

SAFETY DATA SHEET

DIAMOND

This safety data sheet complies with the requirements of:
Regulation (EC) No. 453/2010 and Regulation (EC) No. 1272/2008



SDS # : 10219-2-A
Revision date: 2019-01-28
Format: EU
Version 1

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

Product Code(s) 10219-2-A

Product Name DIAMOND

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

Recommended Use: An adjuvant for use in agriculture and horticulture

Restrictions on use Use as recommended by the label.

1.3. Details of the supplier of the safety data sheet

Manufacturer FMC Agro Limited
Rectors Lane
Pentre
Flintshire
CH5 2DH
United Kingdom
Tel: + 44 1244 537370
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Stader Elbstrasse 28
21683 Stade
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Contact point Tel: +44(0) 1244 537370
Email: fmc.agro.uk@fmc.com

1.4. Emergency telephone number

Emergency telephone Tel: +44(0) 1244 537370 (Office hours only)

Section 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture Regulation (EC) No 1272/2008

| | |
|-----------------------------------|--------------------|
| Serious eye damage/eye irritation | Category 1 (H318) |
| Skin sensitisation | Category 1B (H317) |
| Chronic aquatic toxicity | Category 3 (H412) |

2.2. Label elements

Hazard pictograms

Signal Word
Danger

Hazard Statements

H318 - Causes serious eye damage

H317 - May cause an allergic skin reaction

H412 - Harmful to aquatic life with long lasting effects

EUH401 - To avoid risks to human health and the environment, comply with the instructions for use

Precautionary Statements

P261 - Avoid breathing dust/fume/gas/mist/vapours/spray

P280 - Wear protective gloves/protective clothing/eye protection/face protection

P302 + P352 - IF ON SKIN: Wash with plenty of soap and 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 or doctor/physician

P333 + P313 - If skin irritation or rash occurs: Get medical advice/attention

P362 + P364 - Take off all contaminated clothing and wash it before re-use

P501: Dispose of contents/container as hazardous waste.

2.3. Other hazards

This product is not identified as a PBT/vPvB substance.

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

The product is a mixture, not a substance.

3.2 Mixture containing the following hazardous ingredients:

| Chemical name | EC-No | CAS-No | Weight percent | Classification according to Regulation (EC) No. 1272/2008 [CLP] | REACH registration number |
|--|-----------|------------|----------------|---|---------------------------|
| Alcohols (C12-15 Ln. saturated) ethoxylate | 500-195-7 | 68131-39-5 | 10-30 | Eye Dam. 1 (H318) Aquatic Acute 1 (H400) Aquatic Chronic 3 (H412) | No data available |
| Diethylene glycol | Present | 111-46-6 | 1-10 | Acute Tox. 4 (H302) | No data available |
| n-Butanol | 200-751-6 | 71-36-3 | 1-10 | Acute Tox. 4 (H302) Skin Irrit. 2 (H315) Eye Dam. 1 (H318) STOT SE 3 (H335) STOT SE 3 (H336) Flam. Liq. 3 (H226) | 01-2119484630-38 |

Additional Information

For the full text of the H- and EUH- phrases mentioned in this Section, see Section 16

Section 4: FIRST AID MEASURES

4.1. Description of first aid measures**Eye Contact**

Hold eyes open and rinse slowly and gently with water for 15 to 20 minutes. Remove

contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control centre or doctor for treatment advice.

Skin Contact

Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control centre or doctor for treatment advice.

Inhalation

Remove person from exposure ensuring one's own safety while doing so.

Ingestion

Rinse mouth. Do NOT induce vomiting. Consult a physician.

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

Skin contact: There may be irritation and redness at the site of contact.

Eye contact: There may be irritation and redness. The eyes may water profusely.

Ingestion: There may be soreness and redness of the mouth and throat. Nausea and stomach pain may occur. There may be vomiting.

Inhalation: There may be irritation of the throat with a feeling of tightness in the chest.

Delayed / immediate effects: Immediate effects can be expected after short-term exposure.

4.3. Indication of any immediate medical attention and special treatment needed**Indication of immediate medical attention and special treatment needed, if necessary**

Treat symptomatically. Show this safety data sheet to the doctor in attendance.

Section 5: FIREFIGHTING MEASURES**5.1. Extinguishing media****Suitable Extinguishing Media**

Use extinguishing agent suitable for type of surrounding fire. Cool containers / tanks with water spray.

Unsuitable extinguishing media

No information available

5.2. Special hazards arising from the substance or mixture

Thermal decomposition can lead to release of irritating gases and vapours.

