Polymer Add (Thailand) Co.,Ltd.

Office - 106, Chalaremprakiat, Lor 9, Soi 22, Yak 5, Nongbon, Prawet, Bangkok, Thailand 10250
Factory - 188/3, Moo 8, Tambon Bangpu Mai, Amphoe Muang Samut Prakan, Samutprakan, Thailand 10280
Mobile - Thai : 0804531391, English: 0839415475, **E-mail** – contact@polymeradd.co.th

Safety Data Sheet (SDS)

Product Name	Calcium Silicate Micronized
CAS Number	1344-95-2

1.0 Identification of the Substance/Mixture and of the Company/Undertaking

Product Name	Calcium Silicate
CAS Number	1344-95-2
Relevant Identified Uses	Used in Plastics, Rubber, Paints & Coatings, Paper (Coating Grade), Adhesives & Sealants, Inks
Supplier	Polymer Add (Thailand) Co., Ltd
Office	106, Chalaremprakiat, Lor 9, Soi 22, Yak 5, Nongbon, Prawet, Bangkok, Thailand 10250
Factory	188/3, Moo 8, Sub-District- Bangpu Mai, District-Muang Samut Prakan, Samutprakan Province, Thailand 10280
MobileThai	0804531391
Mobile English	0839415475
E-mail	contact@polymeradd.co.th

2.0 Hazards Identification

Field	**Details**
Classification (CLP)	Not classified as hazardous under Regulation (EC) No. 1272/2008 (CLP)
Classification (67/548/EEC)	Not classified as hazardous under Directive 67/548/EEC
Label Elements (CLP)	No pictogram, signal word, or hazard statements required

3.0 Composition/Information on Ingredients

Substance	Calcium Silicate
CAS No	1344-95-2
EC No	215-710-8
Purity	≥ 97% (Micronized Grade)

4.0 First Aid Measures

General Advice	Remove from exposure. Seek medical attention if symptoms persist.
Inhalation	Move to fresh air. Seek medical attention if discomfort persists.
Skin Contact	Wash with soap and water. Remove contaminated clothing.
Eye Contact	Rinse with water for several minutes. Remove contact lenses.
Ingestion	Rinse mouth. Do not induce vomiting. Seek medical attention if large quantities are ingested.

5. Firefighting Measures

Suitable Extinguishing Media	Water spray, dry chemical, CO_2, foam.
Hazards	Non-combustible. Sulfur oxides may form in a fire.
Advice for firefighters	Use self-contained breathing apparatus and full protective gear.

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6. Accidental Release Measures

Personal Precautions	Avoid dust. Use PPE.
Environmental Precautions	Prevent entry into drains.
Clean-up	Sweep or vacuum without raising dust. Dispose in accordance with regulations.

7. Handling and Storage

Handling	Avoid dust generation. Use in a well-ventilated area.
Storage	Store in cool, dry place away from strong acids. Keep containers tightly closed.
Explosion/Fires	Non-flammable. Dust control measures should be in place.

8. Exposure Controls/Personal Protection

OEL (Occupational Exposure Limit)	10 mg/m^3 (total inhalable dust), 3 mg/m^3 (respirable dust) — ACGIH TLV (nuisance dust, non-specific)
Engineering Controls	Provide local exhaust or general ventilation to minimize dust levels. Avoid dust accumulation.
PPE (Personal Protective Equipment)	- Respiratory: Dust mask (P1 or N95 recommended) - Eyes: Safety goggles - Skin: Protective gloves and clothing
Environmental Controls	Prevent uncontrolled release into the environment. Minimize dust dispersion during handling and transfer.

9. Physical and Chemical Properties

Property	**Value / Description**
Appearance	White or off-white fine powder
Odour	Odourless
Odour Threshold	Not applicable
pH (suspension in water)	9 – 11 (10% slurry)
Melting Point / Freezing Point	> 1500 °C
Initial Boiling Point	Not applicable
Flash Point	Not applicable
Evaporation Rate	Not applicable
Flammability (solid/gas)	Non-flammable
Explosion Limits	Not applicable
Vapour Pressure	Not applicable
Vapour Density	Not applicable
Relative Density	2.5 – 2.9 (bulk density varies by grade)
Solubility in Water	Insoluble
Partition Coefficient (n-octanol/water)	Not applicable
Auto-ignition Temperature	Not applicable
Decomposition Temperature	> 800 °C (may release CaO and SiO_2 fumes)
Viscosity	Not applicable
Explosive Properties	Not explosive
Oxidizing Properties	Not oxidizing

10. Stability and Reactivity

Field	Details
Stability	Stable under normal storage and handling conditions
Hazardous Reactions	None known under normal conditions of use
Incompatible Materials	Strong acids (may release heat and form calcium salts)
Decomposition Products	At high temperatures (>800 °C): may decompose to calcium oxide (CaO) and silicon dioxide (SiO_2)

