

Safety data sheet

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

- 1.1 Product identifier
- Trade name: RAPPER
- Synonym Preliminary (experimental product)
- SDS Number: 999999216
- 1.2 Relevant identified uses of the substance or mixture and uses advised against
- Sector of Use
 - Industrial use
 - Professional
- Application of the substance / the mixture Additive for agrochemicals
- Uses advised against No further relevant information available.
- 1.3 Details of the supplier of the safety data sheet
- Manufacturer/Supplier:
 - DHM Agrochemicals Ltd
 - Castle Lodge
 - Kilgobbin Rd
 - Dublin 18
- Further information obtainable from: E-mail: info@dhm.ie
- 1.4 Emergency telephone number:
 - Emergency CONTACT 01 2952377

SECTION 2: Hazards identification

- 2.1 Classification of the substance or mixture
- Classification according to Regulation (EC) No 1272/2008
 - The product is not classified, according to the CLP regulation.
- 2.2 Label elements
- Labelling according to Regulation (EC) No 1272/2008 Void
- Hazard pictograms Void
- Signal word Void
- Hazard statements Void
- 2.3 Other hazards
- Results of PBT and vPvB assessment
- PBT: Not applicable.
- vPvB: Not applicable.
- Determination of endocrine-disrupting properties Not applicable.

SECTION 3: Composition/information on ingredients

- 3.2 Mixtures
- Dangerous components: Void
- Additional information:
 - According to the provisions set out in Annex II of Regulation (EC) No 1907/2006 there is no obligation of authoring a Safety Data Sheet for this product. Therefore the identification numbers of the substances are not stated.

(Contd. on page 2)

Safety data sheet

Trade name: RAPPER

(Contd. of page 1)

SECTION 4: First aid measures

- 4.1 Description of first aid measures
 - General information: Call a physician if symptoms develop or persist.
 - After inhalation: Supply fresh air; consult doctor in case of complaints.
 - After skin contact:

Remove contaminated clothing and wash affected skin with water and soap. If symptoms persist, consult a doctor.
 - After eye contact:

Rinse opened eye for several minutes under running water.
If symptoms persist, consult a doctor.
 - After swallowing:

Rinse mouth with plenty of water.
If symptoms persist consult doctor.
- 4.2 Most important symptoms and effects, both acute and delayed

No further relevant information available.
- 4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

- 5.1 Extinguishing media
 - Suitable extinguishing agents:

Extinguish with carbon dioxide, dry chemical, waterspray or foam.
Use fire extinguishing methods suitable to surrounding conditions.
 - For safety reasons unsuitable extinguishing agents:

Do not use water jet as an extinguisher, as this will spread the fire.
- 5.2 Special hazards arising from the substance or mixture

In case of fire, the following can be released:
Carbon oxides (CO_x)
- 5.3 Advice for firefighters
 - Protective equipment:

Fire fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
 - Additional information

Collect contaminated fire fighting water separately. It must not enter the sewage system.
Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

SECTION 6: Accidental release measures

- 6.1 Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.
Use personal protective equipment (chapter 8).
- 6.2 Environmental precautions: Do not allow to enter sewers/ surface or ground water.
- 6.3 Methods and material for containment and cleaning up:

For small spills add absorbent (soil may be used in the absence of other suitable materials) scoop up material and place in a sealed, liquid-proof container for disposal. For large spills dike spilled material or otherwise contain material to ensure runoff does not reach a waterway. Place spilled material in an appropriate container for disposal.
- 6.4 Reference to other sections

See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.

(Contd. on page 3)

Safety data sheet

Trade name: RAPPER

See Section 13 for disposal information.

(Contd. of page 2)

SECTION 7: Handling and storage

- 7.1 Precautions for safe handling
 - Provide sufficient air flow/ air extraction in the workplace.
 - Avoid contact with eyes and skin.
 - Wash hands thoroughly after handling.
 - Do not eat, drink or smoke when using the product.
 - Open and handle receptacle with care.
 - Keep receptacles tightly sealed.
 - Avoid release to the environment.
- Information about fire - and explosion protection: No special measures required.
- 7.2 Conditions for safe storage, including any incompatibilities
 - Storage:
 - Requirements to be met by storerooms and receptacles:
 - Keep tightly closed in a dry, cool and well-ventilated place.
 - Information about storage in one common storage facility: Store away from foodstuffs.
 - TRGS 510 storage class: 10-13
 - Further information about storage conditions:
 - Stir before use.
 - Store in cool, dry conditions in well sealed receptacles.
 - Store container in a well-ventilated place.
 - 7.3 Specific end use(s) Additive for agrochemicals