5.3. Advice for firefighters

Wear self-contained breathing apparatus and protective suit. Contaminated fire extinguishing water should not be discharged into drains, if preventable.

Section 6: ACCIDENTAL RELEASE MEASURES**6.1. Personal precautions, protective equipment and emergency procedures****Personal Precautions**

For personal protection see section 8. Isolate and post spill area. Stop leak if you can do it without risk. In the case of large spills (1 ton or more), alert the appropriate authorities.

For emergency responders

Use personal protection recommended in Section 8.

6.2. Environmental precautions

Do not discharge into drains or rivers. Contain the spillage using bunding. Accidental release into water courses must be alerted to the appropriate regulatory body.

6.3. Methods and material for containment and cleaning up

Methods for Containment Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Surface water drains within close vicinity of the spill should be covered. Absorb into dry earth or sand. Transfer to a closable, labelled salvage container for disposal by an appropriate method. Refer to section 13 of SDS for suitable method of disposal.

6.4. Reference to other sections

See section 8 for more information. See section 13 for more information.

Section 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Handling

Avoid contact with skin, eyes and clothing. Ensure adequate ventilation.

Hygiene measures

Handle in accordance with good industrial hygiene and safety practice.

7.2. Conditions for safe storage, including any incompatibilities

Storage

Protect from frost, heat and sunlight. Store above 5°C. Keep out of reach of children and animals. Keep away from food, drink and animal feedingstuffs.

7.3. Specific end use(s)

Risk Management Methods (RMM)

The information required is contained in this Safety Data Sheet.

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

| Chemical name | European Union | The United Kingdom | France | Spain | Germany |
|-------------------------------|---|--|--|--|--|
| Diethylene glycol 111-46-6 | - | STEL 69 ppm STEL 303 mg/m ³ TWA 23 ppm TWA 101 mg/m ³ | - | - | - |
| n-Butanol 71-36-3 | - | STEL 50 ppm STEL 154 mg/m ³ Skin | STEL 50 ppm STEL 150 mg/m ³ | TWA 20 ppm TWA 61 mg/m ³ STEL 50 ppm STEL 154 mg/m ³ | - |
| Chemical name | Italy | Portugal | The Netherlands | Finland | Denmark |
| Diethylene glycol 111-46-6 | - | - | - | - | TWA 2.5 ppm TWA 11 mg/m ³ |
| n-Butanol 71-36-3 | - | TWA 20 ppm | - | TWA 50 ppm TWA 150 mg/m ³ STEL 75 ppm STEL 230 mg/m ³ iho* | Ceiling 50 ppm Ceiling 150 mg/m ³ H* |
| Chemical name | Austria | Switzerland | Poland | Norway | Ireland |
| Diethylene glycol 111-46-6 | STEL 40 ppm STEL 176 mg/m ³ TWA 10 ppm TWA 44 mg/m ³ | SS-C** TWA 10 ppm TWA 44 mg/m ³ STEL 40 ppm STEL 176 mg/m ³ | TWA 10 mg/m ³ | - | TWA 23 ppm TWA 100 mg/m ³ STEL 69 ppm STEL 300 mg/m ³ |
| n-Butanol 71-36-3 | STEL 200 ppm STEL 600 mg/m ³ TWA 50 ppm TWA 150 mg/m ³ | SS-C** TWA 100 ppm TWA 310 mg/m ³ STEL 100 ppm STEL 310 mg/m ³ | TWA 50 mg/m ³ STEL 150 mg/m ³ | Ceiling 25 ppm Ceiling 75 mg/m ³ S* | TWA 20 ppm STEL 60 ppm Skin |

| Chemical name | European Union | The United Kingdom | France | Spain | Germany |
|----------------------|----------------|--------------------|--------|--------|--|
| n-Butanol 71-36-3 | - | - | - | - | Biologische Grenzwerte nach TRGS 903 sind zu beachten |
| Chemical name | Austria | Switzerland | Poland | Norway | Ireland |
| n-Butanol 71-36-3 | - | 10 2 | - | - | - |

Derived No Effect Level (DNEL) No information available.

Predicted No Effect Concentration (PNEC) No information available.

8.2. Exposure controls

Engineering measures Ensure adequate ventilation.

Personal protective equipment

Eye/Face Protection Safety Glasses. Maintain eye wash fountain and quick-drench facilities in work area.

Hand Protection Protective gloves. Made of butyl rubber, chloroprene rubber, neoprene, polyethylene, PVC, viton, or tetrafluoroethylene.

Skin and Body Protection Impervious clothing.

Respiratory Protection Not required under normal use.

