



## MATERIAL SAFETY DATA SHEET (MSDS)

ECOBİGEN Agriculture Food Trade Industry Co. Ltd.

Version 1.0  
Issued February 2022

"In accordance with the Regulation on Safety Data Sheets Regarding Hazardous Substances and Mixtures published in the Official Journal numbered 29204 on December 13, 2014 (R.G. 13.12.2014-29204)."

### Section 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

#### 1.1. Identification of the substance/mixture and of the company/undertaking

**Product Name** AGROBİGEN® -D 17-17-17+(1 MgO) +me

#### 1.2. Relevant identified uses of the substance or mixture and uses advised against

**Material Uses** NPK Blended Fertilizer plus micronutrients

#### 1.3. Details of the supplier of the safety data sheet

**Manufacturer Name** ECOBİGEN Gübre Tarım Gıda Tic. San. Ltd. Şti  
**Address** Alparslan Mah. Samsun 1.Sok. No.13 Bafra, Samsun, TURKEY  
**Telephone** +90 362 365 95 82  
**Web Address** www.ecobigen.com.tr  
**E-Mail Address** info@ecobigen.com.tr

#### 1.4. Emergency Information

**Contact Person** Rıdvan KIZILKAYA  
**Contact Telephone** +90 537 620 32 34

### Section 2: HAZARD IDENTIFICATION

#### 2.1 Classification of the substance or mixture

|                                                                  |         |
|------------------------------------------------------------------|---------|
| Oxidizing Solids Category                                        | 3; H272 |
| Skin Corrosion/Irritation Category                               | 2; H315 |
| Eye Damage/Irritation Category                                   | 1; H318 |
| Hazardous To The Aquatic Environment - Long-Term Hazard Category | 2; H411 |

#### 2.2 Label elements

Hazard pictograms (SEA)



Signal word (SEA)

Danger, Warning



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### Hazard statements (SEA):

- H272 May intensify fire; oxidizer.  
H318 Causes serious eye damage.

### Precautionary statements (SEA):

- P210 Keep away from heat.  
P273 Avoid release to the environment.  
P280 Wear protective gloves/eye protection/face protection.  
P305 + P351 + P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P370 + P378 In case of fire: Use carbon dioxide foam, water spray or dry chemical extinguishers. to extinguish.  
P501 Dispose of contents/container in accordance with local/ regional/ national/ international regulations (to be specified).

### 2.3 Other hazards

Other effects are mentioned on Section 16.

## Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

### 3.1 Composition/information on ingredients

Not available

### 3.2 Information on Ingredients

| Name                             | Chemical formula                                                  | EC No     | CAS No     |
|----------------------------------|-------------------------------------------------------------------|-----------|------------|
| Urea                             | CO(NH <sub>2</sub> ) <sub>2</sub>                                 | 200-315-5 | 57-13-6    |
| Monoammonium phosphate           | (NH <sub>4</sub> )H <sub>2</sub> PO <sub>4</sub>                  | 231-764-5 | 7722-76-1  |
| Potassium nitrate                | KNO <sub>3</sub>                                                  | 231-818-8 | 7757-79-1  |
| Magnesium sulfate                | MgSO <sub>4</sub>                                                 | 231-298-2 | 7487-88-9  |
| Disodium octaborate tetrahydrate | Na <sub>2</sub> B <sub>8</sub> O <sub>13</sub> ·4H <sub>2</sub> O | 234-541-0 | 12280-03-4 |
| Ferrous sulfate                  | FeSO <sub>4</sub>                                                 | 231-753-5 | 7782-63-0  |
| Manganese sulfate                | MnSO <sub>4</sub>                                                 | 232-089-9 | 7785-87-7  |
| Zinc sulfate                     | ZnSO <sub>4</sub>                                                 | 231-793-3 | 7446-20-0  |

See toxicological information (Section 16)



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### Section 4: FIRST AID MEASURES

|                                |                                                                                                                                                     |
|--------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>In case of eye contact</b>  | Rinse with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If need get medical advice/attention. |
| <b>In case of skin contact</b> | Clean skin with soap and plenty of water.                                                                                                           |
| <b>If swallowed</b>            | Rinse mouth with water. Call a Poison Center or get medical advice/attention.                                                                       |
| <b>If inhaled</b>              | Remove person to fresh air and keep comfortable for breathing.                                                                                      |

### Section 5: FIREFIGHTING MEASURES

#### 5.1. Extinguishing media

Carbon dioxide foam, water spray or dry chemical extinguishers.

