Kemet

SAFETY DATA SHEET

according to Regulation (EU) 2020/878

KEMET DIAMOND COMPOUND TYPE SX

Revision 12

Revision date 2023-02-01

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

1.1. Product identifier

Product name	KEMET DIAMOND COMPOUND TYPE SX
Nanoform	Mixture contains a nanoform.

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

Product Use	[SU3] Industrial uses: Uses of substances as such or in preparations at industrial sites; [SU0] Other; [PC0] Other;

1.3. Details of the supplier of the safety data sheet

Company	Kemet International Ltd
Address	Parkwood Trading Estate Maidstone Kent ME15 9NJ
Web	www.kemet.co.uk
Telephone	+44 (0)1622 755287
Fax	+44 (0)1622 670915
Email	sales@kemet.co.uk
Email address of the competent person	nroper@kemet.co.uk
Local Supplier	
Company	Kemet Europe BV
Address	P.O. Box 163 4600 Ad Bergen Op Zoom Netherlands
Telephone	0054 137 25671
Email address of the competent person	info@kemet-europe.com

1.4. Emergency telephone number

Emergency telephone number	+44 1865 407333
Company	NCEC 24 Hr (English Only) Poison Centre England 0854 46 47 Scotland 08454 24 24 24 Ireland +353 (0)1 809 2166

SECTION 2: Hazards identification

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2.2. Label elements

Hazard Statement	No Significant Hazard

2.3. Other hazards

Other hazards	PBT/vPvB assessment is not available as a chemical safety assessment is either not required or has not been conducted.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

EC 1272/2008

Chemical Name	Index No.	CAS No.	EC No.	REACH Registration Number	Conc. (%w/w)	Classification
Diamond Abrasive (Synthetic Diamond)		7782-40-3	231-953-2	01-2119852677-24	5 - 20%	
Amorphous Silica		7631-86-9	231-545-4	01-2119379499-16 01-2119379499-16	1 - 10%	

Particle Characteristics

Dust	Avoid dust formation.
Specific surface area:	80 m2/g
Surface charge/Zeta potential:	No data available
Shape:	Spheroidal;
Crystallinity:	Amorphous;
Surface treatment:	Hydrophilic;
Surface treatment /Coatings:	No;.

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation	Seek medical attention.
Eye contact	Rinse immediately with plenty of water for 15 minutes holding the eyelids open. Seek medical attention. May cause irritation to eyes.
Skin contact	May cause irritation to skin. Wash with soap and water.
Ingestion	DO NOT INDUCE VOMITING. Rinse mouth thoroughly. Drink 1 to 2 glasses of water. Seek medical attention.

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

Inhalation	Inhalation may cause coughing, tightness of the chest and irritation of the respiratory system.
Skin contact	Prolonged contact may cause redness, irritation and dryness.
Ingestion	Ingestion may cause nausea and vomiting.

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

Inhalation	Remove the affected person from the source of contamination immediately. Coughing, difficulty in breathing.
Eye contact	Rinse immediately with plenty of water for 15 minutes holding the eyelids open. Causes severe inflammation and may damage the cornea.
Skin contact	Wash with soap and water. Repeated or prolonged exposure may cause dermatitis.
Ingestion	DO NOT INDUCE VOMITING. Drink 1 to 2 glasses of water. Ingestion may cause nausea and vomiting.

General information

	If you feel unwell, seek medical advice (show the label where possible). Wash all contaminated clothing before reuse.

SECTION 5: Firefighting measures

5.1. Extinguishing media

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5.1. Extinguishing media

	Use as appropriate: Carbon dioxide (CO2), Dry chemical, Foam. Use extinguishing media appropriate to the surrounding fire conditions.

5.2. Special hazards arising from the substance or mixture

	Toxic Fumes and Dust may be formed in fire conditions.

5.3. Advice for firefighters

	Wear:. Self-contained breathing apparatus.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

	Ensure adequate ventilation of the working area. Sweep up.

6.2. Environmental precautions

	Do not allow product to enter drains. Do not flush into surface water.