SECTION 8: Exposure controls/personal protection

- 8.1 Control parameters
 - Ingredients with limit values that require monitoring at the workplace:
 - The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
 - Additional information: The lists that were valid at the time of the SDS authoring were used as basis.
- 8.2 Exposure controls
 - Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions.
 - Appropriate engineering controls No further data; see section 7.
 - Individual protection measures, such as personal protective equipment
 - General protective and hygienic measures:
 - The usual precautionary measures are to be adhered to when handling chemicals.
 - Immediately remove all soiled and contaminated clothing
 - Wash hands before breaks and at the end of work.
 - Avoid contact with the eyes and skin.
 - Do not eat or drink while working.
 - Respiratory protection: Not necessary if room is well-ventilated.
 - Hand protection
 - Protective gloves
 - The glove material has to be impermeable and resistant to the product.
 - Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation.
 - The protective gloves to be used must comply with the specification of regulation (EU) 2016/425 and the resultant standard EN 374. The recommendation is only valid for the supplied product and the stated application. Special working conditions, like heat or mechanical strain, which deviate from the test conditions, can reduce the protective effect provided by the recommended glove.

(Contd. on page 4)

Safety data sheet

Trade name: RAPPER

(Contd. of page 3)

· Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

Recommended:

Hand protection: Wear suitable protective gloves (e.g. Polychloroprene –CR).

Recommendation: contaminated gloves should be disposed of.

· Penetration time of glove material

The exact breakthrough time has to be found out by the manufacturer of the protective gloves and has to be observed.

The determined penetration times according to EN 16523-1:2015 are not performed under practical conditions. Therefore a maximum wearing time, which corresponds to 50% of the penetration time, is recommended.

· Eye/face protection Safety glasses with side-shields

· Body protection: Protective work clothing

· Thermal hazards No special measures required.

SECTION 9: Physical and chemical properties

· 9.1 Information on basic physical and chemical properties

· General Information

· Physical state

Liquid

· Colour:

Yellow to brown

· Odour:

Characteristic

· Odour threshold:

Not determined.

· Melting point/freezing point:

Undetermined.

· Boiling point or initial boiling point and boiling range

Undetermined.

· Flammability

Not applicable.

· Lower and upper explosion limit

· Lower:

Not determined.

· Upper:

Not determined.

· Flash point:

>100 °C

· Decomposition temperature:

Not determined.

· pH at 20 °C

7,4 (5%)

· Viscosity:

· Kinematic viscosity

Not determined.

· Dynamic at 20 °C:

~18 mPas

· Solubility

· water:

Partly miscible.

· Partition coefficient n-octanol/water (log value)

Not determined.

· Vapour pressure:

Not determined.

· Density and/or relative density

· Density at 20 °C:

~0,91 g/cm³

· Relative density

Not determined.

· Vapour density

Not determined.

· Ignition temperature:

Product is not self igniting.

· 9.2 Other information

The above information is not intended for use in preparing product specifications.

(Contd. on page 5)

Safety data sheet

Trade name: RAPPER

(Contd. of page 4)

SECTION 10: Stability and reactivity

- 10.1 Reactivity No further relevant information available.
- 10.2 Chemical stability
- Thermal decomposition / conditions to be avoided:
No decomposition if used according to specifications.
- 10.3 Possibility of hazardous reactions No dangerous reactions known.
- 10.4 Conditions to avoid No further relevant information available.
- 10.5 Incompatible materials: No further relevant information available.
- 10.6 Hazardous decomposition products: No dangerous decomposition products known.

SECTION 11: Toxicological information

- 11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008
- Acute toxicity Based on available data, the classification criteria are not met.
- Skin corrosion/irritation Based on available data, the classification criteria are not met.
- Serious eye damage/irritation Based on available data, the classification criteria are not met.
- Respiratory or skin sensitization Based on available data, the classification criteria are not met.
- Germ cell mutagenicity Based on available data, the classification criteria are not met.
- Carcinogenicity Based on available data, the classification criteria are not met.
- Reproductive toxicity Based on available data, the classification criteria are not met.
- STOT-single exposure Based on available data, the classification criteria are not met.
- STOT-repeated exposure Based on available data, the classification criteria are not met.
- Aspiration hazard Based on available data, the classification criteria are not met.
- Other information:
The data is based on the toxicological properties of the components of the product.
- 11.2 Information on other hazards
- Endocrine disrupting properties
None of the ingredients is listed.

