V.7. |
| | Synonyms | Silicon dioxide, calcined silica |
| | Trade names | C140, C325 |
| 1.2 | Relevant identified uses of | the substance |
| | Main applications – non | Investment Casting, Filler for paints and coatings, adhesives and |
| | exhaustive list | sealants, plastics and elastomers. |
| 1.3 | Details of the supplier of th | e safety data sheet |
| | Company name | Hoben International Limited |
| | Address | Manystones Lane |
| | | Brassington |
| | | MATLOCK |
| | | Derbyshire |
| | | DE4 4HF |
| | | United Kingdom |
| | Phone No. | +44 (0) 1629 540201 |
| | Fax No. | +44 (0) 1629 540605 |
| | Email | sales@hobeninternational.com |
| 1.4 | Emergency telephone num | ber |
| | Telephone number | +44 (0) 1629 540201 |
| | Available outside of office | No |
| | hours? | |
| 2. | HAZARD IDENTIFICATION | l |
| 2.1 | Classification of the substa | nce |
| | Classification according to D | Degulation (EC) No. 1272/2000 [CLD] |
| 2.1.1 | | Pegulation (EC) No 1272/2008 [CLP] |
| 2.1.1 | Specific Target Organ Toxica | ant – Repeated Exposure Category 1 - This product contains |
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| 2.1.1 | Specific Target Organ Toxica respirable crystalline silica (| ant – Repeated Exposure Category 1 - This product contains Cristobalite) at a concentration of >10%. |
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| 2.2 | Label elements | • | | |
|-----|---|------------------|------------------------------|-------------------------------|
| | Hazard pictogram | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | \sim | | |
| | Signal word | DANGER | | |
| | Hazard statement | | ses damage to lungs thro | ugh prolonged or repeated |
| | | inhalation | | |
| | Precautionary statements | | ot breath dust | |
| | | | r respiratory protection | |
| | | • | ose of contents/containe | rs in accordance with local |
| 2.3 | Other hazards | regulations | | |
| 2.5 | This product is an inorganic | substance and | does not meet the criter | ia for PBT or vPvB in |
| | accordance with Annex XIII | | a does not meet the chief | |
| 3. | | | GREDIENTS | |
| 3.1 | Main constituents | | GREDIENTS | |
| 0.1 | | mount | CAS No | EINECS |
| | | 85% | 14464-46-1 | 238-455-4 |
| 3.2 | Impurities | | | |
| | Contains greater than 10% | of respirable C | ristobalite and is classifie | d as STOT RE 1 |
| 4. | FIRST AID MEASURES | · | | |
| 4.1 | Description of first aid mea | sures | | |
| | Eye Contact: | | | and seek medical attention if |
| | | irritation pers | | |
| | Inhalation: | | • | nediately and seek medical |
| | Ingestion | advice if req | neasures required. | |
| | Ingestion: Skin Contact: | | neasures required. | |
| 4.2 | Most important symptoms | | | |
| 4.2 | No acute and delayed symp | | - | |
| 4.3 | Indication of any immediat | | | ent needed |
| | No specific actions are requ | | | |
| 5. | FIRE FIGHTING MEASURE | | | |
| 5.1 | Extinguishing media: | | | |
| - | No specific extinguishing m | edia is needed | | |
| 5.2 | Special hazards arising from | n the substand | e or mixture: | |
| | Non combustible. No hazar | dous thermal o | lecomposition. | |
| 5.3 | Advice for Firefighters: | | | |
| | No specific fire fighting prot | tection is requi | ired. | |
| 6. | ACCIDENTAL RELEASE M | EASURES | | |
| 6.1 | Personal precautions, prote | ective equipmo | ent and emergency proce | edures: |
| | Avoid airborne dust generat | tion, wear pers | sonal protective equipme | nt in compliance with |
| | national legislation. | | | |
| | | | | |
| 6.2 | Environmental precautions No special requirements. | | | |

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- 6.3 Methods and material for containment and cleaning up Avoid dry sweeping and use water spraying or vacuum cleaning systems to prevent airborne dust generation. Wear personal protective equipment in compliance with national legislation.
 6.4 Reference for other sections
- See sections 8 and 13.

