

Safety Data Sheet

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

1.1. Product identifier

Product Name Agroleaf Power Total 20-20-20+TE
Product Code: 20960315GD
Pure substance/mixture Mixture.

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

Recommended Use Fertilizer (PC12). Restricted to professional users.
Uses Advised Against: Consumer use [SU 21].

1.3. Details of the supplier of the safety data sheet

ICL Belgium N.V.
 Industrieweg 20
 2280 Grobbendonk, Belgium
 Tel. nr: +32 (0) 14 507090
 Fax nr.: +32 (0) 14 507091.

For further information, please contact: INFO-MSDS@EVERRIS.COM.

1.4. Emergency telephone number: IN CASE OF AN EMERGENCY CALL: +44 1235 239 670 (24h).

Section 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Mixture

Regulation (EC) No 1272/2008 (CLP)

This mixture is classified as not hazardous according to regulation (EC) 1272/2008 [CLP]

2.2. Label elements

This mixture is classified as not hazardous according to regulation (EC) 1272/2008 [CLP]

Signal Word: None

EU Specific Hazard Statements:

EUH210 - Safety data sheet available on request

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Chemical Name	EC-No.	CAS No	Weight %	Classification according Regulation (EC) 1272/2008 [CLP]	REACH registration number
Potassium nitrate; KNO ₃	231-818-8	7757-79-1	25 - 40%	Ox. Sol. 3 (H272)	01-2119488224-35
Copper-EDTA; Cu-EDTA	237-864-5	14025-15-1	0.1 - 1%	Eye Irrit. 2 (H319) Acute Tox. 4 (H302)	01-2119963944-23
Boric acid; H ₃ BO ₃	233-139-2	10043-35-3	0.1 - 1%	Repr. 1B (H360FD)	01-2119486683-25

Component	SVHC candidates
Boric acid; H ₃ BO ₃ 10043-35-3 (0.1 - 1%)	Present

Full text of H- and EUH-phrases: see section 16

Section 4: FIRST AID MEASURES

4.1. Description of first aid measures

General Advice:	First aid measures should be executed by trained personnel only.
Inhalation	Possible symptoms are coughing and/or dyspnoea. If not breathing, give artificial respiration. If symptoms persist, call a physician.
Skin Contact:	If skin irritation persists, call a physician.
Eye Contact:	Rinse thoroughly with plenty of water, also under the eyelids. If eye irritation persists, consult a specialist.
Ingestion:	Possible symptoms are nausea and/or vomiting. Clean mouth with water and drink afterwards plenty of water. If a person vomits when lying on his back, place him in the recovery position. Never give anything by mouth to an unconscious person. Consult a physician if necessary.

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

None under normal processing

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

None under normal processing.

Section 5: FIRE FIGHTING MEASURES

5.1. Extinguishing media

<i>Suitable Extinguishing Media:</i>	Coordinate fire extinguishing measures to fire in surrounding area. Use dry chemical, CO ₂ , water spray or "alcohol" foam.
<i>Unsuitable Extinguishing Media:</i>	High volume water jet.

5.2. Special hazards arising from the substance or mixture

Thermal decomposition can lead to release of irritating and toxic gases and vapors.

5.3. Advice for firefighters

Use extinguishing agent suitable for type of surrounding fire. In the event of fire and/or explosion do not breathe fumes. Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear.

Section 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Personal Precautions:	Sweep-up to prevent slipping hazard. Use personal protective equipment.
For Emergency Responders:	Use personal protection recommended in Section 8.

6.2. Environmental precautions

Prevent product from entering drains. Do not contaminate surface water.

6.3. Methods and material for containment and cleaning up

<i>Methods for Containment:</i>	Prevent further leakage or spillage if safe to do so.
<i>Methods for Cleanup:</i>	Sweep up and shovel.

6.4. Reference to other sections

§ 8, 12, 13.

Section 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

General hygiene considerations:

Handle in accordance with good industrial hygiene and safety practice. Use personal protection recommended in Section 8. When using, do not eat, drink or smoke.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures/storage conditions:

Keep containers dry and tightly closed to avoid moisture absorption and contamination. Keep away from food, drink and animal feeding stuffs. For quality reasons: Keep out of reach of direct sunlight, store under dry conditions, partly used packaging should be closed well. Keep at temperatures between 0 °C and 40 °C.

