

Safety Data Sheet (SDS)

OSHA HazCom Standard 29 CFR 1910.1200(g) revised in 2012 and GHS Rev 03.

Issue date 02/17/2022

Reviewed on 02/17/2022

1 Identification

- **Product Identifier**
- **Trade Name:** 17-5-10-180-FS, 17-5-10-270-FS, and 17-5-10-360-FS
- **Relevant identified uses of the substance or mixture and uses advised against:**
- **Product Description:** Fertilizer
- **Details of the Supplier of the Safety Data Sheet:**
- **Manufacturer/Supplier:**
Florikan ESA, LLC
6801 Energy Ct. Suite 100
Sarasota, FL 34234
Ph: 941-379-4048 ext 332
Fax: 941-377-3633
Email product info: Doug Cabe; dcabe@florikan.com
- **Emergency telephone number:** Chemtrec 1-800-424-9300 or outside USA 1-703-527-3887

www.Florikan.com

2 Hazard(s) Identification

- **Classification of the substance or mixture:**
The product does not need classification according to OSHA HazCom Standard 29 CFR paragraph (d) of §1910.1200(g) and GHS Rev 03.
- **Label elements:**
- **Hazard pictograms:** Non-Regulated Material
- **Signal word:** Non-Regulated Material
- **Hazard statements:** Non-Regulated Material
- **Unknown acute toxicity:**
This value refers to knowledge of known, established toxicological or ecotoxicological values.
7.7 % of the mixture consists of component(s) of unknown toxicity.
- **Classification system:** NFPA/HMIS Definitions: 0-Least, 1-Slight, 2-Moderate, 3-High, 4-Extreme
- **NFPA ratings (scale 0 - 4)**



- **HMIS-ratings (scale 0 - 4)**



- **Hazard(s) not otherwise classified (HNOC):** None known

3 Composition/Information on Ingredients

- **Chemical characterization: Substance**
- **Description:** Mixture of substances listed below with non-hazardous additions.

Dangerous Components:

CAS: 6484-52-2 RTECS: BR9050000	Ammonium Nitrate ⚠ Skin Irritation 2, H315; Eye Irritation 2A, H319; Specific Target Organ Toxicity - Single Exposure 3, H335	2-12%
CAS: 15708-41-5	EDTA feric sodium complex ⚠ Acute Toxicity - Inhalation 4, H332; Specific Target Organ Toxicity - Single Exposure 3, H335	≤2.5%

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Trade Name: 17-5-10-180-FS, 17-5-10-270-FS, and 17-5-10-360-FS

CAS: 7446-19-7 RTECS: ZH 5300000	Zinc sulfate monohydrate ☠ Eye Damage 1, H318; ☠ Aquatic Acute 1, H400; ☠ Acute Toxicity - Oral 4, H302	≤2.5%
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• **Additional information:**

The exact percentages of the ingredients of this mixture are considered to be proprietary and are withheld in accordance with the provisions of paragraph (i) of §1910.1200 of 29 CFR 1910.1200 Trade Secrets.

4 First-Aid Measures

• **Description of first aid measures**

• **General information:** If symptoms persist, call a physician.

• **After inhalation:**

Supply fresh air. If required, provide artificial respiration. Consult doctor if symptoms persist.

In case of unconsciousness place patient stably in the side position for transportation.

• **After skin contact:**

Generally, the product does not irritate the skin.

Wash with soap and water.

If skin irritation occurs, consult a doctor.

• **After eye contact:**

If eye irritation occurs, consult a doctor.

Rinse opened eye for several minutes under running water.

• **After swallowing:** If swallowed and symptoms occur, consult a doctor.

• **Information for doctor**

• **Most important symptoms and effects, both acute and delayed:** No further relevant information available.

• **Indication of any immediate medical attention and special treatment needed:**

No further relevant information available.

5 Fire-Fighting Measures

• **Extinguishing media**

• **Suitable extinguishing agents:** Use fire fighting measures that suit the environment.

• **For safety reasons unsuitable extinguishing agents:** No further relevant information.

• **Special hazards arising from the substance or mixture:** No further relevant information available.