7.HANDLING AND STORAGE7.1Precautions for safe handlingAusid side area dust secondaria

Avoid airborne dust generation. Provide appropriate exhaust ventilation at places where airborne dust is generated. In case of insufficient ventilation wear suitable respiratory protective equipment. Handle packaged products carefully to prevent accidental bursting. If you require advice on safe handling techniques please contact your supplier or check the Good Practise Guide referred to in section 16. Do not eat or drink in work areas; wash hands after use; remove contaminated clothing and protective equipment before entering eating areas. 7.2 Conditions for safe storage, including any incompatibilities Minimise airborne dust generation and prevent wind dispersal during loading and unloading. Keep containers closed and store packaged products so as to prevent accidental bursting. 7.3 Specific end uses If you require advice on specific uses please contact your supplier or check the Good Practice Guide referred to in section 16. **EXPOSURE CONTROLS/PERSONAL PROTECTION** 8 8.1 **Control parameters** Follow workplace regulatory exposure limits for all types of airborne dust (e.g. total dust, respirable dust, respirable crystalline silica dust) The WEL (Workplace Exposure Limit) for respirable crystalline silica dust is 0.1 mg/m^3 in the UK, measured as an 8 hour TWA (Time Weighted Average). For the equivalent limits in other countries consult your local regulatory authority. 8.2 **Exposure controls** 8.2.1 Appropriate engineering controls Minimise airborne dust generation. Use process enclosures, local exhaust ventilation or other engineering control methods to keep airborne levels below the specified exposure limits. If user operations generate dust, fumes or mist, use ventilation to keep exposure to airborne particles below the exposure limit. Apply organisational measures, e.g. by isolating personal from dusty areas. Wash hands before breaks and at the end of the day. Remove and wash soiled clothing 8.2.2 Individual protection measures such as personal protective equipment a) Eye protection Safety glasses with side shields. Use equipment for eye protection tested and approved under appropriate standards. b) Skin protection No specific requirement. For hands see below. c) Hand protection Appropriate protection (e.g. gloves, barrier cream) is

- recommended for workers who suffer from dermatitis or sensitive skin. Wash hands at the end of each work session.
- d) Respiratory protection In case of prolonged exposure to airborne dust concentrations,

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| wear respiratory protective equipment (e.g., respirator, powered air respirator) that complies with the requirements of European or national legislation. |
|---|
| Environmental exposure controls Avoid wind dispersal |
| |

| 9. | PHYSICAL AND CHEMICAL PROPERTIES | | | |
|------|----------------------------------|--|--|--|
| 9.1 | Information on basic physic | Information on basic physical and chemical properties | | |
| | Appearance | Solid, white powder | | |
| | Odour | Odourless | | |
| | Odour threshold | Not relevant | | |
| | рН | 6.5 | | |
| | Melting point | 1718°c | | |
| | Density | 2.35g/cm ³ | | |
| | Grain shape | Angular | | |
| | Solubility in water | Negligible | | |
| | Solubility in hydrofluoric | Yes | | |
| | acid | | | |
| 9.2 | Other information | | | |
| | No other information | | | |
| 10 | STABILITY AND REACTIVI | ГҮ | | |
| 10.1 | Reactivity - Inert, not reactive | /e | | |
| 10.2 | Chemical Stability - Chemica | | | |
| 10.3 | - | ctions - No hazardous reactions | | |
| 10.4 | Conditions to avoid - Not re | levant | | |
| 10.5 | - | Incompatible materials - No particular incompatibility | | |
| 10.6 | Hazardous decomposition p | Hazardous decomposition products - Not relevant | | |
| 11. | TOXICOLOGICAL INFORM | TOXICOLOGICAL INFORMATION | | |
| 11.1 | Information on toxicologica | l effects | | |
| a) | Acute toxicity | No evidence of acute toxicity. | | |
| b) | Skin corrosion/irritation | Substance is not corrosive, may cause mechanical irritation. | | |
| c) | Serious eye damage/irritation | May cause mechanical irritation. | | |
| d) | Respiratory or skin sensation | No evidence of sensitisation | | |
| e) | Germ cell mutagenicity | No evidence of mutagenicity | | |
| f) | Carcinogenicity | Lung cancer excess risk is demonstrated only under high | | |
| | | occupational exposures to respirable crystalline silica. The lung | | |
| | | cancer excess risk is restricted to people who contract silicosis | | |
| g) | Reproductive toxicity | No evidence of reproductive toxicity | | |
| h) | STOT-single exposure | Not classified | | |
| i) | STOT-repeated exposure | Prolonged inhalation of high levels of respirable crystalline silica | | |
| | | has been shown to cause silicosis, a nodular pulmonary fibrosis. | | |
| j) | Aspiration hazard | Based on available data, the classification criteria are not met | | |
| 12. | ECOLOGICAL INFORMATI | | | |
| 12.1 | Toxicity | Not relevant | | |
| 12.2 | Persistence and degradabili | ty Not relevant | | |
| 12.3 | Bioaccumulative potential | Not relevant | | |

