SAFETY DATA SHEET
EXCEL MULTIPHASE 2 20KG/600KG

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

1.1. Product identifier

Product name EXCEL MULTIPHASE 2 20KG/600KG

Product number I2983, I2555

REACH registration notes This mixture is exempt from REACH registration according to Regulation (EC) No. 1907/2006 (REACH). All raw materials used in the mixture are REACH registered where necessary. This product contains a SVHC (Substance of Very High Concern) that is on the REACH Regulation (EC 1907/2006) candidate list.

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

Identified uses Fertiliser

1.3. Details of the supplier of the safety data sheet

Supplier

E. Marker A/S
OKslundvej 8
DK-6330 Padborg
Denmark
+4574670808 8am - 5pm Mon - Fri +4540597467 Mobile
+4579304190
info@emarker.dk

1.4. Emergency telephone number

Emergency telephone +45 74 67 08 08 8am - 5pm Mon - Fri

National emergency telephone number 111

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical hazards Not Classified

Health hazards Not Classified

Environmental hazards Aquatic Chronic 3 - H412

2.2. Label elements

Hazard statements H412 Harmful to aquatic life with long lasting effects.

Precautionary statements P273 Avoid release to the environment.
P501 Dispose of contents/ container in accordance with national regulations.

2.3. Other hazards

This substance is not classified as PBT or vPvB according to current EU criteria.

SECTION 3: Composition/information on ingredients

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3.2. Mixtures

SSP SINGLE SUPERPHOSPHATE		**5-10%**
CAS number: 8011-76-5	EC number: 232-379-5	REACH registration number: 01-2119488967-11-0004

Classification
Eye Irrit. 2 - H319

COPPER SULPHATE		**<1%**
CAS number: 7758-99-8	EC number: 231-847-6	
M factor (Acute) = 10	M factor (Chronic) = 10	

Classification
Acute Tox. 4 - H302
Skin Irrit. 2 - H315
Eye Irrit. 2 - H319
Aquatic Acute 1 - H400
Aquatic Chronic 1 - H410

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information Get medical attention if any discomfort continues.

Inhalation Get medical attention if symptoms are severe or persist.

Ingestion Get medical attention if symptoms are severe or persist.

Skin contact Wash skin thoroughly with soap and water or use an approved skin cleanser. Get medical attention if symptoms are severe or persist after washing.

Eye contact Rinse immediately with plenty of water. Remove contact lenses, if present and easy to do. Continue rinsing. Continue to rinse for at least 10 minutes. Get medical attention if symptoms are severe or persist after washing.

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

Inhalation Dust in high concentrations may irritate the respiratory system.

Ingestion No harmful effects expected from quantities likely to be ingested by accident.

Skin contact Skin irritation should not occur when used as recommended.

Eye contact The product is considered to be a low hazard under normal conditions of use.

4.3. Indication of any immediate medical attention and special treatment needed

Notes for the doctor Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media The product is not flammable. Use fire-extinguishing media suitable for the surrounding fire.

Unsuitable extinguishing media Not applicable.

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5.2. Special hazards arising from the substance or mixture

Specific hazards Not known.

5.3. Advice for firefighters

Protective actions during firefighting Evacuate area. Cool containers exposed to heat with water spray and remove them from the fire area if it can be done without risk.

Special protective equipment for firefighters Use protective equipment appropriate for surrounding materials. Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing. Firefighter's clothing conforming to European standard EN469 (including helmets, protective boots and gloves) will provide a basic level of protection for chemical incidents.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions Avoid inhalation of dust and contact with skin and eyes. Use suitable respiratory protection if ventilation is inadequate. Wear suitable protective equipment, including gloves, goggles/face shield, respirator, boots, clothing or apron, as appropriate. Take care as floors and other surfaces may become slippery.

6.2. Environmental precautions

Environmental precautions The product is slowly degradable. Harmful to aquatic life with long lasting effects. The product contains substances which are toxic to aquatic organisms and which may cause long-term adverse effects in the aquatic environment. Avoid the spillage or runoff entering drains, sewers or watercourses. Avoid discharge to the aquatic environment. Spillages or uncontrolled discharges into watercourses must be reported immediately to the Environmental Agency or other appropriate regulatory body.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up Take care as floors and other surfaces may become slippery. Avoid generation and spreading of dust. Collect spillage with a shovel and broom, or similar and reuse, if possible. Containers with collected spillage must be properly labelled with correct contents and hazard symbol. Dispose of contents/container in accordance with national regulations. Do not empty into drains. Collect and dispose of spillage as indicated in Section 13.