6.3. Methods and material for containment and cleaning up

	Clean area thoroughly with detergent. Clean spillage area thoroughly with plenty of water. Transfer to suitable, labelled containers for disposal.

6.4. Reference to other sections

	See section 2, 7, 8 & 9 for further information.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

	Avoid contact with eyes and skin. Wear suitable protective equipment.

7.2. Conditions for safe storage, including any incompatibilities

	Keep in a cool, dry, well ventilated area. Store in original container. Avoid extremes of temperature during storage.

7.3. Specific end use(s)

	Use as Supplied. For use as a metal working lubricant/coolant in industrial applications only.

Suitable packaging

	Plastic containers.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

	Ensure adequate ventilation of the working area.

8.1.1. Exposure Limit Values

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8.1.1. Exposure Limit Values

Amorphous Silica	WEL 8-hr limit ppm:	WEL 8-hr limit mg/m3: 6 TWA Inhalable Dust
	WEL 15 min limit ppm:	WEL 15 min limit mg/m3: 2.4 TWA Respirable Dust
	WEL 8-hr limit mg/m3 total inhalable dust: -	WEL 15 min limit mg/m3 total inhalable dust: -
	WEL 8-hr limit mg/m3 total respirable dust: -	WEL 15 min limit mg/m3 total respirable dust: -
Diamond Abrasive (Synthetic Diamond)	WEL 8-hr limit ppm:	WEL 8-hr limit mg/m3:
	WEL 15 min limit ppm:	WEL 15 min limit mg/m3:
	WEL 8-hr limit mg/m3 total inhalable dust: 10	WEL 15 min limit mg/m3 total inhalable dust: -
	WEL 8-hr limit mg/m3 total respirable dust: 4	WEL 15 min limit mg/m3 total respirable dust: -

8.2. Exposure controls



8.2.1. Appropriate engineering controls	Ensure adequate ventilation of the working area.
8.2.2. Individual protection measures	Avoid contact with eyes and skin. Adopt best Manual Handling considerations when handling, carrying and dispensing.
Eye / face protection	Safety glasses. Wear Splash-proof eye goggles manufactured and tested according to EN 166.
Skin protection - Handprotection	Chemical resistant gloves (PVC). Use Chemical resistant gloves according to EN 374. Suitability and durability of the glove is dependant on glove material and duration of contact.
Respiratory protection	Not normally required. Wear suitable respiratory equipment when necessary.
8.2.3. Environmental exposure controls	Dispose of this material and its container to hazardous or special waste collection point.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

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9.1. Information on basic physical and chemical properties

Appearance	Paste
Colour	Various Depending On Grade
Odour	Slight
Odour threshold	Not applicable.
pH	No data available
Melting point	No data available
Initial boiling point	Not applicable.
Flash point	Not applicable.
Evaporation rate	No data available
Flammability (solid, gas)	No data available
Vapour pressure	Not applicable.
Relative Vapour Density	Not applicable.
Density / Relative Density	1.05 G/ML Approx
Partition coefficient	No data available
Autoignition temperature	No data available
Viscosity	No data available
Explosive properties	Not applicable.
Oxidising properties	No data available
Solubility	Slightly miscible in water

9.2. Other information

Conductivity	No data available
Surface tension	No data available
Gas group	Not applicable.
Benzene Content	Not applicable.
Lead content	Not applicable.
VOC (Volatile organic compounds)	Not applicable.

Water solubility

Miscible.

9.2.1. Information with regard to physical hazard classes

Particle shape - Amorphous Surface Treattment - None
Particle size d10 7 - 15 nm, d50 2 - 30 nm, d90 10 - 35 nm.

9.2.2. Other safety characteristics

No data is available on this product.

SECTION 10: Stability and reactivity

10.1. Reactivity

None expected under normal conditions of use.

10.2. Chemical stability

Will not decompose if stored and used as recommended.

10.3. Possibility of hazardous reactions

None expected under normal conditions of use.

10.4. Conditions to avoid

Do NOT allow to freeze. Direct sunlight. Heat, sparks and open flames.

10.5. Incompatible materials

Strong acids. Strong bases.

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10.6. Hazardous decomposition products

	Incomplete combustion will produce toxic and noxious fumes including carbon monoxide and carbon dioxide.