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| 12.4 | Mobility in soil | Negligible |
|------|------------------------------------|-----------------------------------|
| 12.5 | Results of PBT and vPvB assessment | Not relevant |
| 12.6 | Other adverse effects | No specific adverse effects known |

| 13 | DISPOSAL CONSIDERATIONS | | |
|------------|----------------------------------|--|--|
| 13.1 | Waste treatment methods | | |
| | Product | Where possible, recycling is preferable to disposal. Disposal | |
| | | should be carried out in compliance with local regulations. | |
| | Packaging | Dust generation from residues in packaging should be avoided | |
| | | and suitable worker protection assured. Store used packaging in | |
| | | enclosed receptacles. Disposal of packaging should be carried out | |
| | | in compliance with local regulations by an authorized waste | |
| | | management company. | |
| 14. | TRANSPORT INFORMATIC | | |
| 14.1 | UN number | Not relevant | |
| 14.2 | UN proper shipping name | Not relevant | |
| 14.3 | Transport hazard classes | | |
| | ADR | Not classified | |
| | IMDG | Not classified | |
| | ICAO/IATA | Not classified | |
| | RID | Not classified | |
| 14.4 | Packing group | Not applicable | |
| 14.5 | Environmental hazards | Not relevant | |
| 14.6 | Special precautions for user | | |
| 14.7 | Transport in bulk according | | |
| | II of MARPOL 73/78 and the | | |
| 15. | REGULATORY INFORMAT | | |
| 15.1 | - | nental regulations/legislation specific for the substance or mixture | |
| | National legislation/requirer | nents | |
| | | | |
| | International legislation/req | | |
| | Regulation (EC) No 2037/200 | | |
| | Regulation (EC) No 850/2004 | | |
| 15.2 | Regulation (EC) No 689/2008 | | |
| 15.2 | Chemical safety assessment | | |
| | 1907/2006 | om REACH in accordance with Annex V.7 of Regulation (EC) | |
| 16. | OTHER INFORMATION | | |
| 10. (i) | Indication of changes | | |
| (1) | Changes have been made to | comply with regulations | |
| | (EC) 1907/2006 | comply with regulations | |
| | (EC) 1907/2000 (EC) 1272/2008 | | |
| | (EC) 453/2010 | | |
| | (LC) 433/2010 | | |
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- (ii) Abbreviations and acronyms
 EC: European Commission REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals and Substances
 TWA: Time Weighted Average STOT: Specific Target Organ Toxicity PBT: Persistent, Bioaccumalitive, Toxic vPvB: very Persistent and very Bioaccumlating
 (iii) Key literature references and sources for data EH40/2005 Workplace exposure limits (Third Edition, 2018) IARC Monographs on the Evaluation of Carcinogenic Risks to Humans Volume 68 Silica (1997)
 (iv) Classification and procedure used to derive the classification for mixtures according to Begulation (5C) 1372 (2009 [CLP]
- Regulation (EC) 1272/2008 [CLP] This material is classified as STOT RE 1 according to the procedure given in section 3.9 of Regulation (EC) 1272/2008

| (v) | Relevant H-statements (number and full text) | | |
|-------|---|---|--|
| | H372: Causes damage to lungs through prolonged or repeated exposure via inhalation | | |
| (vi) | (vi) Training advice | | |
| | All employees should be give | en adequate training in the proper use and handling of this product | |
| | and any precautions and protective equipment required under applicable regulations. | | |
| (vii) | Further information | EH44/1997 - Dust: General Principles of Protection. | |
| | | EH75/4 (2002) - Respirable Crystalline Silica - Phase 1. | |
| | | EH75/5 (2003) - Respirable Crystalline Silica - Phase 2. | |
| | | HSG258 – Controlling airborne contaminants at work. | |
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