6.4. Reference to other sections

Reference to other sections For personal protection, see Section 8. For waste disposal, see Section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions Read label before use. Wear appropriate clothing to prevent repeated or prolonged skin contact. Avoid inhalation of dust and contact with skin and eyes.

Advice on general occupational hygiene Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling. Wash at the end of each work shift and before eating, smoking and using the toilet.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions Store in a dry place. Keep container in a well-ventilated place. Keep out of the reach of children. Store away from incompatible materials (see Section 10).

7.3. Specific end use(s)

Specific end use(s) The identified uses for this product are detailed in Section 1.2.

SECTION 8: Exposure controls/Personal protection

8.1. Control parameters

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Occupational exposure limits

AMMONIUM SULPHATE

Long-term exposure limit (8-hour TWA): WEL Total inhalable - 10 mg/m³ Respirable - 4 mg/m³ respirable dust

UREA

Long-term exposure limit (8-hour TWA): WEL Total inhalable dust - 10 mg/m³ Respirable dust - 4 mg/m³

METHYLENE UREA (SHORT)

Long-term exposure limit (8-hour TWA): WEL 10 mg/m³ inhalable dust
Long-term exposure limit (8-hour TWA): WEL 3 mg/m³ respirable dust

METHYLENE UREA (MED)

Long-term exposure limit (8-hour TWA): WEL 10 mg/m³ inhalable dust
Long-term exposure limit (8-hour TWA): WEL 3 mg/m³ respirable dust

CALMAG MAGNESIUM OXIDE

Long-term exposure limit (8-hour TWA): WEL 10 mg/m³ inhalable dust as Mg
Long-term exposure limit (8-hour TWA): WEL 4 mg/m³ fume and respirable dust as Mg

MANGANESE SULPHATE MONOHYDRATE

Long-term exposure limit (8-hour TWA): WEL 0.5 mg/m³

BORIC ACID

Long-term exposure limit (8-hour TWA): WEL 10 mg/m³

SODIUM MOLYBDATE DIHYDRATE

Long-term exposure limit (8-hour TWA): WEL 5 mg/m³
Short-term exposure limit (15-minute): WEL 10 mg/m³
WEL = Workplace Exposure Limit.

POTASSIUM CHLORIDE (CAS: 7447-40-7)

DNEL	Workers - Dermal; Short term systemic effects: 580 mg/kg/day Workers - Dermal; Long term systemic effects: 580 mg/kg/day Workers - Inhalation; Short term systemic effects: 292 mg/m³ Workers - Inhalation; Long term systemic effects: 292 mg/m³
PNEC	Industry - Fresh water; 0.047 mg/l marine water; 0.047 mg/l

SSP SINGLE SUPERPHOSPHATE (CAS: 8011-76-5)

DNEL	Workers - Inhalation; Long term systemic effects: 3.1 mg/m³ Workers - Dermal; Long term systemic effects: 17.4 mg/kg/day General population - Inhalation; Long term systemic effects: 0.9 mg/m³ General population - Oral; Long term systemic effects: 2.1 mg/kg/day General population - Dermal; Long term systemic effects: 10.4 mg/kg/day
PNEC	Fresh water; 1.7 mg/l marine water; 0.17 mg/l Intermittent release; 17 mg/l STP; 10 mg/l

UREA (CAS: 57-13-6)

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DNEL

Workers - Dermal; Short term systemic effects: 580 mg/kg/day
Workers - Dermal; Long term systemic effects: 580 mg/kg/day
Workers - Inhalation; Short term systemic effects: 292 mg/m³
Workers - Inhalation; Long term systemic effects: 292 mg/m³
General population - Oral; Short term systemic effects: 42 mg/kg/day
General population - Oral; Long term systemic effects: 42 mg/kg/day
General population - Dermal; Short term systemic effects: 580 mg/kg/day
General population - Dermal; Long term systemic effects: 580 mg/kg/day
General population - Inhalation; Short term systemic effects: 125 mg/m³
General population - Inhalation; Long term systemic effects: 125 mg/m³

PNEC

- Fresh water; 0.047 mg/l
- marine water; 0.047 mg/l

KALI VINASSE POWDER

DNEL

Workers - Dermal; Long term systemic effects: 30 mg/kg/day
Workers - Inhalation; Long term systemic effects: 106 mg/m³

