SAFETY DATA SHEET

(REACH regulation (EC) n° 1907/2006 - n° 2020/878)

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

1.1. Product identifier

Product name : FERTI 10/40/10 + 2 MGO + OE

Product code : 0573.

UFI : DKJ1-X0ST-800Q-K77D

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

Soluble fertilizer

1.3. Details of the supplier of the safety data sheet

Registered company name : PLANTIN.

Address : Usine de la Rolande.84350.COURTHEZON.FRANCE.

Telephone : 04 90 70 20 03. Fax : .

plantin@plantin.fr

www.plantin.fr

1.4. Emergency telephone number : +33(0) 1 45 42 59 59.

Association/Organisation : INRS / ORFILA http://www.centres-antipoison.net.

SECTION 2 : HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

In compliance with EC regulation No. 1272/2008 and its amendments.

Eye irritation, Category 2 (Eye Irrit. 2, H319).

This mixture does not present a physical hazard. Refer to the recommendations regarding the other products present on the site.

This mixture does not present an environmental hazard. No known or foreseeable environmental damage under standard conditions of use.

2.2. Label elements

In compliance with EC regulation No. 1272/2008 and its amendments.

Hazard pictograms :

GHS07

Signal Word :

WARNING

Hazard statements :

H319	Causes serious eye irritation.

Precautionary statements - Prevention :

P280	Wear protective gloves/protective clothing/eye protection/face protection/hearing protection/ ...

Precautionary statements - Response :

P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337 + P313	If eye irritation persists: Get medical advice/attention.

2.3. Other hazards

In use, may form flammable/explosive dust-air mixture.

The mixture contains substances classified as 'Substances of Very High Concern' (SVHC) >= 0.1% published by the European CHemicals Agency (ECHA) under article 57 of REACH: http://echa.europa.eu/fr/candidate-list-table

The mixture fulfils neither the PBT nor the vPvB criteria for mixtures in accordance with annexe XIII of the REACH regulations EC 1907/2006.

The mixture does not contain substances> = 0.1% with endocrine disrupting properties in accordance with the criteria of the Delegated Regulation (EU) 2017/2100 of the Commission or Regulation (EU) 2018/605 of the Commission.

SECTION 3 : COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

Composition :

Identification	Classification (EC) 1272/2008	Note	%
INDEX: 016 CAS: 7778-80-5 EC: 231-915-5 REACH: 01-2119489441-34 SULFATE DE POTASSIUM	GHS07 Wng Eye Irrit. 2, H319		10 <= x % < 25
INDEX: 003 CAS: 6484-52-2 EC: 229-347-8 REACH: 01-2119490981-27 NITRATE D'AMMONIUM	GHS07, GHS03 Wng Ox. Sol. 3, H272 Eye Irrit. 2, H319	[XVII]	2.5 <= x % < 10
INDEX: 005-007-00-2 CAS: 10043-35-3 EC: 233-139-2 REACH: 01-2119486683-25 BORIC ACID	GHS08 Dgr Repr. 1B, H360FD	[1] [2] [6]	0 <= x % < 2.5
INDEX: 029_004_00_0 CAS: 7758-99-8 EC: 231-847-6 REACH: 01-2119520566-40 COPPER SULPHATE	GHS07, GHS09 Wng Acute Tox. 4, H302 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Aquatic Acute 1, H400 M Acute = 1 Aquatic Chronic 1, H410 M Chronic = 10		0 <= x % < 2.5

Specific concentration limits:

Identification	Specific concentration limits	ATE
INDEX: 003 CAS: 6484-52-2 EC: 229-347-8 REACH: 01-2119490981-27 NITRATE D'AMMONIUM	Ox. Sol. 3: H272 C>= 100%	
INDEX: 029_004_00_0 CAS: 7758-99-8 EC: 231-847-6 REACH: 01-2119520566-40 COPPER SULPHATE		oral: ATE = 300 mg/kg BW

Information on ingredients :

(Full text of H-phrases: see section 16)

[XVII] Restricted substance under Regulation (EC) No. 1907/2006 (REACH), Annex XVII.

[1] Substance for which maximum workplace exposure limits are available.

[2] Carcinogenic, mutagenic or reprotoxic (CMR) substance.

[6] Substances of very high concern (SVHC).

SECTION 4 : FIRST AID MEASURES

As a general rule, in case of doubt or if symptoms persist, always call a doctor.