• **Advice for firefighters**

• **Special protective equipment for firefighters:**

As in any fire, wear self-contained breathing apparatus pressure-demand (NIOSH approved or equivalent) and full protective gear to prevent contact with skin and eyes.

6 Accidental Release Measures

• **Personal precautions, protective equipment and emergency procedures:** Not required.

• **Environmental precautions:** No special measures required.

• **Methods and material for containment and cleaning up:**

Dispose of contaminated material as waste according to section 13.

Ensure adequate ventilation.

Dispose of the collected material according to regulations.

• **Reference to other sections:**

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

• **PAC-1:**

7778-80-5 Potassium Sulfate

20 mg/m³

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6484-52-2	Ammonium Nitrate	6.7 mg/m ³
7757-79-1	Potassium Nitrate	9 mg/m ³
1303-96-4	Disodium tetraborate, decahydrate	6 mg/m ³
· PAC-2:		
7778-80-5	Potassium Sulfate	220 mg/m ³
6484-52-2	Ammonium Nitrate	73 mg/m ³
7757-79-1	Potassium Nitrate	100 mg/m ³
1303-96-4	Disodium tetraborate, decahydrate	190 mg/m ³
· PAC-3:		
7778-80-5	Potassium Sulfate	1,300 mg/m ³
6484-52-2	Ammonium Nitrate	440 mg/m ³
7757-79-1	Potassium Nitrate	600 mg/m ³
1303-96-4	Disodium tetraborate, decahydrate	1,100 mg/m ³

7 Handling and Storage

- **Handling**
- **Precautions for safe handling:**
Avoid creating and breathing dust/fume/gas/mist/vapors/spray.
Ensure good ventilation/exhaustion at the workplace.
- **Information about protection against explosions and fires:** No special measures required.
- **Conditions for safe storage, including any incompatibilities**
- **Storage**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** Keep receptacle tightly sealed.
- **Specific end use(s):** No further relevant information available.

8 Exposure Controls/Personal Protection

- **Additional information about design of technical systems:** No further data; see section 7.
- **Control parameters:**
- **Components with occupational exposure limits:**
The following constituent is the only constituent of the product which has a PEL, TLV or other recommended exposure limit.
At this time, the other constituents have no known exposure limits.

15708-41-5 EDTA feric sodium complex

STEL	Short-term value: 10 mg/m ³
TWA	Short-term value: 10 mg/m ³

- **Additional information:** The lists that were valid during the creation of this SDS were used as basis.
- **Exposure controls:**
- **Personal protective equipment**
- **General protective and hygienic measures:**
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing and wash before reuse.
Wash hands before breaks and at the end of work.
- **Breathing equipment:** Not required.
- **Protection of hands:** Protective gloves recommended in manufacturing.

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- **Material of gloves:** Not applicable.
- **Penetration time of glove material:** Not applicable.
- **Eye protection:** Not required.
- **Limitation and supervision of exposure into the environment:** None

9 Physical and Chemical Properties

· Information on basic physical and chemical properties

· General Information

· Appearance:

Form:

Granulate

Color:

Whitish

· **Odor:**

Slight

· **Odor threshold:**

Not determined.

· **pH-value:**

Not determined.

· Change in condition

Melting point/Melting range:

Not determined.

· **Flash point:**

None

· **Flammability (solid, gaseous):**

Not determined.

· **Ignition temperature:**

Not applicable

· **Decomposition temperature:**

Not determined.

· **Auto igniting:**

Product is not self-igniting.

· **Danger of explosion:**

Product does not present an explosion hazard.

· Explosion limits:

Lower:

Not determined.

Upper:

Not determined.

· **Vapor pressure:**

Not applicable.

· **Density @ 20 °C (68 °F):**

1.1092 g/cm³ (9.2563 lbs/gal)

· **Bulk density:**

1,109.2 kg/m³

· **Relative density:**

Not determined.

· **Vapor density:**

Not applicable.

· **Evaporation rate:**

Not applicable.

· Solubility in / Miscibility with:

Water:

Fully miscible.

Soluble.

· **Partition coefficient (n-octanol/water):** Not determined.

