



MATERIAL SAFETY DATA SHEET

MSDS Form No: 013

Date of Issue: June 2017

Date of Revision:

Product Name: CLINO TURF

Revision Number:

Number of Pages: 10

REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2013

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product Identifier

Trade Name	Clino Turf
Group	Clinoptilolite group (of sedimentary origin)
CAS – No.	12173-10-3

1.2. Relevant Identified Uses of the Substance or Mixture and Uses Advised Against

Use of the Substance /Mixture	Agriculture
Recommended restrictions on use	Soil Amendment

1.3. Details of the Supplier of the Safety Data Sheet

Producer	Gordes Zeolit Madencilik Sanayi ve Ticaret Anonim Sirketi
Office Address	Ankara Caddesi, No: 81/123 Bayraklı, Izmir/Turkey
Telephone / Fax	+90 232 348 56 56 / +90 232 348 43 10
Factory Address	Demirci Yolu 4.km Bodamaz Mevkii Gordes, Manisa/Turkey
Telephone / Fax	+90 236 547 30 17
E-mail Address of the SDS-Responsible	aysegulyoruk@gordeszeolite.com

1.4. Emergency Telephone Number

Emergency Telephone No	T : + 90 232 348 56 56
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SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the Substance or Mixture

Physical Hazards	None
Health Hazards	Eye Contact Causes mild irritation, stinging, tearing and redness. Skin Contact Can cause mild irritation, redness and burning. Absorption through skin has caused no harmful effects. Inhalation Excessive doses may cause coughing and difficulty in breathing.



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Environmental Hazards None

2.2. Label Elements

Hazard Pictograms



Signal Word Warning

Hazard Statements

- H315 Causes skin irritation
- H319 Causes serious eye irritation
- H332 Harmful if inhaled
- H335 (Lungs) May cause respiratory irritation

Precautionary Statements

- P261 Avoid breathing dust.
- P264 Wash with water thoroughly after handling.
- P270 Do not eat, drink or smoke when using this product.
- P271 Use only outdoors or in a well-ventilated area.
- P280 Wear protective gloves/protective clothing/eye protection/face protection.
- P312 Call a POISON CENTER or doctor/physician if you feel unwell.
- P321 Specific treatment (see ... on this label).
- P322 Specific measures (see ... on this label).
- P330 Rinse mouth.
- P362 Do not induce vomiting.
- P363 Wash contaminated clothing before reuse.
- P301+P312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
- P302+P352 IF ON SKIN: Wash with plenty of soap and water.
- P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
- P332+P313 If skin irritation occurs: Get medical advice/attention.
- P337+P313 If eye irritation persists: Get medical advice/attention.
- P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do so. Continue rinsing.



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P403+P233 Store in a well-ventilated place. Keep container tightly closed.

P405 Store locked up.

P501 Dispose of contents/container to.

SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

Ingredients	CAS No.	Ratio %
Clinoptilolite	12173-10-3	100

SECTION 4: FIRST AID MEASURES

4.1. Description of the First Aid Measures

Eye Contact	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do so. Continue rinsing.
Skin Contact	Wash with plenty of soap and water.
Inhalation	Remove victim to fresh air and keep at rest in a position comfortable for breathing.
Ingestion	Rinse mouth. Do not induce vomiting. Please contact a Poison Control Centre or doctor.

4.2. Most Important Symptoms and Effects, both Acute and Delayed

None known

4.3. Indication of any Immediate Medical Attention and Special Treatment Needed

No data available



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SECTION 5: FIRE-FIGHTING MEASURES

5.1. Extinguishing Media

Suitable Extinguishing Media Water (spray form), carbon dioxide, dry chemicals, foam

5.2. Special Hazards arising from the Substance or Mixture

Hazardous Combustion Products None

5.3. Advice for Firefighters

Special Fire Fighting Procedures None with respect to this product

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal Precautions, Protective Equipment and Emergency Procedures

For Non-Emergency Personnel No special measures required

For Emergency Responders Handle in accordance with good industrial hygiene and safety practice

6.2. Environmental Precautions

No special environmental precautions required

6.3. Methods and Material for Containment and Cleaning Up

Sweep up and shovel. Keep in suitable, closed containers for disposal.

6.4. Reference to other Sections

Not applicable.



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SECTION 7: HANDLING AND STORAGE

7.1. Precautions for Safe Handling

Advice on Safe Handling	For personal protection, see Section 8.
Advice on Protection against Fire	Avoid dust formation.
Hygiene Measures	General industrial hygiene practice.

7.2. Conditions for Safe Storage, including any Incompatibilities

Requirements for Storage Areas and Container	Protect from moisture and water. Keep away from children and food
Other Data	Store in a well-ventilated place. Store locked-up.

7.3. Specific End Use(s)

No data available.

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1. Control Parameters

Exposure Limits in Air	
OSHA PEL (as Inert or Nuisance Dust)	15 mppcf/5mg/m ³ (respirable fraction) 50 mppcf/15mg/m ³ (total dust)
ACGIH TLV (as particles not otherwise specified)	10 mg/m ³ (inhalable particles) 3 mg/m ³ (respirable particles)

NOTE: There is no established occupational exposure level for the mineral clinoptilolite. The guidelines for Inert Dust are provided as guidelines.



