

Safety Data Sheet

according to the Global Harmonized System

cSmartCal, SmartCal

1. Identification of the substance / preparation and the company / undertaking

Commercial product name	cSmartCal, SmartCal
Synonym	Zeolite 3A, molecular sieve 3A
Recommended use	Moisture analyzer reference substance.
Product No.	cSmartCal: 30005791, 30005793 SmartCal: 30005790, 30005792
Supplier	Mettler-Toledo AG Laboratory & Weighing Solutions Im Langacher CH-8606 Greifensee Switzerland Phone: +41-44-944 22 11 Fax: +41-44-944 33 20
Emergency telephone number	+41-44-251 51 51 (Tox Center, CH-8032 Zurich)
CAS No.	1318-02-1
Revision Date	18.02.2016
Number	2

2. Hazards identifications

The activated (totally dry) product evolves much heat on contact with water.

3. Composition / information on ingredients

Chemical characterization Zeolite, crystalline, synthetic, non fibrous

Components		Health hazards	CAS
Zeolite	75% - 90%		1318-02-1
Clay binder			
Quarz	1% - 2.5%		14808-60-7

4. First aid measures

Inhalation	No special measures required.
Skin contact	Wash with water and soap as precaution.
Eye contact	Rinse thoroughly with plenty of water, also under the eyelids. If eye irritation persists, consult a specialist.
Ingestion	Clean mouth with water and drink afterwards plenty of water.
Further information	This product is a desiccant and generates heat when it absorbs water.

5. Fire-fighting measures

Suitable extinguishing media	No special measures required.
Special protective equipment for firefighters	Standard procedure for chemical fires.
Specific methods	No special measures required.

6. Accidental release measures

Personal precautions	No special measures required.
Environmental precautions	No special environmental precautions required.
Methods for cleaning up	Use mechanical handling equipment. After cleaning, flush away traces with water.

7. Handling and storage

Handling	Take precautionary measures against static discharges.
Storage	Store at room temperature in the original container.

8. Exposure controls / personal protection

Exposure limit(s)	Total dust Permissible exposure limit: 10 mg/m ³ . Alveolar dust fraction Permissible exposure limit: 3 mg/m ³ .
Occupational exposure controls	General industrial hygiene practice.
Personal protection equipment:	
Respiratory protection	No special protective equipment required.
Hand protection	Gloves (SmartCal contains approx. 18% water and therefore Zeolite is deactivated).
Eye protection	Avoid contact with eyes.

9. Physical and chemical properties

Form	Pellets.
Colour	Beige.
Odour	Odourless
Physical and chemical properties	pH: 9.0 – 11.5 (in 5% solution) Water solubility: insoluble Fat solubility: insoluble Bulk density 500 – 900 kg/m ³ .

10. Stability and reactivity

Stability	No decomposition if used as directed.
Materials to avoid	The activated (totally dry) product evolves much heat on contact with water.
Hazardous decomposition products	None under normal use.

11. Toxicological information

Acute toxicity	Zeolite LD50/oral/rat > 10000 mg/kg. LD50/dermal/rabbits > 2000 mg/kg. LC50/inhalation/rat > 15 mg/L.
Local effects	Contact with eyes may cause irritation.
Long term toxicity	Negligible.
Sensitization	None.
Human experience	This product has no known adverse effect on human health.

12. Ecological information

Ecotoxicity	EC50/48h/daphnia > 1000 mg/L. LC50/96h/fish > 1800 mg/L.
Bioaccumulative potential	Does not bioaccumulate.

13. Disposal considerations

Waste from residues / unused products	Dispose of in accordance with local regulations.
Contaminated packaging	Offer rinsed packaging material to local recycling facilities.

14. Transport information

Further Information	Not classified as dangerous in the meaning of transport regulations.
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15. Regulatory information

GHS-Classification GHS product identifier	Zeolite, CAS-No. 1318-02-1, EC-No. 215-283-8. Clay binder Quarz, CAS-No. 14808-60-7, EC-No. 238-878-4
Regulatory Information	In accordance with Regulation (EC) No. 1272/2008 (GHS/CLP), the product does not need to be classified nor labelled.

16. Other information

Recommended use

Moisture analyzer reference substance.

Further Information

Not relevant.

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release. It is not to be considered a warranty or quality specification.
