

Safety Data Sheet

Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II

EfficieNt 28

Revision Date 18-OCT-2011

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product name : EfficieNt 28
SDS Number : 300000002657
Product Type : Urea Formaldehyde Resin

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

Product use : Fertilizer

1.3. Details of the supplier of the safety data sheet

Manufacturer, importer, supplier : Agro-Vital BV
Molenstraat 10-1
8391 AJ Noordwolde

Contact person : info@agro-vital.com

Telephone : **General Information:**
+31(0)561-433115

1.4. Emergency telephone number

: **Emergency telephone:**
Agro-Vital
+31(0)561-433115

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Directive 1999/45/EC [DPD]

The product is not classified as dangerous according to Directive 1999/45/EC and its amendments.

Classification : Not classified

See section 16 for the full text of the R-phrases declared above

2.2. Label elements

Risk phrases : This product is not classified according to EU legislation.
Product use : Industrial applications

Additional warning phrases : Contains formaldehyde, May produce an allergic reaction.

2.3. Other hazards

Based on the substance information, the mixture is not expected to meet the criteria for PBT/vPvB.

SECTION 3: Composition/information on ingredients

Substance/mixture : Mixture

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

SECTION 4: First aid measures

4.1. Description of first aid measures

First aid measures

- Inhalation** : Move exposed person to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Get medical attention if symptoms occur. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
- Ingestion** : Wash out mouth with water. Move exposed person to fresh air. Keep person warm and at rest. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.
- Skin contact** : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
- Eye contact** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention if irritation occurs.

4.2. Most important symptoms and effects, both acute and delayed

Over-exposure signs/symptoms

- Inhalation** : No specific data.
- Ingestion** : No specific data.
- Skin** : No specific data.
- Eyes** : No specific data.

See section 11 for more detailed information on health effects and symptoms.

4.3. Indication of immediate medical attention and special treatment needed

- Notes to physician** : In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
- Protection of first aid personnel** : No action shall be taken involving any personal risk or without suitable training.

SECTION 5: Fire-fighting measures

5.1. Extinguishing media

- Suitable** : Use an extinguishing agent suitable for the surrounding fire.
- Not suitable** : None known.

5.2. Special hazards arising from the substance or mixture

- Hazards from the substance or mixture** : In a fire or if heated, a pressure increase will occur and the container may burst.
- Hazardous thermal decomposition products** : Decomposition products may include the following materials: carbon dioxide, carbon monoxide, nitrogen oxides, aldehydes (including formaldehyde), hydrogen cyanide, particulate matter, other organic compounds,

5.3. Special protective actions for fire-fighters

- Special precautions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment (see section 8).

6.2. Environmental precautions

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

6.3. Methods and material for containment and cleaning up

- Small spill** : Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble or absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
- Large spill** : Stop leak if without risk. Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see section 13). Dispose of via a licensed waste disposal contractor. Note: see section 1 for emergency contact

information and section 13 for waste disposal.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Put on appropriate personal protective equipment (see section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking.

7.2. Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

Packaging materials

Recommended : Use original container.

Specific uses : Fertilizer

7.3. Specific end use(s)

Not applicable.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limit values

Ingredient name

Occupational exposure limits

Europe

No exposure limit value known.

Sweden

No exposure limit value known.

Denmark

formaldehyde

Arbejdstilsynet

Time Weighted Average (TWA) 0.4 mg/m³ 0.3 ppm

Norway

No exposure limit value known.

France

No exposure limit value known.

Netherlands

No exposure limit value known.

Germany

No exposure limit value known.

Finland

No exposure limit value known.

United Kingdom (UK)

No exposure limit value known.

Austria

No exposure limit value known.

Switzerland

No exposure limit value known.

Belgium

No exposure limit value known.

Spain

No exposure limit value known.

Turkey

No exposure limit value known.

Czech Republic

No exposure limit value known.

Ireland

No exposure limit value known.

Italy

No exposure limit value known.

Estonia

No exposure limit value known.

Lithuania

urea

Del Lietuvos Higienos Normos

Time Weighted Average (TWA) 10 mg/m³

Slovakia

No exposure limit value known.

Hungary

No exposure limit value known.

Poland

No exposure limit value known.

Slovenia

No exposure limit value known.

Latvia

urea

OEL

Time Weighted Average (TWA) 10 mg/m³

Greece

No exposure limit value known.

Portugal

No exposure limit value known.

Bulgaria

urea

OEL

Time Weighted Average (TWA) 10 mg/m³

Romania

No exposure limit value known.

8.2. Exposure controls

Recommended monitoring procedures

- : If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to European Standard EN 689 for methods for the assessment of exposure by inhalation to chemical agents and national guidance documents for methods for the determination of hazardous substances.

Occupational exposure controls

- : No special ventilation requirements. Good general ventilation should be sufficient to control worker exposure to airborne contaminants. If this product contains ingredients with exposure limits, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure below any recommended or statutory limits.