· Viscosity:

Dynamic:

Not applicable.

Kinematic:

Not applicable.

· Solvent content:

VOC content:

0.00 %

· Other information:

No further relevant information available.

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10 Stability and Reactivity

- **Reactivity:** No further relevant information available.
- **Chemical stability:** Product is stable under normal conditions.
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions:** No dangerous reactions known.
- **Conditions to avoid:** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known.

11 Toxicological Information

- **Information on toxicological effects:**
- **Acute toxicity:**

- **LD/LC50 values that are relevant for classification:**

7778-80-5 Potassium Sulfate

Oral	LD50	6,600 mg/kg (Rat)
Inhalative	LC50/96 hours	680 mg/l (Pimephales)

6484-52-2 Ammonium Nitrate

Oral	LD50	2,217 mg/kg (Rat)
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15708-41-5 EDTA feric sodium complex

Oral	LD50	>2,000 mg/kg (Rat)
Dermal	LD50	>2,000 mg/kg (Rat)
Inhalative	LC50/4 h	>2.75 mg/l (Rat)
	LC50/96 hours	>100 mg/l (Trout)

7446-19-7 Zinc sulfate monohydrate

Oral	LD50	2,150 mg/kg (Rat)
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- **Primary irritant effect:**
- **On the skin:** Irritant to skin and mucous membranes.
- **On the eye:** No irritating effect.
- **Additional toxicological information:**
The product shows the following dangers according to internally approved calculation methods for preparations:
Irritant

- **Carcinogenic categories:**

- **IARC (International Agency for Research on Cancer):**

None of the ingredients are listed.

- **NTP (National Toxicology Program):**

None of the ingredients are listed.

- **OSHA-Ca (Occupational Safety & Health Administration):**

None of the ingredients are listed.

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12 Ecological Information

· **Toxicity:**

· **Aquatic toxicity:**

15708-41-5 EDTA feric sodium complex

EC50 100.9 mg/l (Daphnia)

· **Persistence and degradability:** No further relevant information available.

· **Behavior in environmental systems:**

· **Bioaccumulative potential:** No further relevant information available.

· **Mobility in soil:** No further relevant information available.

· **Additional ecological information:**

· **General notes:**

Do not allow undiluted product or product that has not been neutralized to reach ground water, water course or sewage system.

· **Results of PBT and vPvB assessment:**

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

· **Other adverse effects:** No further relevant information available.

13 Disposal Considerations

· **Waste treatment methods**

· **Recommendation:**

Observe all federal, state and local environmental regulations when disposing of this material.

· **Uncleaned packaging**

· **Recommendation:** Disposal must be made according to official regulations.

· **Recommended cleansing agent:** Water, if necessary with cleansing agents.

14 Transport Information

· **UN-Number:**

· **DOT, ADR/ADN, IMDG, IATA**

Non-Regulated Material

· **UN proper shipping name:**

· **DOT, ADR/ADN, IMDG, IATA**

Non-Regulated Material

· **Transport hazard class(es):**

· **DOT, ADR/ADN, ADN, IMDG, IATA**

· **Class:**

Non-Regulated Material

· **Packing group:**

· **DOT, ADR/ADN, IMDG, IATA**

Non-Regulated Material

· **Environmental hazards:**

Not applicable.

· **Special precautions for user:**

Not applicable.

· **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code:**

Not applicable.

· **UN "Model Regulation":**

Non-Regulated Material

15 Regulatory Information

· **Safety, health and environmental regulations/legislation specific for the substance or mixture:**

No further relevant information available.

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· **SARA (Superfund Amendments and Reauthorization):**

· **Section 355 (extremely hazardous substances):**

None of the ingredients are listed.

· **Section 313 (Specific toxic chemical listings):**

6484-52-2 Ammonium Nitrate

7757-79-1 Potassium Nitrate

7446-19-7 Zinc sulfate monohydrate

· **TSCA (Toxic Substances Control Act):**

7778-80-5	Potassium Sulfate	ACTIVE
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6484-52-2	Ammonium Nitrate	ACTIVE
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15708-41-5	EDTA feric sodium complex	ACTIVE
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1332-58-7	Kaolin	ACTIVE
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7732-18-5	Water, distilled water, deionized water	ACTIVE
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7757-79-1	Potassium Nitrate	ACTIVE
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1303-96-4	Disodium tetraborate, decahydrate	ACTIVE
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· **Hazardous Air Pollutants**

None of the ingredients are listed.

