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Section 1.0 Identification of the substance / mixture and of the company

1.1 Product Identifier

Product Name : Steatite Ceramic

HSN Code : 68042290, 85462090

 $\begin{array}{lll} \mbox{Physical state} & : \mbox{Solid} \\ \mbox{Formula} & : \mbox{Mg}(\mbox{SiO}_3) \\ \mbox{Synonyms} & : \mbox{Soapstone} \\ \end{array}$

Chemical family : Inorganic Silicate

1.2 Recommended use of the substance/mixture and restrictions on use

Recommended use : Grinding media, mill lining blocks and technical

Ceramics

Non-isolated Intermediate

For research and industrial use only

1.3 Details of the supplier of the safety data sheet

Jyoti Ceramic Industries Pvt Ltd

C-21, N.I.C.E, Satpur Nashik Maharashtra India

Tel +91-253-2350120/2351251; Fax +91-253-2350023

www.jyoticeramic.com

E-mail: info@jyoticeramic.com

For EU member states:

EC REP

Jyoti Ceramic GmbH

Frankenstr. 12, 90762 Fürth, Germany

Tel: +49 911 7871 2084; Fax +49 911 7871 2082

E-Mail: sales@jyoticeramic.com

1.4 Emergency Telephone Number

Jyoti Ceramic Industries Pvt Ltd

+ 91-253-2350120

Reachable during office hours (Indian Standard time):Sunday - Friday: 9.00 AM - 5.00 PM

Jyoti Ceramic GmbH

+49 911 7871 2084:

Reachable during office hours (Central European time): Monday - Friday: 8.30 AM – 5.00 PM



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Section 2.0 Hazard(s) identification

2.1 Classification of the substance or mixture: Not classified (Reg. (EG)No.1272/2008)
2.2 Label elements: Not applicable (Reg. (EG)No.1272/2008)

2.3 Hazards not otherwise classified (HNOC) : No additional information available

> Section 3.0 Composition / Information on Ingredients

3.1 Substance : Not Applicable

3.2 Mixture

Name : Steatite Ceramic CAS No. : 63210-56-0 : 613-181-1

Name of ingredient	CAS No	EINECS No	Wt %	GHS	REACH Reg.
				classification	
Silicon Di-Oxide	7631-86-9	231-545-4	60-65	Not classified	01-2119379499-16
Magnesium Oxide	1309-48-4	215-171-9	20-25	Not classified	
Aluminium Oxide	1344-28-1	215-691-6	6 – 7	Not classified	01-2119529248-35
Barium Oxide	1304-28-5	215-127-9	2 – 5	Not classified	01-2120078585-44
Others			1 - 2	Not classified	

The range variation is to protect the confidentiality or batch to batch composition variation. Due to thermal processing and the resulting inertness, the properties of the product do not pertain to its constituents.

This document is valid for any concentration that lies in the above mentioned range.

Full text of hazard classes and H-statement: see section 15

Section 4.0 Description of First Aid measures

4.1 Description of first aid measures

General : Remove contaminated clothing and shoes. In case of accident or if

you feel unwell, seek medical advice immediately (show the label where possible). If possible show this sheet; If not available show

packaging or label.

After inhaled : In case if dust is inhaled and there symptoms of cough or

shortness of breath, move from exposure to a well ventilated

place, and if breathing difficulty occurs then consult a

physician.

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After skin contact : If irritation to skin occurs due to contact then wash the

affected area with fresh and clean water.

After eye contact : If irritation occurs flush the eyes with fresh clean running tap

water. Get medical attention if irritation continues.

After Ingestion : If substantial quantity is swallowed, dilute with large

amount of water, then consult a physician.

4.2 Most important symptoms and effects, both acute and delayed

Product dust generated through grinding, sanding or machining may cause irritation to the mucous membrane, eyes, skin and respiratory organs.

Symptoms/injuries after inhalation : May cause irritation
Symptoms/injuries after skin contact : May cause skin irritation
Symptoms/injuries after eye contact : May cause eye irritation
Symptoms/injuries after ingestion : No information available

4.3 Indication of any immediate medical attention and special treatment method

No additional information available

Section 5.0 Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media : Product is not combustible and non explosive.