PNEC

Fresh water; 0.46 mg/l
marine water; 0.046 mg/l
Intermittent release; 0.56 mg/l
STP; 1 mg/l

DAP GRANULAR (CAS: 7783-28-0)

DNEL

Workers - Inhalation; Long term systemic effects: 6.1 mg/m³

PNEC

Fresh water; 1.7 mg/l

COPPER SULPHATE (CAS: 7758-99-8)

DNEL

Industry - Oral; Long term systemic effects: 0.041 mg/kg/day
Industry - Oral; Short term systemic effects: 0.082 mg/kg/day

ZINC SULPHATE MONOHYDRATE (CAS: 7446-20-0)

DNEL

Industry - Inhalation; Long term systemic effects: 1 mg/m³
Industry - Dermal; Long term systemic effects: 8.3 mg/kg/day
Consumer - Oral; Long term systemic effects: 0.83 mg/kg/day
Professional - Inhalation; Long term systemic effects: 1.3 mg/m³
Consumer - Dermal; Long term systemic effects: 8.3 mg/kg/day

PNEC

Fresh water; 0.0206 mg/l
marine water; 0.0061 mg/l
Sediment (Freshwater); 235.6 mg/kg
Sediment (Marinewater); 113 mg/kg
Soil; 106.8 mg/kg
STP; 0.0052 mg/l

BORIC ACID (CAS: 10043-35-3)

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DNEL	Industry - Dermal; Long term systemic effects: 68.6 mg/kg/day Industry - Inhalation; Long term systemic effects: 1.45 mg/m³ Consumer - Oral; Long term systemic effects: 0.17 mg/kg/day Consumer - Inhalation; Long term systemic effects: 0.97 mg/m³ Consumer - Oral; Short term systemic effects: 0.17 mg/kg/day Consumer - Dermal; Long term systemic effects: 34.3 mg/kg/day
PNEC	Fresh water; 1.35 mg/l marine water; 1.35 mg/l Intermittent release; 9.1 mg/l Sediment; 1.8 mg/kg Soil; 5.4 mg/kg STP; 1.75 mg/l

8.2. Exposure controls

Protective equipment

Appropriate engineering controls	All handling should only take place in well-ventilated areas.
Eye/face protection	Wear eye protection.
Hand protection	Wear protective gloves.
Other skin and body protection	Wear appropriate clothing to prevent repeated or prolonged skin contact.
Hygiene measures	Wash hands thoroughly after handling. Do not eat, drink or smoke when using this product.
Respiratory protection	No specific recommendations.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	Granules.
Colour	Beige. to Dark brown. or Black.
Odour	Mild.
Odour threshold	Not determined.
pH	Slightly acidic.
Melting point	Not relevant.
Initial boiling point and range	Not relevant.
Flash point	Not relevant.
Evaporation rate	Not relevant.
Flammability (solid, gas)	The product is not flammable.
Vapour pressure	Not relevant.
Vapour density	Not relevant.
Relative density	Not relevant.

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Solubility(ies)	Not known.
Partition coefficient	Not known.
Auto-ignition temperature	Not relevant.
Decomposition Temperature	Not relevant.
Viscosity	Not relevant.
Explosive properties	Not relevant.
Oxidising properties	Does not meet the criteria for classification as oxidising.

9.2. Other information

Other information	No information required.

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity	No test data specifically related to reactivity available for this product or its ingredients.

10.2. Chemical stability

Stability	Stable when stored in a dry place.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions	No potentially hazardous reactions known.

10.4. Conditions to avoid

Conditions to avoid	There are no known conditions that are likely to result in a hazardous situation.

10.5. Incompatible materials

Materials to avoid	Water, moisture.

10.6. Hazardous decomposition products

Hazardous decomposition products	None known.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity - oral

Notes (oral LD_{50})	No specific test data are available.

Acute toxicity - dermal

Notes (dermal LD_{50})	No specific test data are available.

Acute toxicity - inhalation

Notes (inhalation LC_{50})	No specific test data are available.

Skin corrosion/irritation

Skin corrosion/irritation	Based on available data the classification criteria are not met.

Serious eye damage/irritation

Serious eye damage/irritation	In-vitro testing conducted on products with Single Superphosphate content <62% in 2015. Result: reduced the classification to Eye Irritant 2 - H319. Test Guideline OECD 438. This result is less severe than the harmonised classification for Super Phosphates of Eye Damage 1 - H318.

