

SAFETY DATA SHEET

COMPLEX 20-8-14

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



SDS # : 10250-A
Revision date: 2018-07-20
Format: EU
Version 1.02

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

Product Code(s) 10250-A

Product Name COMPLEX 20-8-14

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

Recommended Use: A soluble fertilizer 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 (0) 1244 537370
E-mail: fmc.agro.uk@fmc.com

For further information, please contact:

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*

| | |
|-----------------------------------|-------------------|
| Skin corrosion/irritation | Category 2 (H315) |
| Serious eye damage/eye irritation | Category 2 (H319) |

2.2. Label elements

Hazard pictograms



Signal Word

WARNING

Hazard Statements

H315 - Causes skin irritation

H319 - Causes serious eye irritation

Precautionary Statements

P264 - Wash hands thoroughly after handling

P280 - Wear protective gloves/protective clothing/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

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

P337 + P313 - If eye irritation persists: Get medical advice/attention

P362 - Take off contaminated clothing and wash before reuse

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 |
|---------------------------------------|-----------|------------|----------------|---|---------------------------|
| POTASSIUM NITRATE | 231-818-8 | 7757-79-1 | 10-30 | Ox. Sol. 3 (H272) | No data available |
| AMMONIUM NITRATE | 299-347-8 | 6484-52-2 | 1-10 | Ox. Sol. 3 (H272) Eye Irrit. 2 (H319) | 01-2119490981-27-XXXX |
| POTASSIUM HYDROGENSULPHATE | 231-594-1 | 7646-93-7 | 1-10 | Skin Corr. 1B (H314) STOT SE 3 (H335) | No data available |
| COPPER DISODIUM EDTA | 237-864-5 | 14025-15-1 | 1-10 | Acute Tox. 4 (H302) Eye Irrit. 2 (H319) | No data available |
| BORIC ACID, SODIUM SALT, PENTAHYDRATE | 234-522-7 | 12046-75-2 | <1 | Repr. 2: H361d | 01-2119970731-35-XXXX |

Additional Information

For the full text of the H-, R- 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 15-20 minutes. Call a doctor if irritation persists.

Skin Contact

Immediately remove all stained or splashed clothing that is not adhering to the skin. Drench the affected skin with running water for 10 minutes or longer if substance is still on skin. Consult a doctor if necessary.

Inhalation

Remove person from exposure ensuring one's own safety while doing so. Consult a doctor if necessary.

Ingestion

Rinse mouth. Do NOT induce vomiting. Call a doctor immediately.

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

Eye bathing equipment should be available on the premises.

Section 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Suitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Cool containers / tanks with water spray.

Unsuitable extinguishing media

No information available

5.2. Special hazards arising from the substance or mixture

Toxic fumes may be released in fire situations.

Hazardous Combustion Products

Sulphur oxides, Nitrogen oxides (NOx).

5.3. Advice for firefighters

As in any fire, wear self-contained breathing apparatus and full protective gear. Wear protective clothing to prevent contact with skin and eyes.

Section 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Personal Precautions

For personal protection see section 8. Stop leak if you can do it without risk. In case of spill, avoid contact. Isolate area and keep out animals and unprotected persons. Keep people away from and upwind of spill/leak. Avoid dust formation.

For further clean-up instructions, call Emergency Hotline number listed in Section 1 "Product and Company Identification" above.

For emergency responders

Use personal protection recommended in Section 8.

6.2. Environmental precautions

Do not release to the environment.

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

Sweep up or vacuum up spillage and collect in suitable container for disposal. Equipment should contain high efficiency filter. Transfer to a closable, labeled 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**

Use only in area provided with appropriate exhaust ventilation. Avoid contact with skin, eyes and clothing. Avoid dust formation in confined areas.

Hygiene measures

Handle in accordance with good industrial hygiene and safety practice.

7.2. Conditions for safe storage, including any incompatibilities**Storage**

Keep in a dry, cool and well-ventilated place. Keep away from direct sunlight. Keep container tightly closed. Keep out of reach of children and animals. Keep away from food, drink and animal feedingstuffs. Avoid contact with water or humidity.

7.3. Specific end use(s)**Specific Use(s)**

No data available.

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 |
|--------------------------------|--|--------------------|--------|-------|---------|
| POTASSIUM NITRATE 7757-79-1 | 5 mg/m ³ (8hr TWA) (respirable dust) | - | - | - | - |

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, especially in confined areas.

Personal protective equipment

Eye/Face Protection Tightly fitting safety goggles. Provide emergency on-site eyewash.

Hand Protection Protective gloves. Impervious butyl rubber gloves. Wear chemical protective gloves made of materials such as nitrile or neoprene.

Skin and Body Protection Wear protective gloves/clothing.

Respiratory Protection The product is not likely to present an airborne exposure concern during normal handling, but in the event of a discharge of the material which produces a heavy dust, workers should put on officially approved face mask or respiratory protection.