Use a suitable extinguishing media for the

surrounding fire

Unsuitable extinguishing media : None known

5.2 Special hazards arising from the substrate or mixture

Fire hazard : None known

5.3 Advice for firefighters

Protection during firefighting : Do not enter fire area without proper protective

equipment, including respiratory protection.

Section 6.0 Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

6.1.1 For non-emergency personnel

Protective equipment : Wear protective equipment as described in

Section 8

Emergency procedures : Evacuate unnecessary and unprotected personnel.

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6.1.2 For emergency responders

Protective equipment : Do not attempt to take action without suitable

protective equipment. Equip clean-up crew with

proper protection.

Use protective clothing, dust mask, and eye protection. For further information refer to

section 8: "Exposure controls/personal protection".

6.2 Environmental precautions : Prevent entry of product into sewers and public

waters. Notify authorities if product enters sewers or

public waters.

6.3 Methods and material for contamination and cleaning up

6.4

For containment : Prevent migration and entry into sewers or streams Methods for cleaning up

: Collect the pieces or dust by vacuum or mechanically for disposal and land filling as per local regulations.

6.5 Reference to other sections:

See Heading 8. Exposure controls and personal protection

Section 7.0 Handling and storage

7.1 Precautions for safe handling

Risk of slipping if the product is spilt on the floor. Use safety shoes while handling. Wear safety glasses for eye protection. Sweep up and recover into a container for reuse or disposal. If dust is generated then wear personal protecting clothing including particle filter/dust mask and eye protection.

7.2 Hygiene Measures

Wash contaminated clothing before reuse. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

7.3 Conditions for safe storage, including any incompatibilities:

Storage conditions : Keep container tightly closed

Incompatible materials : Not known

Storage area : Material should be stored in well protected

dry place, in its original packing.

7.4 Specific end uses

See section 1.2



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Section 8.0 Exposure controls and personal protection

8.1 Control parameters

Product dust generated through grinding, sanding or machining may cause irritation to the mucous membrane, eyes, skin and respiratory organs. The limits of dust concentration (mg/m³) at the work-place have to be considered.

The general dust limit according to the TRGS 900, for dust which does not exhibit any mutagenic, carcinogenic, fibrogenic, allergising or toxic effect applies:

The OEL value for A dust (alveolar dust fraction) is 1.25 mg/m³ The OEL value for E dust (inhalable dust fraction) is 10 mg/m³

The exposure limit for SiO₂ dust is as follows:

Silicon Dioxide (7631-86-9)*				
ACGIH	TWA (mg/m³)	10 mg/m ³		
DFG	MAK(mg/m ³)	4 mg/m ³		

^{*}The values are for total dust containing no asbestos and < 1 % crystalline silica.

8.2 Exposure controls

Appropriate engineering controls : Provide local exhaust or general room ventilation.

Suitable ventilation / dust extraction system must be used in the workplace or on the equipment.

Personal protective equipment : Avoid all unnecessary exposure. Emergency eye

wash fountains and safety showers should be available in the immediate vicinity of any

potential exposure.

Hand protection : Neoprene or nitrile rubber gloves

Eye protection : Safety glasses.

Skin and body protection : Wear suitable protective clothing. After work ensure

that skin is cleaned and hand care products are

used.

Respiratory protection : In case of dust exposure respiratory protection

equipment must be worn. FFP2/FFP3 dust masks

with particle filters are recommended.

Section 9.0 Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance Off White



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Surface Finish Smooth
Condition Solid
Odour None

 $\begin{array}{lll} \text{Melting point} & > 1400 \, ^{\circ}\text{C} \\ \text{Freezing point} & \text{Not Applicable} \\ \text{Ignition point} & \text{Non Flammable} \\ \text{Density} & 2.7 \pm 0.05 \, \text{gm/cc} \end{array}$

Hardness on Moh's Scale 7

Solubility in water Non soluble

Porosity

PH Not Applicable Vapour Pressure Not Applicable Viscosity Not Applicable Vapour Density Not Applicable Partition Co-efficient Not Applicable **Explosive Properties** Not Applicable Oxidising Properties Not Applicable **Evaporation Rate** Not Applicable