Packaging Materials:
LGK (Germany)

Store in original container. Store in a closed container.
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7.3. Specific end use(s)

Specific use(s)
Exposure scenario

Fertilizer; www.everris.com; Read and follow label instructions
Mixture. Not required.

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

<i>Potassium nitrate; KNO₃</i>	
Australia	> 10 mg/m ³
Bulgaria - OEL- TWAs	5.0 mg/m ³ TWA
Latvia - OEL - TWAs	5 mg/m ³ TWA
<i>Copper-EDTA; Cu-EDTA</i>	
Austria	STEL 0.4 mg/m ³ TWA: 0.1 mg/m ³
Australia	N.A.
Finland	TWA: 0.02 mg/m ³
<i>Boric acid; H₃BO₃</i>	
Australia	12 mg/m ³
Belgium - 8 Hr TWA	2 mg/m ³ TWA borate
Bulgaria - OEL- TWAs	5.0 mg/m ³ TWA (as B, listed under Boron and its inorganic compounds)
Ireland	TWA: 2 mg/m ³ STEL: 6 mg/m ³
Latvia - OEL - TWAs	10 mg/m ³ TWA
Portugal	STEL: 6 mg/m ³ TWA: 2 mg/m ³
Spain - Valores Limite Ambientales - VLE	STEL: 6 mg/m ³ TWA: 2 mg/m ³
Switzerland	STEL: 1.8 mg/m ³ TWA: 1.8 mg/m ³

Derived No Effect Level (DNEL)

Component	Oral	Dermal	Inhalation
Potassium nitrate; KNO ₃ 7757-79-1 (25 - 40%)		20.8 mg/kg bw/day	36.7 mg/m ³

Predicted No Effect Concentration (PNEC)

No data available

Component	Fresh Water	Freshwater sediment	Sea Water	Sea sediment	Soil	Impact on Sewage Treatment
Potassium nitrate; KNO ₃ 7757-79-1 (25 - 40%)	0.45 mg/l		0.045 mg/l			18 mg/l

8.2. Exposure controls

Personal protective equipment

Eye/Face Protection

Tightly fitting safety goggles

Hand protection	Nitrile rubber (0.26 mm). Break through time. > 8 h.
Respiratory Protection	In case of insufficient ventilation wear suitable respiratory equipment
Skin and body protection:	Wear suitable protective clothing
Hygiene Measures:	Follow good housekeeping practices. When using, do not eat, drink or smoke. Keep away from food, drink and animal feeding stuffs.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Physical State:	Solid
Appearance:	Crystals
Color:	light green.
Odor:	None
Bulk density:	800 - 1200 kg/m ³
pH:	4.5 (@ 200 g/l)
Melting Point/Freezing Point:	No data available
Boiling Point/Range:	Solid. Not applicable.
Flash Point:	Solid. Not applicable.
Evaporation Rate:	Solid. Not applicable.
Flammability (solid, gas):	Not flammable
Vapor Pressure:	Solid. Not applicable.
Vapour density	Solid. Not applicable.
Relative density	No data available
Water Solubility:	No data available
Solubility(ies)	No data available
Partition Coefficient:	Solid. Not applicable.
Autoignition Temperature:	No data available
Decomposition temperature:	No data available
Explosive Properties:	Doesn't present explosion hazard.
<u>9.2. Other information</u>	
VOC Content (%):	Solid. Not applicable.

Section 10: STABILITY AND REACTIVITY

10.1. Reactivity

Not reactive.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

None under normal processing. Thermal decomposition can lead to release of irritating and toxic gases and vapors.

10.4. Conditions to avoid

Keep away from open flames, hot surfaces and sources of ignition. Burning produces obnoxious and toxic fumes.

10.5. Incompatible materials

Keep away from catalysts like derivatives of hexavalent chromium and metal halides. Keep away from flammable products (fuels) like charcoal, wood, flour, soot etc.