NEVER induce swallowing by an unconscious person.

4.1. description of first aid measures

In the event of splashes or contact with eyes :

Wash thoroughly with fresh, clean water for 15 minutes holding the eyelids open.

If there is any redness, pain or visual impairment, consult an ophthalmologist.

In the event of splashes or contact with skin :

Watch out for any remaining product between skin and clothing, watches, shoes, etc.

In the event of swallowing :

Seek medical attention, showing the label.

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

No data available.

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

No data available.

SECTION 5 : FIREFIGHTING MEASURES

Non-flammable.

5.1. Extinguishing media

5.2. Special hazards arising from the substance or mixture

A fire will often produce a thick black smoke. Exposure to decomposition products may be hazardous to health.

Do not breathe in smoke.

5.3. Advice for firefighters

No data available.

SECTION 6 : ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Consult the safety measures listed under headings 7 and 8.

For non first aid worker

Avoid any contact with the skin and eyes.

For first aid worker

First aid workers will be equipped with suitable personal protective equipment (See section 8).

6.2. Environmental precautions

Prevent any material from entering drains or waterways.

6.3. Methods and material for containment and cleaning up

Retrieve the product by mechanical means (sweeping/vacuuming) : do not generate dust.

6.4. Reference to other sections

No data available.

SECTION 7 : HANDLING AND STORAGE

Requirements relating to storage premises apply to all facilities where the mixture is handled.

7.1. Precautions for safe handling

Always wash hands after handling.

Remove and wash contaminated clothing before re-using.

Fire prevention :

Prevent access by unauthorised personnel.

Recommended equipment and procedures :

For personal protection, see section 8.

Observe precautions stated on label and also industrial safety regulations.

Avoid eye contact with this mixture.

Prohibited equipment and procedures :

No smoking, eating or drinking in areas where the mixture is used.

7.2. Conditions for safe storage, including any incompatibilities

No data available.

Packaging

Always keep in packaging made of an identical material to the original.

7.3. Specific end use(s)

No data available.

SECTION 8 : EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Occupational exposure limits :

- ACGIH TLV (American Conference of Governmental Industrial Hygienists, Threshold Limit Values, 2010) :

CAS	TWA :	STEL :	Ceiling :	Definition :	Criteria :
10043-35-3	2 (I) mg/m3	6 (I) mg/m3		A4	

- Germany - AGW (BAuA - TRGS 900, 02/2022) :

CAS	VME :	VME :	Excess	Notes
10043-35-3		0.5 E mg/m3		2 (I)

Derived no effect level (DNEL) or derived minimum effect level (DMEL):

BORIC ACID (CAS: 10043-35-3)

Final use:	**Workers.**
Exposure method:	Dermal contact.
Potential health effects:	Long term local effects.
DNEL :	392 mg/kg body weight/day
Exposure method:	Inhalation.
Potential health effects:	Long term local effects.
DNEL :	8.3 mg of substance/m3
Final use:	**Man exposed via the environment.**
Exposure method:	Ingestion.
Potential health effects:	Short term systemic effects.
DNEL :	0.98 mg/kg body weight/day
Exposure method:	Ingestion.
Potential health effects:	Long term systemic effects.
DNEL :	0.98 mg/kg body weight/day
Exposure method:	Dermal contact.
Potential health effects:	Long term systemic effects.
DNEL :	196 mg/kg body weight/day
Exposure method:	Inhalation.
Potential health effects:	Long term systemic effects.
DNEL :	4.15 mg of substance/m3

Predicted no effect concentration (PNEC):

BORIC ACID (CAS: 10043-35-3)

Environmental compartment:	Soil.
PNEC :	5.7 mg/kg
Environmental compartment:	Fresh water.
PNEC :	2.9 mg/l
Environmental compartment:	Sea water.
PNEC :	2.9 mg/l
Environmental compartment:	Intermittent waste water.
PNEC :	13.7 mg/l
Environmental compartment:	Waste water treatment plant.
PNEC :	10 mg/l

8.2. Exposure controls

Personal protection measures, such as personal protective equipment

Pictogram(s) indicating the obligation of wearing personal protective equipment (PPE) :

Use personal protective equipment that is clean and has been properly maintained.

Store personal protective equipment in a clean place, away from the work area.

Never eat, drink or smoke during use. Remove and wash contaminated clothing before re-using. Ensure that there is adequate ventilation, especially in confined areas.

