Date of issue: 16.03.2011 Replaces Data Sheet of: 04.02.2010

"*" alterations as compared to previous version; n.ap. = not applicable; n.av. = not available

1 IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND OF THE COMPANY / UNDERTAKING

1.1 Identification of Substance or Preparation

Trade Name: OTTO-O.A.S.E. organic.agro.superabsorbent.ecogranules

Article No. : n.av.
Preparation No. : n.av.
Registration No. : n.av.

1.2 Use of the substance / preparation:

Additive for soil's water-balance

1.3 Company / Undertaking Identification

1.3.1 Address of the Company / Supplier:

Advanced New Water Technologies GmbH & Co. KG Anspacher Str. 29 D61389 Schmitten-Hunoldstal

Tèlèphone: +49-160-7931300, Tèlècopie: +49(0)6174-5797763, e-mail: info@otto-oase.com

1.3.1.1 Adress of Distrubution:

Advanced New Water Technologies GmbH & Co. KG Anspacher Str. 29 D61389 Schmitten-Hunoldstal

Tèlèphone: +49-160-7931300, Tèlècopie: +49(0)6174-5797763, e-Mail: info@anwt.de

1.3.2 **Responsible:**

Chemie & Vorschrift, Kannheideweg 35, D-53123 Bonn-Duisdorf; E-Mail: info@chemie-vorschrift.de

1.4 Emergency - Telephone

Emergency - Telephone of Company / Undertaking Information Centre Specialising in Symptoms of Poisoning

Telephone: +49-160-7931300 / +49-163-6304937 (08:30 - 16:30) Telephone: +49 - 761 - 19 240

2 HAZARDS IDENTIFICATION

2.1 **For Humans** (additional information is given under item 11):

Handle in accordance with good industrial hygiene and safety practice.

2.2 For the Environment:

Ecological injuries are not known or expected under normal use.

2.3 For Materials:

None.

3 COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Chemical Characterisation:

Preparation of special ingredients

3.2 **Dangerous Ingredients:**

CAS - No. Index - No. EEC - No. Material

m%-range Symbol R-phrases

Remarks: Classification and labelling of a product is indicated under item 15.

4 FIRST AID MEASURES

4.1 **Inhalation:**

Move to fresh air.

Consult a physician if necessary.

4.2 Skin Contact:

Wash off immediately with plenty of water.

4.3 **Eye Contact :**

Rinse thoroughly with plenty of water, also under the eyelids.

Consult a physician if necessary.

4.4 **Ingestion**:

Clean mouth with water and drink afterwards plenty of water.

Obtain medical attention.

4.5 Note to Physician:

Treat symptomatically.

4.6 Special Equipment:

n.av.

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Company / Distributor : : Advanced New Water Technologies GmbH & Co. KG., Landgraf-Philipp-Straße 27, D- 60431 Frankfurt

Telephone: +49-160-7931300, **Date of issue:** 16.03.2011 **Replaces Data Sheet of:** 04.02.2010

5 FIRE FIGHTING MEASURES

- 5.1 Suitable Extinguishing Media: Use dry chemical, CO₂, water spray or "alcohol" foam.
- 5.2 Extinguishing Media to Avoid: None.
- 5.3 Fire and Explosion Hazards:

In the event of fire carbon oxides, nitrogen oxides (NO), may be formed.

5.4 **Special Protective Equipment:**

Wear positive pressure self-contained breathing apparatus.

Wear full protective dothing.

5.5 Additional Information:

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

6 ACCIDENTAL RELEASE MEASURES

6.1 **Personal Precautions:**

See No. 8.2 Personal Protective Equipment.

Avoid dust formation.

6.2 Environmental Precautions and Methods for Cleaning up:

Do not contaminate surface water. Do not allow material to contaminate ground water system.

Use mechanical handling equipment. Avoid dust formation.

6.3 **Further Information :** None.

