Created: 12 January 2024

SAFETY DATA SHEET

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

1.1 Product identifier

Product Name:	3 Part Polyurethane MDI Compound Part C: Secondary Filler Silica-Sand
Chemical Name:	Quartz (SiO_2)
Synonyms:	Silica flour, crystalline silica flour, silicon dioxide flour, quartz sand, quartzite
CAS No.:	14808-60-7
EC Number:	238-878-4
REACH Registration Number:	Exempt in accordance with Annex V.7

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

Use of the substance/mixture:	Used as a filler in polyurethane resin compounds
Use advised against:	No information available

1.3 Details of the supplier of the safety data sheet

Name of Supplier:	Sicame UK Limited
Address of Supplier:	Unit 4, London Medway Commercial Park James Swallow Way Hoo Rochester, Kent ME3 9GX UK
Telephone:	01322 44 4500
Email:	sales@sicame.co.uk

1.4 Emergency telephone number

Emergency Telephone:	Sales Department 01322 44 4500 24 hours / 7 days a week

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008) [CLP/GHS]: Not classified

Additional information: For full text of Hazard- and EU Hazard-statements: see section 16

2.2 Label elements

Hazard pictograms: None

Signal Word: None

Hazard statements

None

Precautionary statements

None

Supplemental Hazard information (EU)

None

2.3 Other hazards

SECTION 2: Hazards identification (....)

Not a PBT according to REACH Annex XIII

Not a vPvB according to REACH Annex XIII

Has not been identified as having endocrine disrupting properties

SECTION 3: Composition/information on ingredients

3.1 Substances

Chemical Name	Conc.	CAS No.	EC No.	Classification (REGULATION (EC) No 1272/2008) [CLP/GHS]	SCL/ M-Factor/ ATE	REACH Registration Number	WEL/ OEL
Quartz (SiO_2)	> 85%	14808-60-7	238-878-4	Not classified (Substance with a workplace exposure limit)	-	-	Yes
Quartz (SiO_2) (fine fraction)	< 1%	14808-60-7	238-878-4	STOT RE 1, H372	-	-	Yes

3.2 Mixtures

Not applicable

SECTION 4: First aid measures

4.1 Description of first aid measures

Rescuers should put on approved personal protective equipment (PPE) before administering first aid

Rescuers should take suitable precautions to avoid becoming casualties themselves

Contact with eyes

If substance has got into eyes, immediately wash out with plenty of water for at least 15 minutes
Irrigate eyes thoroughly whilst lifting eyelids
Remove contact lenses, if present and easy to do. Continue rinsing.
If eye irritation persists: Get medical advice/attention.

Contact with skin

Gently wash with plenty of soap and water.
If skin irritation occurs: Get medical advice/attention.

Ingestion

Rinse mouth.
Give plenty of water to drink
When in doubt or symptoms persist, seek medical attention

Inhalation

If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.
IF exposed or concerned: Get medical advice/attention

4.2 Most important symptoms and effects, both acute and delayed

Contact with eyes

May cause mild eye irritation

Contact with skin

SECTION 4: First aid measures (....)

May cause mild skin irritation

Ingestion

The ingestion of significant quantities may cause gastro-intestinal disturbances

Inhalation

Dust may cause respiratory irritation.

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically

SECTION 5: Firefighting measures

5.1 Extinguishing media

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

Unsuitable extinguishing media: No information available

5.2 Special hazards arising from the substance or mixture

No hazardous thermal decomposition.

Avoid formation of dust

5.3 Advice for firefighters

No special precautions are required for this product

Clothing for firefighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

No action shall be taken involving any personal risk or without suitable training

Only trained and authorised personnel should carry out emergency response

Personal precautions for non-emergency personnel: Do not breathe dust; Wash thoroughly after handling.

Personal precautions for emergency responders: Avoid formation of dust; Wear protective clothing as per section 8

6.2 Environmental precautions

Presents little or no hazard to the aquatic environment

6.3 Methods and material for containment and cleaning up

Avoid raising dust

Do not dry sweep

Damp down to avoid dust generation

Vacuum or sweep spillage and remove to a safe place

Seek expert advice for removal and disposal of all contaminated materials and wastes

6.4 Reference to other sections

SECTION 6: Accidental release measures (....)

See section(s): 7, 8 &13

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Minimize dust generation and accumulation

Provide appropriate exhaust ventilation at places where airborne dust is generated

If dust is formed, wear approved dust mask

Wear protective clothing as per section 8

Do not eat, drink or smoke when using this product.

