


In compliance with Regulation (EC) 1907/2006 and Regulation (EC) 453/2010

Revision date 25/09/2013
Version 01

1. 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	C100, C200
1.2 Relevant identified uses of the substance	
Main applications – non exhaustive list	Investment Casting, Filler for paints and coatings, adhesives and sealants, plastics and elastomers.
1.3 Details of the supplier of the 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 number	
Telephone number	+44 (0) 1629 540201
Available outside of office hours?	No
2. HAZARD IDENTIFICATION	
2.1 Classification of the substance	
2.1.1	<i>Classification according to Regulation (EC) No 1272/2008 [CLP]</i> Specific Target Organ Toxicant – Repeated Exposure Category 2 - This product contains respirable crystalline silica (cristobalite) at a concentration of >1% but <10%. H373: May cause damage to lungs through prolonged or repeated exposure via inhalation
2.1.2	<i>Classification according to Directive 67/548/EEC</i> Xn Harmful R48/20 - Harmful: danger of serious damage to health by prolonged exposure through inhalation S22 – Do not breath dust
2.2 Label elements	
Hazard pictogram	
Signal word	WARNING
Hazard statement	H 373 – May cause damage to lungs through prolonged or repeated inhalation

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	Precautionary statements	P 260 – Do not breath dust P 284 – Wear respiratory protection P 501 – Dispose of contents/containers in accordance with local regulations		
2.3	Other hazards	This product is an inorganic substance and does not meet the criteria for PBT or vPvB in accordance with Annex XIII of REACH		
3.	COMPOSITION/INFORMATION ON INGREDIENTS			
3.1	Main constituents			
	Name	Amount	CAS No	EINECS
	Cristobalite	>85%	14464-46-1	238-455-4
3.2	Impurities	Contains between 1 and 10% of respirable cristobalite and is classified as STOT RE 2		
4.	FIRST AID MEASURES			
4.1	Description of first aid measures			
	Eye Contact:	Rinse with copious quantities of water and seek medical attention if irritation persists.		
	Inhalation:	Move exposed person to fresh air immediately and seek medical advice if required.		
	Ingestion:	No first aid measures required.		
	Skin Contact:	No first aid measures required.		
4.2	Most important symptoms and effect, both acute and delayed	No acute and delayed symptoms and effects are observed.		
4.3	Indication of any immediate medical attention and special treatment needed	No specific actions are required.		
5.	FIRE FIGHTING MEASURES			
5.1	Extinguishing media:	No specific extinguishing media is needed.		
5.2	Special hazards arising from the substance or mixture:	Non combustible. No hazardous thermal decomposition.		
5.3	Advice for Firefighters:	No specific fire fighting protection is required.		
6.	ACCIDENTAL RELEASE MEASURES			
6.1	Personal precautions, protective equipment and emergency procedures:	Avoid airborne dust generation, wear personal protective equipment in compliance with national legislation.		
6.2	Environmental precautions	No special requirements.		
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.		

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7.	HANDLING AND STORAGE
7.1	Precautions for safe handling 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.
8	EXPOSURE CONTROLS/PERSONAL PROTECTION
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, wear respiratory protective equipment (e.g., respirator, powered air respirator) that complies with the requirements of European or national legislation.
8.2.3	Environmental exposure controls Avoid wind dispersal

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9.	PHYSICAL AND CHEMICAL PROPERTIES	
9.1	Information on basic physical and chemical properties	
Appearance	Solid, white powder	
Odour	Odourless	
Odour threshold	Not relevant	
pH	6.5	
Melting point	1718°C	
Density	2.35g/cm ³	
Grain shape	Angular	
Solubility in water	Negligible	
Solubility in hydrofluoric acid	Yes	
9.2	Other information	
	No other information	
10	STABILITY AND REACTIVITY	
10.1	Reactivity	
	Inert, not reactive	
10.2	Chemical Stability	
	Chemically stable	
10.3	Possibility of hazardous reactions	
	No hazardous reactions	
10.4	Conditions to avoid	
	Not relevant	
10.5	Incompatible materials	
	No particular incompatibility	
10.6	Hazardous decomposition products	
	Not relevant	
11.	TOXICOLOGICAL INFORMATION	
11.1	Information on toxicological 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	No classification for carcinogenicity.
g)	Reproductive toxicity	No evidence of reproductive toxicity
h)	STOT-single exposure	
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 INFORMATION	
12.1	Toxicity	Not relevant
12.2	Persistence and degradability	Not relevant
12.3	Bioaccumulative potential	Not relevant
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

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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 INFORMATION	
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	No special precautions
14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	Not relevant
15. REGULATORY INFORMATION	
15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture	
<i>National legislation/requirements</i>	
<i>International legislation/requirements</i>	
Regulation (EC) No 2037/2000	Not relevant
Regulation (EC) No 850/2004	Not relevant
Regulation (EC) No 689/2008	Not relevant
15.2 Chemical safety assessment	
No chemical safety assessment has been carried out by the supplier	
16. OTHER INFORMATION	
(i) Indication of changes	Changes have been made to comply with regulations (EC) 1907/2006 (EC) 1272/2008 (EC) 453/2010
(ii) Abbreviations and acronyms	None used
(ii) Key literature references and sources for data	EH40/2005 Workplace exposure limits (Second edition, 2011) 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 Regulation (EC) 1272/2008 [CLP]	This material is classified as STOT RE 2 according to the procedure given in section 3.9 of Regulation (EC) 1272/2008

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| (v) Relevant R-phrases and/or H-statements (number and full text) | H373: May cause damage to lungs through prolonged or repeated exposure via inhalation |
| (vi) Training advice | All employees should be given 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.
HSG37 - An Introduction to Local Exhaust Ventilation. |

The information contained in this document applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. It is the user's responsibility to satisfy oneself as to the suitability and completeness of this information for his/her own particular use.