Environmental exposure controls Refer to specific Member State legislation for requirements under Community environmental legislation.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

| | |
|------------------------------|--------------------------------|
| Physical State | Liquid |
| Appearance | Liquid |
| Odour | Characteristic |
| Colour | Light yellow |
| Odour threshold | No information available |
| pH | 5.0 - 7.0 |
| Melting point/freezing point | 4.5 °C |
| Boiling point/boiling range | 96.5-349 °C |
| Flash point | 72 °C closed cup |
| Evaporation Rate | No information available |
| Flammability (solid, gas) | |
| Flammability Limit in Air | |
| Upper flammability limit: | No information available |
| Lower flammability limit | No information available |
| Vapour pressure | No information available |
| Vapour density | No information available |
| Specific gravity | 0.89-0.90 |
| Water solubility | 6.42 g/L @ 20°C |
| Solubility in other solvents | No information available |
| Partition coefficient | Log Pow = 5.3 |
| Autoignition temperature | No information available |
| Decomposition temperature | No information available |
| Viscosity, kinematic | No information available |
| Viscosity, dynamic | No information available |
| Explosive properties | No information available |
| Oxidising properties | Non-oxidizing (by EC criteria) |

9.2. Other information

Softening point No information available

| | |
|------------------|--------------------------|
| Molecular weight | No information available |
| VOC content (%) | 21 g/L |
| Density | 0.89-0.90 |
| Bulk density | No information available |
| K _{st} | No information available |

Section 10: STABILITY AND REACTIVITY

10.1. Reactivity

Stable under recommended storage conditions

10.2. Chemical stability

Stable under recommended storage conditions.

Explosion data

Sensitivity to Mechanical Impact None.

Sensitivity to Static Discharge None.

10.3. Possibility of hazardous reactions

Hazardous polymerisation

Hazardous polymerization does not occur.

Hazardous reactions

Decomposition may occur on exposure to conditions or materials listed below.

10.4. Conditions to avoid

Heat.

10.5. Incompatible materials

Strong oxidising agents. Strong acids. Strong bases.

10.6. Hazardous decomposition products

May emit toxic fumes under fire conditions.

Section 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Acute toxicity

Product Information

| | |
|-------------|--------------------|
| LD50 Oral | > 5000 mg/kg (rat) |
| LD50 Dermal | > 2000 mg/kg (rat) |

| Chemical name | LD50 Oral | LD50 Dermal | Inhalation LC50 |
|--|-----------------------|--------------------------|--------------------------------------|
| Alcohols (C12-15 Ln. saturated) ethoxylate | > 5000 mg/kg (Rat) | = 2500 mg/kg (Rabbit) | |
| Diethylene glycol | = 12565 mg/kg (Rat) | = 11890 mg/kg (Rabbit) | > 4600 mg/m ³ (Rat) 4 h |

| | |
|-----------------------------------|---------------------------|
| Skin corrosion/irritation | No information available. |
| Serious eye damage/eye irritation | No information available. |
| Sensitisation | Sensitiser |
| Mutagenicity | No information available. |
| Carcinogenicity | No information available. |

Reproductive toxicity No information available.
STOT - single exposure No information available.
STOT - repeated exposure No information available.
Aspiration hazard No information available.

Section 12: ECOLOGICAL INFORMATION

12.1. Toxicity

There is no data available for this product.

| Chemical name | Toxicity to algae | Toxicity to fish | Toxicity to daphnia and other aquatic invertebrates |
|-------------------|-------------------|---|---|
| Diethylene glycol | - | 96 h LC50: = 75200 mg/L (Pimephales promelas) flow-through | 48 h EC50: = 84000 mg/L (Daphnia magna) |

12.2. Persistence and degradability

Estimated half-life at 25°C: 1 year at pH 4; >1 year at pH 7; between 1 day and 1 year at pH 9.

12.3. Bioaccumulative potential

log Pow = 5.3 @ 21°C.

12.4. Mobility in soil

Mobility in soil

No information available.

12.5. Results of PBT and vPvB assessment

This product is not identified as a PBT/vPvB substance.

12.6. Other adverse effects

Harmful to aquatic life

Section 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Waste from residues / unused products Transfer to a suitable container and arrange for collection by specialised disposal company. Do not contaminate ponds, waterways or ditches with chemical or used containers. Do not discharge to sewer systems.

Contaminated Packaging Clean container with water. Dispose of rinse water in accordance with local and national guidelines.

EWC Waste Disposal No 02 01 08

OTHER INFORMATION NOTE : The user's attention is drawn to the possible existence of specific European, national or local regulations regarding disposal.