Wash hands after use

Remove contaminated clothing and protective equipment before entering eating areas.

Shower and change clothes at end of work shift.

7.2 Conditions for safe storage, including any incompatibilities

No special precautions are required for this product

Avoid formation of dust

7.3 Specific end use(s)

Filler for polyurethane resin compounds

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment.
Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace exposure - Measurement of exposure by inhalation to chemical agents - Strategy for testing compliance with occupational exposure limit values). European Standard EN 14042 (Workplace atmospheres. Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents). European Standard EN 482 (Workplace exposure. General requirements for the performance of procedures for the measurement of chemical agents).
Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

Occupational exposure to respirable crystalline silica dust should be monitored and controlled

Quartz (SiO_2)

(EU) OELV (long term TWA) (respirable crystalline silica) 0.1 mg/m³
WEL (long term) 0.1 mg/m³ (respirable crystalline silica, UK)

8.2 Exposure controls

Selection and use of personal protective equipment should be based on a risk assessment of exposure potential

Engineering controls

Minimise airborne dust generation
Avoid dispersal of dust in the air (i.e., clearing dust surfaces with compressed air)
Provide appropriate exhaust ventilation at places where airborne dust is generated

Respiratory protection

SECTION 8: Exposure controls/personal protection (....)

If dust is formed, wear approved dust mask
Use type FFP2 or FFP3 (EN 143) dust masks

Skin protection

No special clothing/skin protection is required under normal conditions of use
Appropriate protection (e.g. gloves, barrier cream) is recommended for workers who suffer from dermatitis or sensitive skin

Eye/face protection

If there is a risk of product getting into eyes, wear safety glasses approved to standard EN 166.

Thermal hazards

Not applicable

Hygiene measures

Use good personal hygiene practices
Do not eat, drink or smoke when using this product.
Wash thoroughly after handling.
Contaminated clothing should be laundered before reuse

Environmental exposure controls

Avoid wind dispersal

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state:	Solid, powder. Grain shape: angular
Colour:	Grey, white
Odour:	None
Melting point/freezing point:	> 1610 °C
Boiling point or initial boiling point and boiling range:	2230 – 2590 °C
Flammability:	Not flammable
Lower and upper explosion limit:	Not applicable
Flash point:	Not applicable (solid with a melting point >1610 °C)
Auto-ignition temperature:	No self-heating below 400 ºC (solid with a melting point >1610 °C)
Decomposition temperature:	≈ 2000 °C
pH:	5 – 8 (40% aqueous dispersion @ 20 °C)
Kinematic viscosity:	Not applicable (solid with a melting point >1610 °C)
Solubility:	Water: Negligible. Hydrofluoric acid: Soluble
Partition coefficient n-octanol/water (log value):	Not applicable, inorganic
Vapour pressure:	Not applicable (solid inorganic substance)
Density and/or relative density:	2 – 3 (water =1)
Relative vapour density:	Not applicable
Particle characteristics:	No data available

9.2 Other information

No information available

SECTION 10: Stability and reactivity

10.1 Reactivity

Inert, not reactive

SECTION 10: Stability and reactivity (....)

10.2 Chemical stability

Stable under normal conditions

10.3 Possibility of hazardous reactions

No hazardous reactions known if used for its intended purpose

10.4 Conditions to avoid

Avoid formation of dust

10.5 Incompatible materials

No information available

10.6 Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced

SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute Toxicity

Based on available data, the classification criteria are not met

Substances

Chemical Name	LD_{50} (oral, rat)	LC_{50} (inhalation, rat)	LD_{50} (dermal, rabbit)
Quartz (SiO_2)	> 2000 mg/kg	No data available	> 2000 mg/kg

Skin corrosion/irritation

Based on available data, the classification criteria are not met

Substances

Chemical Name	Irritation/corrosion
Quartz (SiO_2)	No data available

Serious eye damage/irritation

Based on available data, the classification criteria are not met

Substances

Chemical Name	Irritation/corrosion
Quartz (SiO_2)	No data available

Respiratory or skin sensitisation

Based on available data, the classification criteria are not met

Substances

Chemical Name	Skin sensitisation	Respiratory sensitisation
Quartz (SiO_2)	No data available	No data available

Germ cell mutagenicity

Based on available data, the classification criteria are not met

SECTION 11: Toxicological information (....)