SECTION 11: Toxicological information

11.1 Information on hazard classes

Acute toxicity	No data is available on this product.
Skin corrosion/irritation	May cause irritation to skin.
Serious eye damage/irritation	May Cause Eye Irritation.
Respiratory or skin sensitisation	No sensitizaton effects reported.
Repeated or prolonged exposure	Prolonged or repeated exposure may cause irritation to skin and mucous membranes.

11.1.4. Toxicological Information

Amorphous Silica	**Oral Rat LD50:** 5000	**Dermal Rabbit LD50:** 2000
	Inhalation Rat LC50/4 h: 2.2	
Diamond Abrasive	**Dermal Rat LD50:** >2000 mg/kg	**Oral Rat LD50:** >2000 mg/Kg
	Inhalation Rat LC50/4 h: >5.2 mg/li	

SECTION 12: Ecological information

12.1. Toxicity

Amorphous Silica	**Daphnia EC50/48h:** 7600.0000 mg/l	**Fish LC50/96h:** 5000.0000 mg/l
	Algae EC50/72h: 440	**Brachydanio Rerio LC50/96h:** 5000

	No data is available on this product.

12.2. Persistence and degradability

	No data is available on this product.

12.3. Bioaccumulative potential

	No data is available on this product.

Partition coefficient

	KEMET DIAMOND COMPOUND TYPE SX No data available

12.4. Mobility in soil

	No data is available on this product.

12.5. Results of PBT and vPvB assessment

	PBT/vPvB assessment is not available as a chemical safety assessment is either not required or has not been conducted.

12.6 Endocrine disrupting properties

	This product does not contain any known or suspected endocrine disruptors.

12.7. Other adverse effects

	No data is available on this product.

Further information

	No known adverse environmental effects.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

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13.1. Waste treatment methods

	Allocation of the correct EWC Number should be done in accordance with the european Waste Catalogue and should be carried out in agreement with an EA authorised waste disposal company.

General information

	Can be incinerated if in compliance with local and national regulations. Dispose of in compliance with all local and national regulations.

Disposal methods

	Dispose of this material and its container to hazardous or special waste collection point.

Disposal of packaging

	Empty containers can be sent to landfill after cleaning, if in compliance with local and national regulations. Empty containers can be sent for disposal or recycling.

SECTION 14: Transport information

14.1. UN number

	The product is not classified as dangerous for carriage.

14.2. UN proper shipping name

	The product is not classified as dangerous for carriage.

14.3. Transport hazard class(es)

	The product is not classified as dangerous for carriage.

14.4. Packing group

	The product is not classified as dangerous for carriage.

14.5. Environmental hazards

	The product is not classified as dangerous for carriage.

14.6. Special precautions for user

	The product is not classified as dangerous for carriage.
	No data is available on this product.

14.7 Maritime Transport in bulk according to IMO instruments

	The product is not classified as dangerous for carriage.
	No known adverse health effects.

Further information

	The product is not classified as dangerous for carriage.

SECTION 15: Regulatory information

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

Regulations	The Health and Safety at Work Act 1974. Workplace Exposure Limits EH40. COMMISSION REGULATION (EU) 2020/878 of 18 June 2020 amending Annex II to Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH).

15.2. Chemical safety assessment

	A chemical safety assessment has not been conducted.

SECTION 16: Other information

Other information

Revision	This document differs from the previous version in the following areas:. 1 - Nanoform. 3 - Particle Characteristics. 9 - 9.2.2. Other safety characteristics.

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Other information	
	9 - 9.2.1. Information with regard to physical hazard classes. 12 - Further information. 12 - 12.6 Endocrine disrupting properties. 12 - 12.7. Other adverse effects. 14 - 14.6. Special precautions for user. 14 - 14.7 Maritime Transport in bulk according to IMO instruments. 15 - Regulations.

Further information	
	The information supplied in this Safety Data Sheet is designed only as guidance for the safe use, storage and handling of the product. This information is correct to the best of our knowledge and belief at the date of publication however no guarantee is made to its accuracy. 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 other process.

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