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Respiratory sensitisation

Respiratory sensitisation No specific test data are available.

Skin sensitisation

Skin sensitisation Not determined. Based on available data the classification criteria are not met.

Germ cell mutagenicity

Genotoxicity - in vitro This substance has no evidence of mutagenic properties.

Carcinogenicity

Carcinogenicity No specific test data are available.

Reproductive toxicity

Reproductive toxicity - fertility Contains a small amount of Boron which is a SVHC and may damage fertility and may cause damage to the unborn child.

Specific target organ toxicity - single exposure

STOT - single exposure Not classified as a specific target organ toxicant after a single exposure.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure Not classified as a specific target organ toxicant after repeated exposure. Contains Manganese Sulphate Mono - STOT RE2 - Target Organ - Brain. Supplier information: "MnSO4 is already classified under Directive 67/548/EEC as R48/20/22 and under GHS as STOT RE2. Data exists showing some neurochemical changes at low levels after inhalation exposure for 90 days, together with locomotor changes, around 3mg/m3 concentration, suggesting that significant toxicity could occur at the 20-200 mg/m3 concentration level, which supports the current classification of STOT RE 2 for the inhalation route."

Aspiration hazard

Aspiration hazard Not anticipated to present an aspiration hazard, based on chemical structure.

SECTION 12: Ecological information

Ecotoxicity Harmful to aquatic life with long lasting effects. The product contains substances which are toxic to aquatic organisms and which may cause long-term adverse effects in the aquatic environment. Contains copper sulphate. Contains manganese sulphate monohydrate. Contains zinc sulphate monohydrate.

12.1. Toxicity

12.2. Persistence and degradability

Persistence and degradability The product is slowly degradable.

12.3. Bioaccumulative potential

Partition coefficient Not known.

12.4. Mobility in soil

Mobility No data available.

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment This product does not contain any substances classified as PBT or vPvB.

12.6. Other adverse effects

Other adverse effects Not relevant.

SECTION 13: Disposal considerations

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13.1. Waste treatment methods

General information Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

Disposal methods The generation of waste should be minimised or avoided wherever possible. Reuse or recycle products wherever possible. Only store in correctly labelled containers. Dispose of contents/container in accordance with national regulations. No specific disposal method required. Do not empty into drains.

SECTION 14: Transport information

General The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, ADR/RID).

14.1. UN number

Not applicable.

14.2. UN proper shipping name

Not applicable.

14.3. Transport hazard class(es)

No transport warning sign required.

14.4. Packing group

Not applicable.

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant
No.

14.6. Special precautions for user

Not applicable.

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

Transport in bulk according to Annex II of MARPOL 73/78 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 legislation Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (as amended).
Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (as amended).

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

SECTION 16: Other information

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Abbreviations and acronyms used in the safety data sheet

ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways.
ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.
ATE: Acute Toxicity Estimate.
CAS: Chemical Abstracts Service.
cATpE: Converted Acute Toxicity Point Estimate.
DMEL: Derived Minimal Effect Level.
DNEL: Derived No Effect Level.
EC_{50}: 50% of maximal Effective Concentration.
GHS: Globally Harmonized System.
IATA: International Air Transport Association.
ICAO: Technical Instructions for the Safe Transport of Dangerous Goods by Air.
IMDG: International Maritime Dangerous Goods.
LC_{50}: Lethal Concentration to 50 % of a test population.
LD_{50}: Lethal Dose to 50% of a test population (Median Lethal Dose).
LOAEC: Lowest Observed Adverse Effect Concentration.
LOAEL: Lowest Observed Adverse Effect Level.
LOEC: Lowest Observed Effect Concentration.
NOAEC: No Observed Adverse Effect Concentration.
NOAEL: No Observed Adverse Effect Level.
NOEC: No Observed Effect Concentration.
PBT: Persistent, Bioaccumulative and Toxic substance.
PNEC: Predicted No Effect Concentration.
REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006.
SVHC: Substances of Very High Concern.
vPvB: Very Persistent and Very Bioaccumulative.

Revision comments

NOTE: Lines within the margin indicate significant changes from the previous revision.

Revision date

01/04/2022

Revision

5

Supersedes date

15/11/2019

SDS number

20696

Hazard statements in full

H302 Harmful if swallowed.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.
H412 Harmful to aquatic life with long lasting effects.