Substances

Chemical Name	Toxicity - In Vitro	Toxicity - In Vivo
Quartz (SiO_2)	No data available	No data available

Carcinogenicity

Based on available data, the classification criteria are not met

Exposure in high concentrations or over prolonged periods of time can lead to lung disease (silicosis) and an increased risk of lung cancer

Substances

Chemical Name	NOAEL (oral, rat)	NOAEC (inhalation, rat)	NOAEL (dermal, rat)
Quartz (SiO_2)	No data available	No data available	No data available

Reproductive toxicity

Based on available data, the classification criteria are not met

Substances

Chemical Name	NOAEL (oral, rat)	NOAEC (inhalation, rat)	NOAEL (dermal, rat)
Quartz (SiO_2)	No data available	No data available	No data available

Specific target organ toxicity (STOT) - single exposure

Based on available data, the classification criteria are not met

Substances

Chemical Name	Route	Remarks
Quartz (SiO_2)	Respiratory	No data available

Specific target organ toxicity (STOT) - repeated exposure

Based on available data, the classification criteria are not met

Prolonged and/or massive inhalation of respirable crystalline silica dust may cause lung fibrosis, commonly referred to as silicosis

Substances

Chemical Name	NOAEL (oral, rat)	NOAEC (inhalation, rat)	NOAEL (dermal, rat)
Quartz (SiO_2)	No data available	No data available	No data available

Aspiration hazard

Based on available data, the classification criteria are not met

Contact with eyes

May cause mild eye irritation

Contact with skin

May cause mild skin irritation

Ingestion

The ingestion of significant quantities may cause gastro-intestinal disturbances

Inhalation

SECTION 11: Toxicological information (....)

Dust may cause respiratory irritation.

11.2 Information on other hazards

Has not been identified as having endocrine disrupting properties

SECTION 12: Ecological information

12.1 Toxicity

Based on the available data, the classification criteria are not met

Substances

Chemical Name	LC_{50} (fish)	EC_{50} (aquatic invertebrates)	EC_{50} (aquatic algae)
Quartz (SiO_2)	No data available	No data available	No data available

12.2 Persistence and degradability

Not applicable, inorganic

Substances

Chemical Name	Biodegradation
Quartz (SiO_2)	Not applicable, inorganic

12.3 Bioaccumulative potential

Some organisms accumulate $Si(OH)_4$

Substances

Chemical Name	Bioconcentration Factor (BCF)	Log Kow
Quartz (SiO_2)	No data available	Not applicable, inorganic

12.4 Mobility in soil

Negligible

Substances

Chemical Name	Adsorption/desorption
Quartz (SiO_2)	No data available

12.5 Results of PBT and vPvB assessment

Not a PBT according to REACH Annex XIII

Not a vPvB according to REACH Annex XIII

12.6 Endocrine disrupting properties

Has not been identified as having endocrine disrupting properties

12.7 Other adverse effects

No information available

SECTION 13: Disposal considerations

13.1 Waste treatment methods

SECTION 13: Disposal considerations (....)

Disposal should be in accordance with local, state or national legislation

Do not discharge into drains or the environment, dispose to an authorised waste collection point

This mineral can be disposed of as a non-toxic/inactive material in approved landfill sites in accordance with local regulations.

13.2 Classification

The waste must be identified according to the List of Wastes (2000/532/EC)

Hazardous Property Code(s): None assigned

SECTION 14: Transport information

Not classified as hazardous for transport

14.1 UN number or ID 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 information available

14.7 Maritime transport in bulk according to IMO instruments

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 Packing 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) 2020/878) and UK REACH

The GB Classification, Labelling and Packaging Regulation (GB CLP) applies in Great Britain

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 chemical safety assessment is not required under REACH

SECTION 16: Other information

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

Sources of data: Information from company data, published literature and supplier safety data sheets

Workers must be informed of the presence of hazardous ingredients and trained in the proper use and handling of this product as required under applicable regulations

Text not given with phrase codes where they are used elsewhere in this safety data sheet:

H372: Causes damage to organs through prolonged or repeated exposure

Acronyms

ATE: Acute Toxicity Estimate

CAS: Chemical Abstracts Service

DNEL: Derived No-Effect Level

EC: European Community

EC_{50}: Effective Concentration, 50%

GHS: Globally Harmonised System

IARC: International Agency for Research on Cancer

LC_{50}: Lethal Concentration, 50%

LD_{50}: Lethal Dose, 50%

NOAEC: No Observed Adverse Effect Concentration

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

SCL: Specific Concentration Limit

SVHC: Substances of Very High Concern

SECTION 16: Other information (....)

vPvB: very Persistent and very Bioaccumulative

WEL: Workplace Exposure Limit