

SECTION 1: Identification**1.1. GHS Product identifier**

Product form	: Substance
Trade name	: GRANULAR COLEMANITE
Chemical name	: Calcium borate, dicalcium hexaborate pentahydrate
Substance type	: Mono-constituent
EC-No.	: 817-854-2
CAS-No.	: 1318-33-8
Product group	: Trade product

1.2. Other means of identification

No additional information available

1.3. Recommended use of the chemical and restrictions on use

Recommended uses and restrictions	: Not restricted
Recommended use	: Agriculture (Fertilizer, Formulation of fertilizer)

1.4. Supplier's details

Supplier	Importer
ETİ MADEN İŞLETMELERİ GENEL MÜDÜRLÜĞÜ Kızılırmak Mahallesi 1443. Cadde No:5 Çukurambar-Çankaya Zipcode: 06530 Ankara – TÜRKİYE Tel: +90 312 294 20 00 – Fax: +90 312 230 71 84 info@etimaden.gov.tr www.etimaden.gov.tr	ETIMINE USA, INC. 411 Hackensack Ave Suite 902 Hackensack, NJ 07601 USA Tel: +1 (201) 462-1200; Fax: +1 (201) 462-1500 etimineusa@etimineusa.com www.etimineusa.com

1.5. Emergency phone number**CHEMTREC 1-800-262-8200/ (703) 741-5500****SECTION 2: Hazard identification****2.1. Classification of the substance or mixture****Classification according to the United Nations GHS**

Not classified

Adverse physicochemical, human health and environmental effects : To our knowledge, this product does not present any particular risk, provided it is handled in accordance with good occupational hygiene and safety practice

2.2. GHS Label elements, including precautionary statements**Labelling according to the United Nations GHS**

Hazard pictograms (GHS UN) :

2.3. Other hazards which do not result in classification

Other hazards not contributing to the classification : Granular Colemanite is an inorganic substance and does not meet the criteria for PBT or vPvB substance.

SECTION 3: Composition/information on ingredients**3.1. Substances**

Substance type	: Mono-constituent
Name	: Colemanite
CAS-No.	: 1318-33-8
EC-No.	: 817-854-2
Chemical name	: Calcium borate, dicalcium hexaborate pentahydrate
Substance identification codes:	See section 1.1

Name	Product identifier	%	Classification according to the United Nations GHS
Colemanite	(CAS-No.) 1318-33-8	≥ 58	Not classified
Calcite	(CAS-No.) 1317-65-3	≤ 20	Not classified
Clay		≤ 10	Not classified
Dolomite	(CAS-No.) 16389-88-1	≤ 8	Not classified

3.2. Mixtures

Not applicable

SECTION 4: First-aid measures**4.1. Description of necessary first-aid measures**

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact : Wash skin with plenty of water.
First-aid measures after eye contact : Rinse eyes with water as a precaution.
First-aid measures after ingestion : Call a poison center or a doctor if you feel unwell.

4.2. Most important symptoms/effects, acute and delayed

No additional information available

4.3. Indication of immediate medical attention and special treatment needed, if necessary

Treat symptomatically.

SECTION 5: Fire-fighting measures**5.1. Suitable extinguishing media**

Suitable extinguishing media : Water spray. Dry powder. Foam.

5.2. Specific hazards arising from the chemical

Hazardous decomposition products in case of fire : Toxic fumes may be released.

5.3. Special protective actions for fire-fighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures**6.1. Personal precautions, protective equipment and emergency procedures****6.1.1. For non-emergency personnel**

Emergency procedures : Ventilate spillage area.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and materials for containment and cleaning up

Methods for cleaning up : Mechanically recover the product.
Other information : Dispose of materials or solid residues at an authorized site.

SECTION 7: Handling and storage**7.1. Precautions for safe handling**

Precautions for safe handling : Ensure good ventilation of the work station. Wear personal protective equipment.
Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in a well-ventilated place. Keep cool.

SECTION 8: Exposure controls/personal protection**8.1. Control parameters**

No additional information available

8.2. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station.
Environmental exposure controls : Avoid release to the environment.

8.3. Individual protection measures, such as personal protective equipment (PPE)

Hand protection : Protective gloves
Eye protection : Safety glasses
Skin and body protection : Wear suitable protective clothing
Respiratory protection : In case of insufficient ventilation, wear suitable respiratory equipment
Personal protective equipment symbol(s)

**8.4. Exposure limit values for the other components**

No additional information available

SECTION 9: Physical and chemical properties**9.1. Basic physical and chemical properties**

Physical state	: Solid
Colour	: Light grey.
Odour	: odourless.
Odour threshold	: Not available
Melting point	: Not available
Freezing point	: Not applicable
Boiling point	: Not available
Flammability (solid, gas)	: Non flammable.
Explosive limits	: Not applicable
Lower explosive limit (LEL)	: Not applicable
Upper explosive limit (UEL)	: Not applicable
Flash point	: Non flammable
Auto-ignition temperature	: Non flammable
Decomposition temperature	: When heated above 105 C it loses its hydrate water
pH	: Not available
pH solution	: Not available
Viscosity, kinematic (calculated value) (40 °C)	: Not applicable
Partition coefficient n-octanol/water (Log Kow)	: Not available
Vapour pressure	: Not available
Vapour pressure at 50 °C	: Not available
Density	: Not available
Relative density	: Not available
Relative vapour density at 20 °C	: Not applicable
Solubility	: Water: Low solubility
Particle size	: 2-4 mm
Particle size distribution	: Not available
Particle shape	: Not available
Particle aspect ratio	: Not available
Particle specific surface area	: Not available