- Eye / face protection

Avoid contact with eyes.

Before handling powders or dust emission, wear mask goggles in accordance with standard EN166.

Prescription glasses are not considered as protection.

Provide eyewash stations in facilities where the product is handled constantly.

- Hand protection

Wear suitable protective gloves in the event of prolonged or repeated skin contact.

Use suitable protective gloves that are resistant to chemical agents in accordance with standard EN ISO 374-1.

Gloves must be selected according to the application and duration of use at the workstation.

Protective gloves need to be selected according to their suitability for the workstation in question : other chemical products that may be handled, necessary physical protections (cutting, pricking, heat protection), level of dexterity required.

Type of gloves recommended :

- Natural latex
- Nitrile rubber (butadiene-acrylonitrile copolymer rubber (NBR))
- PVC (polyvinyl chloride)
- Butyl Rubber (Isobutylene-isoprene copolymer)

- Body protection

Work clothing worn by personnel shall be laundered regularly.

After contact with the product, all parts of the body that have been soiled must be washed.

- Respiratory protection

Avoid inhaling dust.

Type of FFP mask :

Wear a disposable half-mask dust filter in accordance with standard EN149/A1.

SECTION 9 : PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Physical state	
Physical state :	Powder or dust.
Colour	
Unspecified	
Odour	
Odour threshold :	Not stated.
Melting point	
Melting point/melting range :	Not specified.
Freezing point	
Freezing point / Freezing range :	Not stated.
Boiling point or initial boiling point and boiling range	
Boiling point/boiling range :	Not specified.
Flammability	
Flammability (solid, gas) :	Not stated.
Lower and upper explosion limit	
Explosive properties, lower explosivity limit (%) :	Not stated.
Explosive properties, upper explosivity limit (%) :	Not stated.
Flash point	
Flash point interval :	Not relevant.
Auto-ignition temperature	
Self-ignition temperature :	Not specified.

Decomposition temperature
Decomposition point/decomposition range : Not specified.

pH
pH : Not stated.
Neutral.
pH (aqueous solution) : Not stated.

Kinematic viscosity
Viscosity : Not stated.

Solubility
Water solubility : Soluble.
Fat solubility : Not stated.

Partition coefficient n-octanol/water (log value)
Partition coefficient: n-octanol/water : Not stated.

Vapour pressure
Vapour pressure (50°C) : Not relevant.

Density and/or relative density
Density : = 1

Relative vapour density
Vapour density : Not stated.

Particle characteristics
The mixture does not contain nanoforms.

9.2. Other information
No data available.

9.2.1. Information with regard to physical hazard classes
No data available.

9.2.2. Other safety characteristics
No data available.

SECTION 10 : STABILITY AND REACTIVITY

10.1. Reactivity
No data available.

10.2. Chemical stability
This mixture is stable under the recommended handling and storage conditions in section 7.

10.3. Possibility of hazardous reactions
No data available.

10.4. Conditions to avoid
Avoid :
- formation of dusts
- frost

10.5. Incompatible materials
No data available.

10.6. Hazardous decomposition products
No data available.

SECTION 11 : TOXICOLOGICAL INFORMATION

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008
May have reversible effects on the eyes, such as eye irritation which is totally reversible by the end of observation at 21 days.

11.1.1. Substances

Acute toxicity :

COPPER SULPHATE (CAS: 7758-99-8)
Oral route : LD50 = 300 mg/kg bodyweight/day
Species : Rat

Dermal route : LD50 > 2000 mg/kg bodyweight/day

Species : Rat

NITRATE D'AMMONIUM (CAS: 6484-52-2)
Oral route : LD50 > 2000 mg/kg bodyweight/day
Species : Rat (recommended by the CLP)

Skin corrosion/skin irritation :

COPPER SULPHATE (CAS: 7758-99-8)
Irritation : Causes skin irritation.
2.3 <= Average score <= 4.0

11.1.2. Mixture

No toxicological data available for the mixture.

11.2. Information on other hazards

SECTION 12 : ECOLOGICAL INFORMATION

12.1. Toxicity

12.1.1. Substances

COPPER SULPHATE (CAS: 7758-99-8)
Fish toxicity : LC50 = 0.1 mg/l
Factor M = 1
Duration of exposure : 96 h

EC10 mg/l
Factor M = 10

Algae toxicity :

EC10 mg/l
Factor M = 10

NITRATE D'AMMONIUM (CAS: 6484-52-2)
Fish toxicity : LC50 > 100 mg/l
Duration of exposure : 96 h

12.1.2. Mixtures

No aquatic toxicity data available for the mixture.

