

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

Product form	: Substance
Trade name	: GRANULAR ULEXITE
Chemical name	: Ulexite, Sodium-Calcium Pentaborate Octahydrate
Substance type	: Mono-constituent
EC-No.	: 603-535-3
CAS-No.	: 1319-33-1
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**

ETİ MADEN İŞLETMELERİ GENEL MÜDÜRLÜĞÜ

Kızılırmak Mahallesi 1443. Cadde No:5

Çukurambar-Çankaya

P.O. Box 06530

Ankara - TÜRKİYE

T +90 312 294 20 00 - F +90 312 230 71 84

[info@etimaden.gov.tr](mailto:info@etimaden.gov.tr) - [www.etimaden.gov.tr](http://www.etimaden.gov.tr)**1.5. Emergency phone number**

+90 312 294 20 00

**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 : Ulexite 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	: ULEXITE
CAS-No.	: 1319-33-1
EC-No.	: 603-535-3
Chemical name	: Ulexite, Sodium-Calcium Pentaborate Octahydrate
Substance identification codes: See section 1.1	

Name	Product identifier	%	Classification according to the United Nations GHS
Ulexite	(CAS-No.) 1319-33-1	≥ 69	Not classified
Calcite	(CAS-No.) 1317-65-3	≤ 16	Not classified
Clay		≤ 10	Not classified
Dolomite	(CAS-No.) 16389-88-1	≤ 5	Not classified

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according to the United Nations GHS (Rev. 7, 2017)

### 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)

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### 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	: Not applicable
Decomposition temperature	: When heated above 45 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: Moderately soluble
Particle size	: 2-4
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

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### 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

### GRANULAR ULEXITE (1319-33-1)

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

### Ulexite (1319-33-1)

LC50 - Fish [1]	150 mg/l B Rainbow Trout ( <i>S.gairdneri</i> )
LC50 - Fish [2]	178 mg/l B Goldfish ( <i>Carassius auratus</i> )
NOEC chronic fish	26.5 mg/l B Goldfish ( <i>Carassius auratus</i> )

### 12.2. Persistence and degradability

### GRANULAR ULEXITE (1319-33-1)

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

### GRANULAR ULEXITE (1319-33-1)

Bioaccumulative potential	Not bioaccumulative. 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 ULEXITE (1319-33-1)

Mobility in soil	Ulexite is poorly 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.

## SECTION 14: Transport information

In accordance with IMDG / IATA / UN RTDG

UN RTDG	IMDG	IATA
<b>14.1. UN number</b>		
Not regulated for transport		
<b>14.2. UN Proper Shipping Name</b>		
Not applicable	Not applicable	Not applicable
<b>14.3. Transport hazard class(es)</b>		
Not applicable	Not applicable	Not applicable
Not applicable	Not applicable	Not applicable
<b>14.4. Packing group</b>		
Not applicable	Not applicable	Not applicable
<b>14.5. Environmental hazards</b>		
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 the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)  
Listed on NZIoC (New Zealand Inventory of Chemicals)  
Listed on the AICS (Australian Inventory of Chemical Substances).

## SECTION 16: Other information

Issue date : 01/01/2016  
Revision date : 03/01/2021

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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". (January, 2018; Rev. No: 01)

### 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  
IOELV - Indicative Occupational Exposure Limit Value  
LC50 - Median lethal concentration  
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.

SDS UN - ETİ Maden

*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.*