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 | Dry powder |
| Appearance | No information available |
| Odour | Barely perceptible |
| Colour | Blue |
| Odour threshold | No information available |
| pH | No information available |
| Melting point/freezing point | No information available |
| Boiling point/boiling range | No information available |
| Flash point | No information available |
| Evaporation Rate | No information available |
| Flammability (solid, gas) | No information available |
| 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 | No information available |
| Water solubility | Soluble in water |
| Solubility in other solvents | No information available |
| Partition coefficient | No information available |
| 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 | No information available |

9.2. Other information

| | |
|------------------|--------------------------|
| Softening point | No information available |
| Molecular weight | No information available |
| VOC content (%) | No information available |
| Density | No information available |
| Bulk density | No information available |
| K _{st} | No information available |

Section 10: STABILITY AND REACTIVITY

10.1. Reactivity

None under normal use conditions

10.2. Chemical stability

Stable under recommended storage conditions.

Explosion data

Sensitivity to Mechanical Impact No information available.

Sensitivity to Static Discharge No information available.

10.3. Possibility of hazardous reactions

Hazardous polymerisation

Hazardous polymerization does not occur.

Hazardous reactions

None under normal processing. 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.

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**

| Chemical name | LD50 Oral | LD50 Dermal | Inhalation LC50 |
|---------------------------------------|---|----------------------|-------------------------|
| POTASSIUM NITRATE | 3750 mg/kg (Rat) 1901 mg/kg (Rabbit) | | |
| AMMONIUM NITRATE | >5000 mg/kg (Rat) | | > 88.8 mg/L (Rat) 4 h |
| POTASSIUM HYDROGENSULPHATE | = 2340 mg/kg (Rat) | | |
| COPPER DISODIUM EDTA | 890 mg/kg (rat) | | >5.32 mg/kg (rat) |
| BORIC ACID, SODIUM SALT, PENTAHYDRATE | 2330 mg/kg (Rat) | >2000 mg/kg (Rabbit) | >2.03 mg/L (5hr) (Rat) |

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

| | |
|--------------------------|--|
| Symptoms | <p>Skin contact: There may be irritation and redness at the site of contact.</p> <p>Eye contact: There may be irritation and redness. The eyes may water profusely.</p> <p>Ingestion: There may be soreness and redness of the mouth and throat. Nausea and stomach pain may occur. There may be vomiting.</p> <p>Inhalation: There may be irritation of the throat with a feeling of tightness in the chest.</p> <p>Delayed / immediate effects: Immediate effects can be expected after short-term exposure.</p> |
| Aspiration hazard | No information available. |

Section 12: ECOLOGICAL INFORMATION

12.1. Toxicity

| Chemical name | Toxicity to algae | Toxicity to fish | Toxicity to daphnia and other |
|---------------|-------------------|------------------|-------------------------------|
| | | | |

| | | | |
|---------------------------------------|--|--|---|
| | | | aquatic invertebrates |
| POTASSIUM NITRATE | - | 96hr LC50: 180 mg/L | 48hr EC50: 490 mg/L |
| AMMONIUM NITRATE | - | 48 h LC50: 65 - 85 mg/L (Cyprinus carpio) semi-static | - |
| BORIC ACID, SODIUM SALT, PENTAHYDRATE | (Agmenellum quadruplicatum) 10d NOEC >=100 mg.B/l (Pseudokirchneriella subcapitata) 72H EbC50 40 mg.B/l | (Pimephales promelas) 32d NOEC 11.2 mg.B/l (Pimephales promelas) 96H LC50 79.7 mg.B/l | (Daphnia magna) 21d LOEC 56 mg.B/l (Daphnia magna) 48H LC50 133 mg.B/l |

12.2. Persistence and degradability

No information available.

12.3. Bioaccumulative potential

No information available.

12.4. Mobility in soil**Mobility in soil**

No information available.

Mobility

Soluble in water.

12.5. Results of PBT and vPvB assessment

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

12.6. Other adverse effects

Negligible

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. Alternatively, the product can be incinerated, in accordance with local regulations. The diluted product and washings should be sent to a water treatment facility. Do not contaminate ponds, waterways or ditches with chemical or used containers. Do not discharge to sewer systems.

Contaminated Packaging

Clean container with water. Empty containers should be taken to an approved waste handling site for recycling or disposal. 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 | The product is not transported in bulk tankers. |

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 (United States) | DSL (Canada) | EINECS/ELINCS (Europe) | ENCS (Japan) | China (IECSC) | KECL (Korea) | PICCS (Philippines) | AICS (Australia) |
|--------------------------------|-------------------------|-----------------|---------------------------|-----------------|------------------|--------------|------------------------|---------------------|
| POTASSIUM NITRATE 7757-79-1 | X | X | X | X | X | X | X | X |
| AMMONIUM NITRATE 6484-52-2 | X | X | X | X | X | X | X | X |
| POTASSIUM | | | | | | | | |

| | | | | | | | | |
|---------------------------------------|---|---|---|---|---|---|---|---|
| HYDROGENSULPHATE 7646-93-7 | X | X | X | X | X | X | X | X |
| COPPER DISODIUM EDTA 14025-15-1 | X | X | X | X | X | X | X | X |

15.2. Chemical safety assessment

A chemical safety assessment has not been carried out for the substance or the mixture by the supplier.

Section 16: OTHER INFORMATION

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

Full text of R-phrases referred to under sections 2 and 3

Not applicable

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

H272 - May intensify fire; oxidiser
H302 - Harmful if swallowed
H314 - Causes severe skin burns and eye damage
H315 - Causes skin irritation
H319 - Causes serious eye irritation
H335 - May cause respiratory irritation
H361d - Suspected of damaging the unborn child

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: 2018-07-20

Reason for revision: Format Change.

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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