7 HANDLING AND STORAGE (For national regulations refer to item 15.2)

7.1 **Handling**

7.1.1 Precautions for Safe Handling:

Keep containers dry and tightly closed to avoid moisture absorption and contamination.

7.1.2 Precautions in Case of Fire and Explosion:

Keep away from heat and sources of ignition.

7.2 Storage

7.2.1 Storage Instructions:

Store in original container. Keep away from heat. Keep away from direct sunlight.

7.2.2 Store away from:

Do not store together with oxidizing agents.

7.2.3 Further Information on Storage Conditions:

None

7.3 **Specific use(s):** n.av.

8 Exposure Controls and Personal Protection

8.1 Exposure limit values:

Material Limit Value :

8.2 Exposure controls

8.2.1 Occupational exposure controls:

Do not breathe dust. Avoid contact with the skin and the eyes. When using, do not eat, drink or smoke. Remove and wash contaminated dothing before re-use. Wash hands before breaks and at the end of workday.

8.2.1a Respiratory Protection: Respirator must be worn if exposed to dust.

8.2.1b **Hand Protection :** Repeated or prolonged exposure impervious butyl rubber gloves

8.2.1c **Eye Protection**: Safety glasses

8.2.1d **Skin Protection**: No.

8.2.1e Further Information: Refer to special restrictions in wearing protective equipment

8.2.2 **Environmental exposure controls** n.av.

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Telephone: +49-160-7931300, **Date of issue:** 16.03.2011 **Replaces Data Sheet of:** 04.02.2010

9 **Physical and Chemical Properties** 9.1 **General information** 9.1.1 Form: granular 9.1.2 Colour: brown beige 9.1.3 Odour: characteristic, moss, turf 9.2 Important health, safety and environmental information 9.2.1 pH-value, undiluted: n.av., pH-value, 1% aqueous solution: 7,5 - 8,5 9.2.2 Boiling point / Boiling - range (°C): n.av., Melting point / Melting range (°C): n.av. 9.2.3 Flash point (°C, c.c.): n.ap. 9.2.4 Flammability (EEC A10/A13): No. 9.2.5 Ignition temperature (°C): n.av. 9.2.6 Autoflammability (EEC A16): No. 9.2.7 Oxidising properties: No. 9.2.8 Explosion hazard: No. 9.2.9 Explosion limits (Vol.%) lower: n.av., upper:n.av. 9.2.10 Vapour pressure: n.av. 9.2.11 Density (g/ml): n.av. 9.2.12 Solubility (in Water): insoluble 9.2.13 Partition coefficient, n-OctanolWater: n.av. 9.2.14 Viscosity: n.ap. 9.2.15 Solvent separation test: n.ap. 9.2.16 Solvent content (m %): n.ap. 9.3 Other information 9.3.1 Thermal decomposition (°C): n.av. 9.3.2 Vapour density (Air = 1): n.ap. 9.3.3 Evaporation rate: n.av. 10 STABILITY AND REACTIVITY 10.1 Conditions to Avoid: Heat, flames and sparks. 10.2 Materials to Avoid: Incompatible with strong bases and oxidizing agents, acids. **Hazardous Decomposition Products:** 10.3 No decomposition if stored normally. 10.4 Further Information: None 11 TOXICOLOGICAL INFORMATION 11.1 **Toxicological Tests:** 11.1.1 Acute Health Effects: Inhalation, LC50 rat, (mg/l/4h): n.av. Ingestion, LD50 rat, (mg/kg): n.av. Skin - contact, LD₅₀ rat, (mg/kg): n.av. Irritation (to skin / eye): None. Sensitisation: None. 11.1.2 Subacute / Chronic Toxicity: Carcinogenicity: n.av. Mutagenicity: n.av. Teratogenicity: n.av. Narcotic Effects: No. 11.2 **Practical Experience** Observations relevant for classification: 11.2.1 None. 11.2.2 Further Observations: None. 11.3 **General Remarks:** Classification of the preparation has been done by calculation in accordance with EEC directives.