#### 5.2. Special hazards arising from the substance or mixture

Avoid contact with other combustible materials.

#### 5.3. Advice for firefighters

Use NIOSH-approved respirator including the full face and eye protection and wear rubber gloves.

### Section 6: ACCIDENTAL RELEASE MEASURES

#### 6.1. Personal precautions, protective equipment and emergency procedures

Use personal protective equipments which are mentioned on Section 8.

#### 6.2. Environmental precautions

Keep out off overground and underground waters.

#### 6.3. Methods and materials for containment and cleaning up

Absorb spills with inert material and put chemicals into waste containers.

#### 6.4. Reference to other sections

Reference to other sections are mentioned on Section 13.



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### Section 7: HANDLING AND STORAGE

#### 7.1. Precautions for safe handling

Keep away from heat/sparks/open flames/hot surfaces. Store in a cool and dry place. It should

not be exposed to direct sunlight. Keep away from extreme heat. Avoid formation of dust and aerosols. Avoid exposure

#### 7.2. Conditions for safe storage, including any incompatibilities

Keep away from heat/sparks/open flames/hot surfaces. Store in tightly closed containers. Store in a cool and dry place away from nonconcurrent materials. Keep container tightly closed in a dry and well-ventilated place.

#### 7.3. Specific end use(s)

There is not use of the product other than that specified in Section 1.2

### Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

#### 8.1. Control parameters

No data available.

#### 8.2. Exposure controls

##### 8.2.1. Appropriate engineering controls

No data available.

##### 8.2.2. Personal protective equipment



#### Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product.

#### Respiratory protection

Wear respiratory protective mask (type N100 (US) or type P3 (EN 143) during operation.



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### Section 9: PHYSICAL AND CHEMICAL PROPERTIES

#### 9.1. Information on basic physical and chemical properties

|                              |                                                        |       |
|------------------------------|--------------------------------------------------------|-------|
| Appearance                   | : Solid                                                |       |
| Colour                       | : White                                                |       |
| Odour                        | : Odourless                                            |       |
| pH (20°C, 1:10)              | : 4-5,5                                                |       |
| Melting point/freezing point | : Not available                                        |       |
| Flash point                  | : Not available                                        |       |
| Initial boiling point        | : Not available                                        |       |
| Solubility                   | : Soluble in water, acids                              |       |
| Viscosity                    | : Not available                                        |       |
| Bulk density                 | : 700-900 kg/m <sup>3</sup>                            |       |
| Plant Nutrient Contents      | : Nitrogen (N)                                         | 17%   |
|                              | Phosphorus Pentaoxide (P <sub>2</sub> O <sub>5</sub> ) | 17%   |
|                              | Potassium Oxide (K <sub>2</sub> O)                     | 17%   |
|                              | Magnesium Oxide                                        | 1%    |
|                              | Boron (B)                                              | 0.1%  |
|                              | Iron (Fe)                                              | 0.2%  |
|                              | Manganese (Mn)                                         | 0.2%  |
|                              | Zinc (Zn)                                              | 0.2%  |
|                              | Chlorine                                               | <0.1% |

#### 9.2. Other safety information

Other information is not available.

### Section 10: STABILITY AND REACTIVITY

#### 10.1. Reactivity

Not available.

#### 10.2. Chemical stability

The product is stable under normal conditions during transportation, storage and use.

#### 10.3. Possibility of hazardous reactions

Not available.

#### 10.4. Conditions to avoid

Exposure to moisture.



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## 10.5. Incompatible materials

Strong reducing agents, strong acids, strong bases.

## 10.6. Hazardous decomposition products

Hazardous decomposition products formed under fire conditions: Carbon oxides, oxides of potassium, Borane/boron oxides

## Section 11: TOXICOLOGICAL INFORMATION

### 11.1 Information on toxicological effects

|                                   |                                                 |
|-----------------------------------|-------------------------------------------------|
| Acute toxicity                    | : LD 50 >2000 mg/kg Oral – Rate (OECD - 401)    |
| Skin corrosion/irritation         | : Prolonged exposure may cause skin irritation. |
| Serious eye damage/irritation     | : May cause eye irritation on direct contact.   |
| 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                                |

## Section 12: ECOLOGICAL INFORMATION

It has low aquatic toxicity to aquatic organisms. Does not meet the classification criteria.

|                                   |                                        |
|-----------------------------------|----------------------------------------|
| TLM, 96 hours                     | : 10-1000 ppm                          |
| LC <sub>50</sub> , Fish, 96 hours | : 6000 mg/l ( <i>Sakmo gairdneri</i> ) |
| EC <sub>50</sub> , Daphnia        | : 83 mg/l ( <i>Daphnia magna</i> )     |

### 12.1 Bioaccumulative potential

No data available.