9.2. Data relevant with regard to physical hazard classes (supplemental)

No additional information available

SECTION 10: Stability and reactivity**10.1. Reactivity**

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

No additional 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 toxicological effects

Acute toxicity (oral)	: Not classified
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified
Skin corrosion/irritation	: Not classified
Serious eye damage/irritation	: Not classified
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified
STOT-repeated exposure	: Not classified
Aspiration hazard	: Not classified

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Viscosity, kinematic	Not applicable
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SECTION 12: Ecological information

12.1. Toxicity

Ecology - general	: The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.
Hazardous to the aquatic environment, short-term (acute)	: Not classified
Hazardous to the aquatic environment, long-term (chronic)	: Not classified

12.2. Persistence and degradability

GRANULAR COLEMANITE (1318-33-8)

Persistence and degradability	Boron is naturally occurring and ubiquitous in the environment.
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12.3. Bioaccumulative potential

GRANULAR COLEMANITE (1318-33-8)

Bioaccumulative potential	Boron is a naturally occurring element. Boron does not accumulate up the food chain. It is not expected to bioconcentrate in fish.
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12.4. Mobility in soil

GRANULAR COLEMANITE (1318-33-8)

Mobility in soil	Colemanite is moderately soluble in water and will leach through the soil at very slow rate.
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12.5. Other adverse effects

Ozone	: Not classified
Other adverse effects	: No additional information available

SECTION 13: Disposal considerations

13.1. Disposal methods

Waste treatment methods	: Dispose of contents/container in accordance with licensed collector's sorting instructions.
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SECTION 14: Transport information

In accordance with IMDG / IATA / UN RTDG

UN RTDG	IMDG	IATA
14.1. UN number		
Not regulated for transport		
14.2. UN Proper Shipping Name		
Not applicable	Not applicable	Not applicable
14.3. Transport hazard class(es)		
Not applicable	Not applicable	Not applicable
Not applicable	Not applicable	Not applicable
14.4. Packing group		
Not applicable	Not applicable	Not applicable
14.5. Environmental hazards		
Dangerous for the environment : No	Dangerous for the environment : No Marine pollutant : No	Dangerous for the environment : No
No supplementary information available		

14.6. Special precautions for user

- UN RTDG

No data available

- IMDG

No data available

- IATA

No data available

14.7. Transport in bulk according to IMO instruments

Not applicable

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations specific for the product in question

Regulatory reference : Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
 Listed on KECL/KECI (Korean Existing Chemicals Inventory)
 Listed on NZIoC (New Zealand Inventory of Chemicals)
 Listed on the AICS (Australian Inventory of Chemical Substances)
 Listed on the Canadian NDSL (Non-Domestic Substances List)
 Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)
 Listed on the United States TSCA (Toxic Substances Control Act) inventory.

SECTION 16: Other information

Issue date : 01/01/2016

Revision date : 03/01/2021

Section	Changed item	Change	Comments
		Modified	This SDS has been compiled in accordance with UN-GHS (Rev.6) (2015) for the first time. (January, 2016; Rev. No: 00)
		Added	This SDS was updated in line with "Standardization and Simplification of Bag Printings". CAS registry system to include CAS number of 1318-33-8. (January, 2018; Rev. No: 01)
		Added	This SDS was updated to include 'Fertilizer and Formulation of Fertilizer' uses under Section 1.2. (February, 2019; Rev. No: 01.1)

Abbreviations and acronyms

: CAS-No. - Chemical Abstract Service number
ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE - Acute Toxicity Estimate
BCF - Bioconcentration factor
BLV - Biological limit value
BOD - Biochemical oxygen demand (BOD)
CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
COD - Chemical oxygen demand (COD)
DMEL - Derived Minimal Effect level
DNEL - Derived-No Effect Level
EC50 - Median effective concentration
EC-No. - European Community number
EN - European Standard
IARC - International Agency for Research on Cancer
IATA - International Air Transport Association
IMDG - International Maritime Dangerous Goods
LC50 - Median lethal concentration
IOELV - Indicative Occupational Exposure Limit Value
LD50 - Median lethal dose
LOAEL - Lowest Observed Adverse Effect Level
N.O.S. - Not Otherwise Specified
NOAEC - No-Observed Adverse Effect Concentration
NOAEL - No-Observed Adverse Effect Level
NOEC - No-Observed Effect Concentration
OECD - Organisation for Economic Co-operation and Development
OEL - Occupational Exposure Limit
PBT - Persistent Bioaccumulative Toxic
PNEC - Predicted No-Effect Concentration
REACH - Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006
RID - Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS - Safety Data Sheet
STP - Sewage treatment plant
ThOD - Theoretical oxygen demand (ThOD)
TLM - Median Tolerance Limit
TRGS - Technical Rules for Hazardous Substances
VOC - Volatile Organic Compounds
vPvB - Very Persistent and Very Bioaccumulative
WGK - Water Hazard Class

Training advice

: Normal use of this product shall imply use in accordance with the instructions on the packaging.

Other information

: **DISCLAIMER OF LIABILITY** The information in this SDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness. The conditions or methods of handling, storage, use or disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. This SDS was prepared and is to be used only for this product. If the product is used as a component in another product, this SDS information may not be applicable.

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This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.