12.2. Persistence and degradability

12.2.1. Substances

COPPER SULPHATE (CAS: 7758-99-8)
Biodegradability : no degradability data is available, the substance is considered as not degrading quickly.

NITRATE D'AMMONIUM (CAS: 6484-52-2)
Biodegradability : no degradability data is available, the substance is considered as not degrading quickly.

12.3. Bioaccumulative potential

No data available.

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

No data available.

12.6. Endocrine disrupting properties

No data available.

12.7. Other adverse effects

No data available.

SECTION 13 : DISPOSAL CONSIDERATIONS

Proper waste management of the mixture and/or its container must be determined in accordance with Directive 2008/98/EC.

13.1. Waste treatment methods

Do not pour into drains or waterways.

Waste :

Waste management is carried out without endangering human health, without harming the environment and, in particular without risk to water, air, soil, plants or animals.

Recycle or dispose of waste in compliance with current legislation, via a certified collector or company.

Do not contaminate the ground or water with waste, do not dispose of waste into the environment.

Soiled packaging :

Empty container completely. Keep label(s) on container.

Give to a certified disposal contractor.

SECTION 14 : TRANSPORT INFORMATION

Exempt from transport classification and labelling.

14.1. UN number or ID number

-

14.2. UN proper shipping name

-

14.3. Transport hazard class(es)

-

14.4. Packing group

-

14.5. Environmental hazards

-

14.6. Special precautions for user

-

14.7. Maritime transport in bulk according to IMO instruments

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SECTION 15: Regulatory information

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

Classification and labelling information included in section 2:

The following regulations have been used:

- EU Regulation No. 1272/2008 amended by EU Regulation No. 2022/692 (ATP 18)

Container information:

No data available.

Restrictions applied under Title VIII of Regulation (EC) No. 1907/2006 (REACH):

The mixture contains at least one restricted substance under Annex XVII of Regulation (EC) No. 1907/2006 (REACH): https://echa.europa.eu/substances-restricted-under-reach. Please refer to Section 3 to identify the substance involved.

Explosives precursors :

The mixture contains at least one substance subject to Regulation (EU) 2019/1148 on the marketing and use of explosives precursors:

- Ammonium nitrate (CAS 6484-52-2)

Particular provisions :

No data available.

15.2. Chemical safety assessment

No data available.

SECTION 16 : OTHER INFORMATION

Since the user's working conditions are not known by us, the information supplied on this safety data sheet is based on our current level of knowledge and on national and community regulations.

The mixture must not be used for other uses than those specified in section 1 without having first obtained written handling instructions.

It is at all times the responsibility of the user to take all necessary measures to comply with legal requirements and local regulations.

The information in this safety data sheet must be regarded as a description of the safety requirements relating to the mixture and not as a guarantee of the properties thereof.

Wording of the phrases mentioned in section 3 :

H272	May intensify fire; oxidiser.
H302	Harmful if swallowed.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H360FD	May damage fertility. May damage the unborn child.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.

Abbreviations and acronyms :

LD50 : The dose of a test substance resulting in 50% lethality in a given time period.

LC50 : The concentration of a test substance resulting in 50% lethality in a given period.

REACH : Registration, Evaluation, Authorization and Restriction of Chemical Substances.

ATE : Acute Toxicity Estimate

BW : Body Weight

DNEL : Derived No-Effect Level

PNEC : Predicted No-Effect Concentration

CMR: Carcinogenic, mutagenic or reprotoxic.

UFI : Unique formulation identifier.

STEL : Short-term exposure limit

TWA : Time Weighted Averages

TLV : Threshold Limit Value (exposure)

AEV : Average Exposure Value.

ADR : European agreement concerning the international carriage of dangerous goods by Road.

IMDG : International Maritime Dangerous Goods.

IATA : International Air Transport Association.

ICAO : International Civil Aviation Organisation

RID : Regulations concerning the International carriage of Dangerous goods by rail.

WGK : Wassergefahrdungsklasse (Water Hazard Class).

GHS07 : Exclamation mark

PBT: Persistent, bioaccumulable and toxic.

vPvB : Very persistent, very bioaccumulable.

SVHC : Substances of very high concern.