· **California Proposition 65:**

· **Chemicals known to cause cancer:**

None of the ingredients are listed.

· **Chemicals known to cause reproductive toxicity for females:**

None of the ingredients are listed.

· **Chemicals known to cause reproductive toxicity for males:**

None of the ingredients are listed.

· **Chemicals known to cause developmental toxicity:**

None of the ingredients are listed.

· **New Jersey Right-to-Know List:**

6484-52-2 Ammonium Nitrate

1332-58-7 Kaolin

7757-79-1 Potassium Nitrate

· **New Jersey Special Hazardous Substance List:**

6484-52-2	Ammonium Nitrate	R3
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· **Pennsylvania Right-to-Know List:**

6484-52-2 Ammonium Nitrate

1332-58-7 Kaolin

7757-79-1 Potassium Nitrate

1303-96-4 Disodium tetraborate, decahydrate

· **Pennsylvania Special Hazardous Substance List:**

6484-52-2	Ammonium Nitrate	E
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· **Carcinogenic categories:**

· **EPA (Environmental Protection Agency):**

7446-19-7	Zinc sulfate monohydrate	D, I, II
1303-96-4	Disodium tetraborate, decahydrate	I (oral)

· **TLV (Threshold Limit Value established by ACGIH):**

1332-58-7	Kaolin	2 mg/m ³
1303-96-4	Disodium tetraborate, decahydrate	A4

· **NIOSH-Ca (National Institute for Occupational Safety and Health):**

None of the ingredients are listed.

- **GHS label elements** Non-Regulated Material
- **Hazard pictograms:** Non-Regulated Material
- **Signal word:** Non-Regulated Material
- **Hazard statements:** Non-Regulated Material

· **National regulations:**

The product is not subject to be labelled according with the prevailing version of the regulations on hazardous substances.

- **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

16 Other Information

The information and recommendations in this safety data sheet are, to the best of our knowledge, accurate as of the date of issue. Nothing herein shall be deemed to create warranty, expressed or implied, and shall not establish a legally valid contractual relationship. It is the responsibility of the user to determine applicability of this information and the suitability of the material or product for any particular purpose.

· **Contact:**

- **Date of last revision/ revision number:** 02/17/2022 / -

· **Abbreviations and acronyms:**

ADR: The European Agreement concerning the International Carriage of Dangerous Goods by Road
 ADN: The European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
 IMDG: International Maritime Code for Dangerous Goods
 DOT: US Department of Transportation
 IATA: International Air Transport Association
 EINECS: European Inventory of Existing Commercial Chemical Substances
 ELINCS: European List of Notified Chemical Substances
 CAS: Chemical Abstracts Service (division of the American Chemical Society)
 NFPA: National Fire Protection Association (USA)
 HMIS: Hazardous Materials Identification System (USA)
 VOC: Volatile Organic Compounds (USA, EU)
 LC50: Lethal concentration, 50 percent
 LD50: Lethal dose, 50 percent
 PBT: Persistent, Bioaccumulative and Toxic
 vPvB: very Persistent and very Bioaccumulative
 NIOSH: National Institute for Occupational Safety and Health
 OSHA: Occupational Safety & Health Administration
 TLV: Threshold Limit Value
 PEL: Permissible Exposure Limit
 REL: Recommended Exposure Limit
 Acute Toxicity - Inhalation 4: Acute toxicity – Category 4
 Skin Irritation 2: Skin corrosion/irritation – Category 2
 Eye Damage 1: Serious eye damage/eye irritation – Category 1
 Eye Irritation 2A: Serious eye damage/eye irritation – Category 2A
 Specific Target Organ Toxicity - Single Exposure 3: Specific target organ toxicity (single exposure) – Category 3
 Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1

- *** Data compared to the previous version altered.**

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