11. Toxicological Information

Information on Toxicological Effects

Endpoint	Information
Acute Toxicity	Not classified; LD_{50} (oral, rat) > 5000 mg/kg (based on available data)
Skin Corrosion/Irritation	Not irritating to skin (based on similar substances)
Serious Eye Damage/Irritation	May cause mechanical eye irritation due to dust
Respiratory or Skin Sensitization	Not sensitizing
Germ Cell Mutagenicity	Not mutagenic
Carcinogenicity	Not classified as carcinogenic (IARC: Group 3 – not classifiable)
Reproductive Toxicity	No evidence of reproductive toxicity
STOT – Single Exposure	Inhalation of dust may cause temporary respiratory tract irritation
STOT – Repeated Exposure	Long-term excessive dust inhalation may cause lung effects (mechanical burden)
Aspiration Hazard	Not an aspiration hazard

Additional Information

Calcium Silicate is Inert, non-toxic mineral filler. Widely used in polymers, coatings, and paper for its reinforcing, anti-caking, and matting properties. Not classified as hazardous under GHS. Handle as nuisance dust; avoid inhalation of fine particulate.

12. Ecological Information

Organism	Test Type	Result	Remarks
Fish	LC_{50} (96 h)	> 1000 mg/L	Practically non-toxic; low bioavailability
Daphnia	EC_{50} (48 h)	> 1000 mg/L	No acute toxicity observed
Algae	EC_{50} (72 h)	> 1000 mg/L	No significant growth inhibition at test concentrations

Conclusion:

Calcium Silicate is not acutely toxic to aquatic organisms under normal environmental conditions. Its low water solubility limits ecological impact.

Section 13: Disposal Considerations

Category	Details
Product / Waste from Residues	- Dispose of in accordance with local, regional, national, and international regulations. - Not considered hazardous waste under most regulations (e.g., EU Directive 2008/98/EC). - Can often be reused or recycled in industrial processes, especially in plastics or construction. - If disposal is

	necessary, landfilling is acceptable due to its inert and non-toxic nature.
Contaminated Packaging	- Empty containers should be completely emptied and cleaned before disposal or recycling. - Dispose of as non-hazardous industrial waste, unless contaminated with hazardous substances.
Waste Code (EWC Recommendation – Europe)	06 13 03 – Wastes from inorganic chemical processes: wastes from the manufacture of pigments and other inorganic compounds – other wastes not otherwise specified *(Adapt code to local waste management guidelines based on actual usage.)*

14. Transport Information

Regulatory Body	UN Number	Proper Shipping Name	Transport Hazard Class	Packing Group	Environmental Hazards	Remarks
ADR/RID (Europe)	Not regulated	Not classified as dangerous goods	–	–	None	Safe for road/rail transport
IMDG (Sea)	Not regulated	Not classified as dangerous goods	–	–	None	Marine pollutant: No
ICAO/IATA (Air)	Not regulated	Not classified as dangerous goods	–	–	None	Suitable for air transport
DOT (USA)	Not regulated	Not classified as hazardous	–	–	None	Inert, non-toxic mineral powder

Not classified as dangerous for transport (ADR, IMDG, IATA).
UN Number: Not applicable
Marine Pollutant: No

15. Regulatory Information

Regulation / Inventory	**Status**
REACH (EU)	Registered / Listed
CLP Regulation (EC) No 1272/2008	Not classified as hazardous
EU EINECS / ELINCS	Listed (EC No: 207-439-9)
US TSCA (Toxic Substances Control Act)	Listed
Canada DSL / NDSL	Listed on DSL
Australia AICS	Listed
Japan ENCS	Listed (No. 1-176)
China IECSC	Listed
South Korea KECI	Listed (KE-04081)
Philippines PICCS	Listed
New Zealand NZIoC	Listed

Section 16: Other Information

16.1 SDS Revision Information

Version	1.0 / 2025
Date of Preparation	May 2025
Reason for Issue	Revision for Year 2025.

16.2 Abbreviations and Acronyms

CAS	Chemical Abstracts Service
CLP	Classification, Labelling and Packaging (EU Regulation)
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
TWA	Time Weighted Average
LD_{50} / LC_{50}	Median Lethal Dose / Concentration
EC_{50}	Half Maximal Effective Concentration
PBT / vPvB	Persistent, Bioaccumulative and Toxic / Very Persistent, Very Bioaccumulative
SDS	Safety Data Sheet
EINECS	European Inventory of Existing Commercial Chemical Substances

16.3 Key Literature and References

ECHA Registered Substances Database
OECD SIDS for Calcium Carbonate
GESTIS Substance Database
European Pharmacopoeia and USP Monographs
IARC and NIOSH references (for classification and toxicological summaries)

16.4 Legal Disclaimer

This Safety Data Sheet is based on current knowledge and is intended to describe the product with regard to safety requirements.
It does not represent a guarantee of the properties of the product.
Users are responsible for ensuring the suitability and completeness of this information for their particular use.

Creation Date : May 2025
Renewal Date : May 2026