Hygiene measures

- : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Respiratory protection

- : Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Hand protection

- : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

- Eye protection** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists or dusts.
- Skin protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance

- Physical state** : Liquid
- Color** : Clear, light green
- Odor** : Formaldehyde
- Odor threshold** : Not determined
- pH** : 9.5
- Melting Point** : Not determined
- Initial boiling point and boiling range** : Not determined
- Flash point** : Not applicable.
- Evaporation rate** : Not determined
- Flammability** : Non-flammable.
- Explosion limits**
- Upper:** : Not determined
- Lower:** : Not determined
- Vapor pressure** : Not determined
- Vapor density** : Not determined
- Relative density** : 1.26
- Solubility** : Not determined
- Partition coefficient: n-octanol/water** : Not determined
- Auto-ignition temperature** : Not determined
- Decomposition temperature** : Not determined
- Viscosity** : Kinematic-Not determined
Dynamic- 25 cPs @25 °C (77 °F)
- Explosive properties** : Not determined
- Oxidising properties** : Not determined

9.2. Other information

Not applicable.

SECTION 10: Stability and reactivity

10.1. Reactivity

Stable under normal conditions.

10.2. Chemical stability

The product is stable.

10.3. Possibility of hazardous reactions

Under normal conditions of storage and use, hazardous reactions will not occur.

10.4. Conditions to avoid

Do not freeze.

10.5. Incompatible materials

Reactive or incompatible with the following materials: Acids and salts of aluminum and ammonia

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

Summary of health effects based on the conventional method of Directive 1999/45/EC

None of the health effects meet the criteria for classification.

11.1. Information on toxicological effects

EfficieNt 28

Acute toxicity

Oral

No applicable toxicity data.

Dermal

No applicable toxicity data.

Inhalation

No applicable toxicity data.

Other routes

No applicable toxicity data.

Irritation/Corrosion

No applicable toxicity data.

Skin sensitization

No applicable toxicity data.

Respiratory sensitization

No applicable toxicity data.

Repeated Dose Toxicity

No applicable toxicity data.

Carcinogenicity

No applicable toxicity data.

Mutagenicity

No applicable toxicity data.

Toxic to Reproduction

No applicable toxicity data.

SECTION 12: Ecological information

Summary of environmental hazards based on the conventional method of Directive 1999/45/EC

None of environmental hazard criteria are met.

12.1. Toxicity

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No applicable toxicity data.

12.2. Persistence and degradability

EfficieNt 28

No data available.

12.3. Bioaccumulative potential

EfficieNt 28

Not tested but expected to be minimal.

12.4. Mobility in soil

EfficieNt 28

Mobile liquid.

12.5. Results of PBT and vPvB assessment

EfficieNt 28

Based on the substance information, the mixture is not expected to meet the criteria for PBT/vPvB.

12.6. Other adverse effects

EfficieNt 28

Toxicity to bacteria, algae and higher marine organisms not tested. COD: Not determined.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Methods of disposal

- :** The generation of waste should be avoided or minimized wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe way. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Avoid

dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Hazardous waste : Within the present knowledge of the supplier, this product is not regarded as hazardous waste, as defined by EU Directive 91/689/EEC.

SECTION 14: Transport information

Regulatory information	14.1. UN number	14.2. UN proper shipping name	14.3. Transport hazard class(es)	14.4. Packing group
ADR		Non-regulated		
RID		Non-regulated		
ADN/ADNR		Non-regulated		
ICAO/IATA		Non-regulated		
IMO/IMDG		Non-regulated		

14.5. Environmental hazards

Environmentally hazardous and/or Marine Pollutant : No.

14.6. Special precautions for user

Not applicable.

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not applicable.

SECTION 15: Regulatory information

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

EU regulations

SEVESO Directive 96/82/EC : Ingredient name Listed
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REACH Annex XVII : Not listed

Biocides - Annex I to Directive 98/8/EC : Not listed

Prior Informed Consent. List of chemicals subject to the international PIC procedure (Part I, II, III) : None required.

Integrated pollution prevention and control list : Not listed

(IPPC) - Air

Integrated pollution prevention and control list (IPPC) - Water : Not listed

National regulations

Denmark

MAL-code : 5 - 6

International regulations

Chemical inventories REACH Status The substance(s) in this product has (have) been Pre-Registered and/or Registered, or are exempted from registration, according to Regulation (EC) No. 1907/2006 (REACH).
Australia inventory (AICS) All components are listed or exempted.
Canada inventory All components are listed or exempted.
Japan inventory All components are listed or exempted.
China inventory (IECSC) All components are listed or exempted.
Korea inventory All components are listed or exempted.
New Zealand Inventory (NZIoC) All components are listed or exempted.
Philippines inventory (PICCS) Not determined.
United States inventory (TSCA 8b) All components are listed or exempted.

15.2. Chemical Safety Assessment

Chemical Safety Assessment not applicable.

SECTION 16: Other information

The product is not classified as dangerous according to Directive 1999/45/EC and its amendments.

Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II

History

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