10.6. Hazardous decomposition products

None under normal processing. Thermal decomposition can lead to release of irritating and toxic gases and vapors.

Section 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Product Information

If this product is a mixture, the classification is not based on toxicology studies for this product, but is based solely on toxicology studies for ingredients found within this product. More detailed substance and/or ingredient information may be provided in the other sections of this SDS

Information on the Likely Routes of Exposure (inhalation, ingestion, skin and eye contact):

Inhalation	Inhalation of dust in high concentration may cause irritation of respiratory system.
Eye contact	May cause slight irritation.
Skin Contact	May cause irritation.
Ingestion	May cause gastrointestinal discomfort if consumed in large amounts.

Information on Toxicological Effects

None known

Acute Toxicity**Unknown Acute Toxicity:** 0% of the mixture consists of ingredient(s) of unknown toxicity.

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Potassium nitrate; KNO ₃	= 3015 mg/kg (Rat)	> 2000 mg/kg	> 527 mg/m ³
Boric acid; H ₃ BO ₃	= 2660 mg/kg (Rat)	> 2000 mg/kg	> 0.16 mg/L (Rat) 4 h

Delayed and Immediate Effects as well as Chronic Effects from Short and Long-Term Exposure:

If this product is a mixture, the classification is not based on toxicology studies for this product, but is based solely on toxicology studies for ingredients found within this product. More detailed substance and/or ingredient information may be provided in the other sections of this SDS

Serious eye damage/eye irritation	Classification based on individual ingredients of the mixture.
Respiratory or skin sensitization	Classification based on individual ingredients of the mixture.
Germ Cell Mutagenicity	Classification based on individual ingredients of the mixture.
Carcinogenicity	Classification based on individual ingredients of the mixture.
Reproductive Toxicity	Classification based on individual ingredients of the mixture.
STOT - Single Exposure	Classification based on individual ingredients of the mixture.
STOT - Repeated Exposure	Classification based on individual ingredients of the mixture.
Aspiration Hazard	Classification based on individual ingredients of the mixture.

Section 12: ECOLOGICAL INFORMATION

12.1. Toxicity**Ecotoxicity**

Should not be released into the environment

Unknown Aquatic Toxicity

0% of the mixture consists of component(s) of unknown hazards to the aquatic environment.

Chemical Name	Algae/aquatic plants	Fish	Toxicity to Microorganisms	Crustacea
Boric acid; H ₃ BO ₃	-	1020: 72 h Carassius auratus mg/L LC50 flow-through	-	115 - 153: 48 h Daphnia magna mg/L EC50

12.2. Persistence and degradability**Persistence and Degradability:**

No persistent or cumulative effects were observed.

12.3. Bioaccumulative potential**Bioaccumulation:**

Does not bioaccumulate.

Chemical Name	LOGPOW
Boric acid; H ₃ BO ₃	-0.757

<u>12.4. Mobility in soil</u>	No data available.
<u>12.5. PBT and vPvB assessment</u>	No data available.
<u>12.6. Other adverse effects</u>	No data available.

Section 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Disposal of Wastes:	Disposal should be in accordance with applicable regional, national and local laws and regulations.
Contaminated Packaging:	Do not reuse container.
Other Information	Use up product completely. Packaging material is industrial waste.

Section 14: TRANSPORT INFORMATION

IMO / IMDG

<u>14.1</u>	
UN-No:	Not regulated
<u>14.2</u>	
Proper shipping name:	Not regulated
<u>14.3</u>	
Hazard Class:	Not regulated
<u>14.4</u>	
Packing group:	Not regulated
<u>14.5</u>	
Marine Pollutant:	No information available
<u>14.6</u>	
Special Provisions	None
<u>14.7</u>	
Bulk transport according Annex II of MARPOL and IBC Code	No data available

ADR/RID

<u>14.1</u>	
UN-No:	Not regulated
<u>14.2</u>	
Proper shipping name:	Not regulated
<u>14.3</u>	
Hazard Class:	Not regulated
<u>14.4</u>	
Packing group:	Not regulated
<u>14.5</u>	
Environmental Hazard	Not regulated
<u>14.6</u>	
Special Provisions	None