9.2. Other information

No additional information available

Section 10.0 Stability and reactivity

10.1 Reactivity : Not known **Chemical stability** 10.2 : Stable Possibility of hazardous reactions 10.3 : Not known 10.4 Conditions to avoid : Not known 10.5 Incompatible materials : Not known 10.6 **Hazardous decomposition products** : Not known

Section 11.0 Toxicological information

11.1 Information on the toxicological effects

Acute toxicity : Not classified Skin corrosion/irritation : Not classified Serious eye damage/irritation : Not classified Respiratory or skin sensitization : Not classified Germ cell mutagenicity : Not classified

Carcinogenicity : No evidence of carcinogenic effect

Reproductive toxicity : Not classified Specific target organ toxicity (single exposure) : Not classified Specific target organ toxicity (repeated exposure) : Not classified Aspiration hazard : Not classified

Symptoms/injuries after inhalation : Product dust generated through

grinding, sanding or machining may



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cause irritation to the mucous

membrane, eyes, skin and respiratory

organs

Symptoms/injuries after skin contact : Product dust may cause skin irritation Symptoms/injuries after eye contact : Product dust may cause eye irritation

Symptoms/injuries after ingestion : No information available

Section 12.0 Ecological information

If used properly, no environmental problems are anticipated. Do not empty the product or collected dust into ground water or drains.

12.1Toxicity: Not known12.2Persistence & Degradability: Not known12.3Bioaccumulative Potential: Not known

12.4 Mobility in soil

12.5 Results of PBT and vPvB assessment : Product does not contain PBT or vPvB

substances (see. REACH Annex XIII)

12.6 Other Adverse Effect

Effect on ozone layer : Not known

Effect on the global warming : No known effects from this product. GWP mix comment : No known effects from this product.

> Section 13.0 Disposal considerations

13.1 Waste treatment methods

Sewage disposal recommendations : Do not dispose of waste into sewer

Waste disposal recommendations : Unless contaminated in service, this product is neutral

to the environment. Landfill dispose in a safe

manner in accordance with local/national regulations.

Ecology - waste materials : Avoid release to the environment

> Section 14.0 Transport information

No dangerous goods as defined by ADR/RID/ADN/GGVSEB, ICAO/IATA, IMDG, USDOT

14.1 UN number : Not regulated for transport.

14.2 UN proper shipping name : Not applicable
 14.3 Transport hazard class(es) : Not applicable
 14.4 Packing Group : Not applicable
 14.5 Environmental Hazards : Not applicable

14.6 Special Precautions for the user : See section 7 and 8

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code

: Not applicable



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Section 15.0 Regulatory information

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

No classification or labelling applicable in accordance with Regulation (EC) No 1272/2008.

None of the chemicals in this product are considered highly hazardous by OSHA.

15.2.: Chemical safety assessment

A chemical safety assessment of the product or its components is not available.

Section 16.0 Other information

16.1.: Abbreviations and acronyms

REACH: Regulation on Registration, Evaluation, Authorisation and Restriction of Chemicals.

TWA: Time Weighted Average;

OEL: Occupational exposure limit;

ACGIH: American Conference of Governmental Industrial Hygienists;

OSHA: Occupational Safety and Health Administration;

CAS No.: Chemical Abstract Service Registration Number;

EINECS: European Inventory of Existing Commercial Chemical

Substances

GHS: The Globally Harmonized System of Classification and labelling;

IATA: International Air Transport Association;

DOT: Department Of Transport;

IMDG: International Maritime Dangerous Goods;

RID: Regulations concerning the International Transport of Dangerous

Goods by Rail;

ADR: European Agreement concerning the International Carriage of

Dangerous Goods by Road;

ICAO: International Civil Aviation Organization

PBT: Persistent, bioaccumulative and toxic substances

vPvB: Very persistent and very bioaccumulative substances



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This SDS covers all grades of Steatite Ceramic grinding media and technical ceramics. The information is based on the current state of our knowledge and relates to the product in its condition as applied. However, no guarantee, warranty or assurance is accepted either explicitly or implicitly for the accuracy, reliability and/or completeness of this information.

We expressly call on the person receiving this information to check on the suitability and completeness of this information for their particular application.