SECTION 12: Ecological information

- 12.1 Toxicity
- Aquatic toxicity:
The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.
- 12.2 Persistence and degradability No further relevant information available.
- 12.3 Bioaccumulate potential No further relevant information available.
- 12.4 Mobility in soil No further relevant information available.
- Other information:
The data is based on the ecotoxicological properties of the components of the product.
- 12.5 Results of PBT and vPvB assessment
- PBT: Not applicable.
- vPvB: Not applicable.
- 12.6 Endocrine disrupting properties
The product does not contain substances with endocrine disrupting properties.
- 12.7 Other adverse effects
- Additional ecological information:
- General notes:
Do not allow product to reach ground water, water course or sewage system.

(Contd. on page 6)

Safety data sheet

Trade name: RAPPER

(Contd. of page 5)

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

SECTION 13: Disposal considerations

- 13.1 Waste treatment methods
- Recommendation
Product residues and uncleaned empty containers should be packaged, sealed, labelled and disposed of or recycled according to relevant national and local regulations. Where large quantities are concerned, consult the supplier. When uncleaned empty containers are passed on, the recipient must be warned of any possible hazard that may be caused by residues. For disposal within the EC, the appropriate code according to the European Waste List (EWL) should be used. It is among the tasks of the polluter to assign the waste to waste codes specific to industrial sectors and processes according to the European Waste List (EWL).
- European waste catalogue
It is not possible to determine a waste code for this product in accordance with the European Waste Catalogue (EWC) since it is only possible to classify it according to how it is used by the customer. The waste code is to be determined within the EU in liaison with the wastedisposal operator.
- Uncleaned packaging:
- Recommendation: Disposal must be made according to official regulations.
- Recommended cleansing agents: Water, if necessary together with cleansing agents.

SECTION 14: Transport information

- | | |
|--|---|
| · 14.1 UN number or ID number | |
| · ADR/RID/ADN, IMDG, IATA | Void |
| · 14.2 UN proper shipping name | |
| · ADR/RID/ADN, IMDG, IATA | Void |
| · 14.3 Transport hazard class(es) | |
| · ADR/RID/ADN, ADN, IMDG, IATA | |
| · Class | Void |
| · 14.4 Packing group | |
| · ADR/RID/ADN, IMDG, IATA | Void |
| · 14.5 Environmental hazards: | |
| · Marine pollutant: | No |
| · 14.6 Special precautions for user | Not applicable. |
| · 14.7 Maritime transport in bulk according to IMO instruments | Not applicable. |
| · Transport/Additional information: | Not dangerous according to the above specifications.
Keep separated from foodstuffs. |
| · UN "Model Regulation": | Void |

SECTION 15: Regulatory information

- 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
- Directive 2012/18/EU Not applicable.
- Named dangerous substances - ANNEX I None of the ingredients is listed.

(Contd. on page 7)

Safety data sheet

Trade name: RAPPER

(Contd. of page 6)

- Other regulations, limitations and prohibitive regulations
- LIST OF SUBSTANCES SUBJECT TO AUTHORISATION (ANNEX XIV)
None of the ingredients is listed.
- Substances of very high concern (SVHC) according to REACH, Article 57
This product does not contain any substances of very high concern > 0.1%.
- National regulations:
- Waterhazard class: Water hazard class 1 (Self-assessment): slightly hazardous for water.
- Technical instructions (air): Chapter 5.2.5 Organic substances
- Class Share in %
- NK 50-100
- Youth Labor Protection Act (JarbSchG)
Observe employment restrictions for adolescents according to §22 JarbSchG.
- Maternity Protection Act - MuSchG Not applicable.
- 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- Classification according to Regulation (EC) No 1272/2008
The classification of the mixture is generally based on the calculation method using substance data according to Regulation (EC) No 1272/2008.
- Department issuing SDS: Product safety department
- Contact: E-mail: info@dhm.ie
- Abbreviations and acronyms:
 ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)
 IMDG: International Maritime Code for Dangerous Goods
 IATA: International Air Transport Association
 GHS: Globally Harmonised System of Classification and Labelling of Chemicals
 EINECS: European Inventory of Existing Commercial Chemical Substances
 ELINCS: European List of Notified Chemical Substances
 CAS: Chemical Abstracts Service (division of the American Chemical Society)
 PBT: Persistent, Bioaccumulative and Toxic
 SVHC: Substances of Very High Concern
 vPvB: very Persistent and very Bioaccumulative