IATA

<u>14.1</u>	
UN-No:	Not regulated
<u>14.2</u>	
Proper shipping name:	Not regulated
<u>14.3</u>	
Hazard Class:	Not regulated
<u>14.4</u>	
Packing group:	Not regulated
<u>14.5</u>	
Environmental Hazard	Not regulated
<u>14.6</u>	
Special Provisions	None

Section 15: REGULATORY INFORMATION

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

Belgium

Component	Belgium - Major Accidents - Qualifying Quantities for Safety Reporting	Belgium - Major Accidents - Qualifying Quantities for Accident Prevention
Potassium nitrate; KNO ₃ 7757-79-1 (25 - 40%)	10000 tonne; 5000 tonne	5000 tonne (in cases where this dangerous substance falls within category P5a Flammable liquids or P5b Flammable liquids, then for the purposes of this Regulation the lowest qualifying quantities applies); 1250 tonne

Denmark

Denmark No data available

France

ICPE Not regulated

Germany

LGK (Germany) 13
Water Endangering Class (WGK): 1 (Everris classification)
Gefahrstoffverordnung (Germany) TRGS 511 Not regulated

Component	German WGK Section
Potassium nitrate; KNO ₃ 7757-79-1 (25 - 40%)	1
Copper-EDTA; Cu-EDTA 14025-15-1 (0.1 - 1%)	2
Boric acid; H ₃ BO ₃ 10043-35-3 (0.1 - 1%)	1

Component	EU - Explosives Precursors Marketing and Use (98/2013) - Substances Subject to Suspicious Transactions Reporting	EU - REACH (1907/2006) - Annex XVII - Restrictions on Certain Dangerous Substances
Potassium nitrate; KNO ₃ 7757-79-1 (25 - 40%)	Present	
Boric acid; H ₃ BO ₃ 10043-35-3 (0.1 - 1%)		Use restricted. See item 30.

Component	EU - REACH (1907/2006) - Article 59(1) - Candidate List of Substances for Eventual Inclusion in Annex XIV
Boric acid; H ₃ BO ₃ 10043-35-3 (0.1 - 1%)	Reason for inclusion Toxic for reproduction, Article 57c (233-139-2)

15.2 Chemical safety assessment

Substance(s) usage is covered according to Reach regulation 1907/2006

Take note of Dir. 98/24/EC on the protection of the health and safety of workers from risks related to chemical agents at work

Chemical Name	Restricted substance per REACH Annex XVII	Substance subject to authorization per REACH Annex XIV
Boric acid; H ₃ BO ₃	Use restricted. See item 30.	

Section 16: OTHER INFORMATION

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

- H360FD - May damage fertility. May damage the unborn child
- H272 - May intensify fire; oxidizer

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

RID: Regulations Concerning the International Transport of Dangerous Goods by Rail

ICAO: International Civil Aviation Organization
 ADR: 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 Harmonized System of Classification and Labeling of Chemicals
 EINECS: European Inventory of Existing Commercial Chemical Substances
 CAS: Chemical Abstracts Service (division of the American Chemical Society)
 PNEC: Predicted No Effect Concentration
 DNEL: Derived No-Effect Level
 REACH: Registration, Evaluation, Authorization of Chemicals
 CLP: EU-GHS; Classification, Labelling and Packaging
 OEL: Occupational Exposure Limit
 TWA: Time Weighted Average
 ATE: Acute Toxicity Estimate
 EUH phrase: CLP (EU) specific hazard statement
 LD50: Lethal dose, 50%.
 LC50: Lethal concentration, 50%.
 SVHC: Substance of Very High Concern.

Classification procedure

- Calculation method
- Expert judgment and weight of evidence determination

Key literature references and sources for data

According to EC Regulation 1907/2006 (Reach), Regulation EU No. 2015/830. Regulation (EC) No 1272/2008 (CLP).

Prepared by

Regulatory Affairs Department (INFO-MSDS@EVERRIS.COM)

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Restrictions on use

Restricted to professional users

Reason for revision

*** Indicates changes since the last revision. This version replaces all previous versions

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