Risk Label:

Remarks:

14.3.4

Tradename: OTTO-O.A.S.E. organic.agro.superabsorbent.ecogranules Company / Distributor : : Advanced New Water Technologies GmbH & Co. KG., Landgraf-Philipp-Straße 27, D- 60431 Frankfurt Telephone: +49-160-7931300, Date of issue: 16.03.2011 Replaces Data Sheet of: 04.02.2010 12 **ECOLOGICAL INFORMATION** 12.1 **Ecotoxicity:** We have no quantitative data concerning the ecological effects of this product. Ecological injuries are not known or expected under normal use. 12.2 Mobility: n.av. 12.3 Persistence and degradability: We have no quantitative data concerning the ecological effects of this product. 12.4 Bioaccumulative potential: nav. 12.5 Results of PBT assessment nav 12.6 Other adverse effects 12.6.1 COD-Value, mg/g: n.av. 12.6.2 BOD₅-Value, mg/g: n.av. 12.6.3 AOX-Remarks: n.ap. 12.6.4 Significant Components: n.ap. 12.6.5 Other adverse effects: 13 **DISPOSAL CONSIDERATIONS** (For national Regulations refer to item 15.) 13.1 Residues 13.1.1 Recommendation: D 10 Waste - Code - No.: 20 01 99 In addition comply with the regional authorities. 13.1.2 Safe Handling: See item 7 and 15. 13.2 **Contaminated Packaging** 13.2.1 Recommendation: Wash with suitable cleaner. Otherwise as described under Residues. 13.2.2 Safe Handling: As described under Residues. 14 TRANSPORT INFORMATION 14.1 Transportation by Road or Railway according to ADR and RID Remarks: Not a dangerous substance as defined in the above regulations. Name and Description: Class: UN-No: Risklabel: Classification Code: Packing Group: Hazard-No.: Limited Quantity: Transport-category: 14.2 Classification for Transportation by Inland-Navigation according to ADNO Remarks: Classification has not been done. Class: Division: Category: 14.2.1 Description of Goods: 14.2.2 Remarks: 14.3 Classification for Transportation by Vessels according to IMDG Remarks: Not a dangerous substance as defined in the above regulations. Packing Group: Class: UN-No.: 14.3.1 EmS-No.: Marine Pollutant: 14.3.2 Instruction for Declaration and Labelling: 14.3.3 **Proper Shipping Name:**

Safety Data Sheet in Accordance with regulation 1907/2006

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14.4 Classification for <u>Transportation by Aeroplane</u> according to IATA-DGR/ICAO-TI

Remarks: Not a dangerous substance as defined in the above regulations.

Class: UN-No.: Packing Group:

14.4.1 Instruction for Declaration and Labelling:

Proper Shipping Name:

Risk Label:

Packing Instructions, Passenger: Cargo:

14.4.2 **Remarks**:

15 REGULATORY INFORMATION

15.1 Classification according to EEC-Regulations:

Classification required by EEC : No. Applicable Exemptions : Hazard Identification : Hazard Symbol(s) :

Component(s):

R-Phrases:

S-Phrases:

Additional Markings:

15.1.1 The above mentioned labelling is valid for distribution to public use.

Labelling (formats, exemptions, additional markings) has to be done according to respective regulations.

15.2 National Regulations

16 OTHER INFORMATION

Text of R phrases mentioned in Section 3

n.ap.

The statements in this Material Safety Data Sheet were made to the best of our knowledge and are as accurate as possible. They are given for information only. They do not constitute a contractual guarantee of a product's properties. They must neither be altered nor transferred to other products.

Prepared by : Chemie & Vorschrift, Kannheideweg 35, D-53123 Bonn-Duisdorf, 🕿 +49-228-74 81 824

Receipt of Data: 26.01.2010, ant001