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Composition of Clinoptilolite varies naturally; product typically contains < 5% of the following:

Name:	Silica, Quartz, SiO ₂
CAS Number:	14808-60-7
Exposure Limits in Air	
OSHA-PEL	10 mg/m ³ %SiO ₂ +2 (8-Hour Time Weighted Average)
ACGIH – TLV	0.05 mg/m ³ (8-Hour Time Weighted Average)
NIOSH	0.05 mg/m ³ (8-Hour Time Weighted Average, 40-hour work week)

Exposure Limits refer to the respirable fraction. Silica is classified as hazardous under Occupational Safety and Health Administration (OSHA) regulations (29 CFR 1910.1200).

8.2. Exposure Controls

Personal Protection Equipment

<i>Respiratory Protection</i>	Use dust mask
<i>Hand Protection</i>	Dry moleskin gloves
<i>Eye Protection</i>	Avoid contact with eyes, use goggles
<i>Skin and Body Protection</i>	No special measures required

SECTION 9: PHYSICAL, CHEMICAL AND MINERALOGICAL PROPERTIES

9.1. Information on Basic Physical and Chemical Properties

Form	Solid, powder or granules
Colour	White, light cream, whitish beige, beige
Odour	None
Moisture	Max. 12%
Size	Standard: 0,5-1,5mm. 0,5-1mm and any other size available.
Specific Gravity	1,9 - 2,1 g/cm ³
Bulk Density	0,80 - 0,90 g/cm ³
Solubility in Water	Insoluble
Average Porosity	35-40%
Surface Area (BET)	40-44 m ² /g
Water Retention Capacity	35 - 45%
NH ₄ ⁺ Exchange Capacity	1,6 – 2,0 meq/g



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Thermal Stability	up to 840 °C
Flash Point	Not applicable, does not flash
Flammability	Not flammable

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

No information available.

10.2. Stability

No decomposition if used, handled and stored properly

10.3. Possibility of Hazardous Reactions

None under normal use

10.4. Conditions to Avoid

None

10.5. Incompatible Materials

None

10.6. Hazardous Polymerisation

Will not occur

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on Toxicological Effects

No known toxicity to plants or animals.

Environmental	Inorganic material does not decompose and is not eliminated from environment by means of biological cleaning processes.
Bioaccumulation	Does not bio-accumulate in animal or plants.



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SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Non-toxic

12.2. Bio-Accumulative Potential

Does not bio-accumulate. Accumulation in aquatic and terrestrial organisms unlikely

12.3. Further Information

Handle in accordance with good hygiene and safety practice

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste Treatment Methods

Product	Dispose of in accordance with local regulations
Packaging	Dispose of in accordance with local regulations

SECTION 14: TRANSPORT INFORMATION

14.1. UN Number

DOT, ADR, ADN, IMDG, IATA	Not Regulated
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14.2. UN Proper Shipping

DOT, ADR, ADN, IMDG, IATA	Not Regulated
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14.3. Transport Hazard Class

DOT, ADR, ADN, IMDG, IATA	Not Regulated
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14.4. Packing Group

DOT, ADR, IMDG, IATA

Not Regulated

SECTION 15: REGULATORY INFORMATION

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SECTION 16: OTHER INFORMATION

ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
CAS	Chemical Abstracts Service (division of the American Chemical Society)
CLP	Classification, Labelling, and Packaging Regulation (EC) No 1272/2008
DNEL	Derived No-Effect Level (REACH)
DOT	US Department of Transportation
DSL	Domestic Substance List
EINECS	European Inventory of Existing Commercial Chemical Substances
ELINCS	European List of Notified Chemical Substances
EPA	Environmental Protection Agency
GHS	Globally Harmonized System of Classification and Labelling of Chemicals
HMIS	Hazardous Materials Identification System (USA)
IARC	International Agency of Research on Cancer
IATA	International Air Transport Association
IMDG	International Maritime Code for Dangerous Goods
NIOSH	National Institute of Occupational Safety and Health
NFPA	National Fire Protection Association (USA)
NTP	National Toxicological Program
PBT	Persistent, Bioaccumulative, and Toxic
PNEC	Predicted No-Effect Concentration (REACH)



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REACH	Registration, Evaluation, Authorisation, and Restriction of Chemicals; (EC) 1907/2008
RCRA	Resource Conservation and Recovery Act
SARA	Superfund Amendment and Reauthorization Act
SVHC	Substances of very high concern
TSCA	Toxic Substances Control Act
TLV	Threshold Limit Value

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Chemist

Certificate No: 01.61.04

Validity Date of Certificate: 19.10.2018

DISCLAIMER: This Safety Data Sheet is prepared with information to the best of our knowledge and provides guidance about the safety measures to be taken during use, handling, storage and transport of the product. It cannot be seen as a product warranty certificate or a technical specification.