### 12.2 Mobility in soil

No data available.

### 12.3 Results of PBT and vPvB assessment

No data available.





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### 12.4 Other adverse effects

Another negative effect is not expected.

## Section 13: DISPOSAL CONSIDERATION

### 13.1. Disposal considerations

Dispose of waste in accordance with national legislation.

Dispose of package in accordance with national legislation.

## Section 14: TRANSPORT INFORMATION

RID: 1479 Oxidizing Solid, N.O.S.

ADR: 1479 Oxidizing Solid, N.O.S.

ADNR:-

IMDG Code: 1479 Oxidizing Solid, N.O.S.

ICAO-TI:-

IATA-DGR 1479 Oxidizing Solid, N.O.S.

### 14.1 UN number

1479

### 14.2 UN proper shipping name

Oxidizing Solid, B. B. B..

### 14.3. Transport hazard class(es)

5.1; O2

### 14.4. Packaging group

ADR/RID/ADN III

IMDG III

ICAO III

### 14.5. Environmental hazards

Toxic to aquatic life with long lasting effects.

### 14.6. Special precautions for user

|                  |          |
|------------------|----------|
| Limited quantity | 5 kg     |
| EMS              | F-H, S-Q |
| Emergency code   | 1Z       |
| Hazard No. (ADR) | 50       |





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Tunnel restriction code (E)

### 14.7. MARPOL 73/78 Annex II and IBC Code

No data available.

## Section 15: REGULATORY INFORMATION

### 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

Regulation on Safety Data Sheets Regarding Hazardous Substances and Mixtures published in the Official Journal numbered 29204 on December 13, 2014

Globally Harmonized System Of Classification And Labelling Of Chemicals (Ghs), ST/SG/AC.10/30/Rev.4

Regulation on Restriction and Prohibition of Hazardous Substances and Mixtures published in the Official Journal numbered 27092 on December 26, 2008

## Section 16: OTHER INFORMATION

Signal word (SEA) : Danger, Warning

Hazard statements (SEA):

H272: May intensify fire; oxidizer.

H315: Causes skin irritation.

H318: Causes serious eye damage.

H414: Toxic to aquatic life with long lasting effects.

GHS Code: GHS03, GHS05, GHS09

Precautionary statements (SEA):

Prevention

P210: Keep away from heat.

P220: Keep/Store away from clothing/.../combustible materials.

P221: Take any precaution to avoid mixing with combustibles/...

P264: Wash with plenty of water thoroughly after handling.

P273: Avoid release to the environment.

P280: Wear protective gloves/eye protection/face protection.







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### Response

P302 + P352: IF ON SKIN: Wash with plenty water.

P305 + P351 + P338: IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing.

P310: Immediately call a POISON CENTER/doctor.

P321: Specific treatment (see ... on this label).

P332 + P313: If skin irritation occurs: Get medical advice/attention.

P362 + P364: Take off contaminated clothing and wash it before reuse.

P370 + P378: In case of fire: Use carbon dioxide foam, water spray or dry chemical extinguishers. to extinguish.

P391: Collect spillage.

### Disposal

P501: Dispose of contents/container in accordance with local/regional/ national/ international regulations (to be specified).

### Appendix

|                  |                                                                                              |
|------------------|----------------------------------------------------------------------------------------------|
| ADR              | European Agreement on the International Carriage of Dangerous Goods by Road.                 |
| ADN              | European Agreement on the International Carriage of Dangerous Goods by Inland Waterways      |
| RID              | European Agreement on the International Carriage of Dangerous Goods by Rail                  |
| EC No            | European Community number                                                                    |
| CAS              | Chemical Theories Service                                                                    |
| LD <sub>50</sub> | 50% (half) dose of substance causing death in the group of test animals (Median lethal Dose) |
| LC <sub>50</sub> | 50% (half) lethal concentration of substance in the group of test animals                    |
| EC <sub>50</sub> | 50% Effective Concentration of the substance causing the maximum response                    |
| PBT              | Persistent, Bioaccumulative and Toxic                                                        |
| vPvB             | Very Persistent, very Bioaccumulative                                                        |
| ACGIH            | American Conference of State Industrial Hygienists                                           |
| TWA              | Time-weighted average                                                                        |
| STEL             | Short term exposure limit                                                                    |

### Additional information

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