Section 14: TRANSPORT INFORMATION

NOTE

NOT CLASSIFIED AS DANGEROUS IN THE MEANING OF TRANSPORT REGULATIONS.

IMDG/IMO

| | |
|---|---|
| 14.1 UN/ID no | Not regulated |
| 14.2 Proper Shipping Name | Not regulated |
| 14.3 Hazard class | Not regulated |
| 14.4 Packing Group | Not regulated |
| 14.5 Marine Pollutant | Not applicable |
| 14.6 Special Provisions | None |
| 14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code | This product is not transported in bulk containers. |

RID

| | |
|---------------------------|----------------|
| 14.1 UN/ID no | Not regulated |
| 14.2 Proper Shipping Name | Not regulated |
| 14.3 Hazard class | Not regulated |
| 14.4 Packing Group | Not regulated |
| 14.5 Environmental Hazard | Not applicable |
| 14.6 Special Provisions | None |

ADR/RID

| | |
|---------------------------|----------------|
| 14.1 UN/ID no | Not regulated |
| 14.2 Proper Shipping Name | Not regulated |
| 14.3 Hazard class | Not regulated |
| 14.4 Packing Group | Not regulated |
| 14.5 Environmental Hazard | Not applicable |
| 14.6 Special Provisions | None |

ICAO/IATA

| | |
|---------------------------|----------------|
| 14.1 UN/ID no | Not regulated |
| 14.2 Proper Shipping Name | Not regulated |
| 14.3 Hazard class | Not regulated |
| 14.4 Packing Group | Not regulated |
| 14.5 Environmental Hazard | Not applicable |
| 14.6 Special Provisions | None |

Section 15: REGULATORY INFORMATION

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

European Union**Authorisations and/or restrictions on use:**

This product does not contain substances subject to authorisation (Regulation (EC) No. 1907/2006 (REACH), Annex XIV)
This product does not contain substances subject to restriction (Regulation (EC) No. 1907/2006 (REACH), Annex XVII)

Persistent Organic Pollutants

Not Applicable

Ozone-depleting substances (ODS) regulation (EC) 1005/2009

Not Applicable

International Inventories

| Chemical name | TSCA | DSL | EINECS/ELINC | ENCS | China | KECL (Korea) | PICCS | AICS |
|---------------|------|-----|--------------|------|-------|--------------|-------|------|
|---------------|------|-----|--------------|------|-------|--------------|-------|------|

| | (United States) | (Canada) | S (Europe) | (Japan) | (IECSC) | | (Philippines) | (Australia) |
|--|-----------------|----------|------------|---------|---------|---|---------------|-------------|
| Alcohols (C12-15 Ln. saturated) ethoxylate 68131-39-5 | X | X | X | | X | X | X | X |
| Diethylene glycol 111-46-6 | X | X | X | X | X | X | X | X |
| n-Butanol 71-36-3 | X | X | X | X | X | X | X | X |

15.2. Chemical safety assessment

No information available

Section 16: OTHER INFORMATION

Key or legend to abbreviations and acronyms used in the safety data sheet

Full text of H-Statements referred to under sections 2 and 3

H226 - Flammable liquid and vapour
H302 - Harmful if swallowed
H315 - Causes skin irritation
H317 - May cause an allergic skin reaction
H318 - Causes serious eye damage
H335 - May cause respiratory irritation
H336 - May cause drowsiness or dizziness
H412 - Harmful to aquatic life with long lasting effects

Legend

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road
CAS: CAS (Chemical Abstracts Service)
Ceiling: Maximum limit value:
DNEL: Derived No Effect Level (DNEL)
EINECS: EINECS (European Inventory of Existing Chemical Substances)
GHS: Globally Harmonised System (GHS)
IATA: International Air Transport Association (IATA)
ICAO: International Civil Aviation Organization
IMDG: International Maritime Dangerous Goods (IMDG)
LC50: LC50 (lethal concentration)
LD50: LD50 (lethal dose)
PBT: Persistent, Bioaccumulative, and Toxic (PBT) Chemicals
RID: Regulations Concerning the International Transport of Dangerous Goods by Rail
STEL: Short term exposure limit
SVHC: SVHC: Substances of Very High Concern for Authorisation:

TWA: time weighted average
vPvB: very Persistent and very Bioaccumulative

Revision date: 2019-01-28

Reason for revision: SDS sections updated.

Disclaimer

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. This company shall not be held liable for any damage resulting from handling or from contact with the above product.

Prepared By

FMC Corporation

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End of Safety Data Sheet