

Safety Data Sheet (SDS)

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

Issue date 03/15/2016

Reviewed on 03/15/2016

1 Identification

- **Product Identifier**
- **Trade name:** 17-3-9
- **Relevant identified uses of the substance or mixture and uses advised against:**
- **Product Description** PC12 Fertilizers
- **Details of the Supplier of the Safety Data Sheet:**
- **Manufacturer/Supplier:**
Florikan ESA, LLC
6801 Energy Ct.
Suite 100
Sarasota, FL. 34240
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:**



GHS08 Health hazard

Repr. 1 H360 May damage fertility or the unborn child.

- **Label elements:**
- **GHS label elements**
The product is classified and labeled according to the Globally Harmonized System (GHS).
- **Hazard pictograms:**



GHS08

- **Signal word:** Danger
- **Hazard statements:**
H360 May damage fertility or the unborn child.
- **Precautionary statements:**
P280 Wear protective gloves / eye protection / face protection.
P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P308+P313 IF exposed or concerned: Get medical advice/attention.
P405 Store locked up.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.
- **Unknown acute toxicity:**
6 % of the mixture consists of component(s) of unknown toxicity.
- **Classification system:**
- **NFPA ratings (scale 0 - 4)**

Health = 0
Fire = 0
Reactivity = 0

(Contd. on page 2)

Safety Data Sheet (SDS)

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

Issue date 03/15/2016

Reviewed on 03/15/2016

Trade name: 17-3-9

· **HMIS-ratings (scale 0 - 4)**

HEALTH	1	Health = 1
FIRE	0	Fire = 0
REACTIVITY	0	Reactivity = 0

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

3 Composition/Information on Ingredients

· **Chemical characterization: Mixtures**

· **Description:** Mixture: consisting of non-regulated material.

· **Dangerous Components:**

CAS: 6484-52-2 RTECS: BR9050000	Ammonium Nitrate ☞ Ox. Sol. 3, H272; ☞ Skin Irrit. 2, H315; Eye Irrit. 2A, H319; STOT SE 3, H335	25-50%
CAS: 7487-88-9 RTECS: OM 4500000	Magnesium Sulphate ☞ STOT SE 3, H335	15-35%
CAS: 7722-76-1	Ammonium phosphate monobasic ☞ Skin Irrit. 2, H315; STOT SE 3, H335; Eye Irrit. 2B, H320	5-10%
CAS: 14807-96-6 RTECS: WW2710000	Talc (Mg ₃ H ₂ (SiO ₃) ₄) not containing asbestos or asbestiform fibres	2-12%
CAS: 60-00-4 RTECS: AH 4375000	Edetic acid ☞ Eye Irrit. 2A, H319	≤ 2.5%
CAS: 14807-96-6	Talc ☞ Acute Tox. 4, H302; Skin Irrit. 2, H315; STOT SE 3, H335; Eye Irrit. 2B, H320	≤ 2.5%
CAS: 7720-78-7 RTECS: NO 8510000	iron(II) sulfate ☞ Acute Tox. 4, H302; Skin Irrit. 2, H315; Eye Irrit. 2A, H319	≤ 2.5%
CAS: 10043-35-3 RTECS: ED 4550000	Boric Acid ☞ Repr. 1B, H360	≤ 2.5%

4 First-Aid Measures

· **Description of first aid measures:**

· **After inhalation:** Supply fresh air; consult doctor in case of complaints.

· **After skin contact:** Generally the product does not irritate the skin.

· **After eye contact:** 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:**

CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

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

(Contd. on page 3)

Safety Data Sheet (SDS)

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

Issue date 03/15/2016

Reviewed on 03/15/2016

Trade name: 17-3-9

· **Advice for firefighters:**

· **Protective equipment:**

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:** Do not allow to enter sewers/surface or ground water.

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

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.

7 Handling and Storage

· **Handling**

· **Precautions for safe handling:** No special precautions are necessary if used correctly.

· **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:** None.

· **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 constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit.

At this time, the other constituents have no known exposure limits.

14807-96-6 Talc (Mg₃H₂(SiO₃)₄) not containing asbestos or asbestiform fibres

PEL Long-term value: 20 mppcf ppm
(containing <1% Quartz)

REL Long-term value: 2* mg/m³
*respirable dust; and <1% Quartz

TLV Long-term value: 2* mg/m³
*as respirable fraction; E

14807-96-6 Talc

PEL Long-term value: 20 mppcf ppm
(containing <1% Quartz)

REL Long-term value: 2* mg/m³
*respirable dust; and <1% Quartz

TLV Long-term value: 2* mg/m³
*as respirable fraction; E

(Contd. on page 4)

Safety Data Sheet (SDS)

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

Issue date 03/15/2016

Reviewed on 03/15/2016

Trade name: 17-3-9

7720-78-7 iron(II) sulfate

REL Long-term value: 1 mg/m³
as Fe

TLV Long-term value: 1 mg/m³
as Fe

10043-35-3 Boric Acid

TLV Short-term value: 6* mg/m³
Long-term value: 2* mg/m³
*as inhalable fraction

· **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:** Wash hands before breaks and at the end of work.

· **Breathing equipment:** Not required.

· **Protection of hands:** Not required.

· **Material of gloves:** Not required.

· **Penetration time of glove material:** Not applicable.

· **Eye protection:** Not required.

9 Physical and Chemical Properties

· **Information on basic physical and chemical properties**

· **General Information**

· **Appearance:**

Form:

Granulate

Color:

Grey

· **Odor:**

Slight

· **Odor threshold:**

Not determined.

· **pH-value:**

Not applicable.

· **Change in condition**

Melting point/Melting range:

Not determined.

Boiling point/Boiling range:

210 °C (410 °F)

· **Flash point:**

None

· **Flammability (solid, gaseous):**

Not determined.

· **Ignition temperature:**

Not determined.

· **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:**

Relative density:

Not determined.

Vapor density:

Not applicable.

(Contd. on page 5)

Safety Data Sheet (SDS)

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

Issue date 03/15/2016

Reviewed on 03/15/2016

Trade name: 17-3-9

- **Evaporation rate:** Not applicable.
- **Solubility in / Miscibility with:**
 - **Water:** Soluble.
 - **Partition coefficient (n-octanol/water):** Not determined.
 - **Viscosity:**
 - **Dynamic:** Not applicable.
 - **Kinematic:** Not applicable.
 - **Solvent content:**
 - **Organic solvents:** 0.0 %
 - **Solids content:** 100.0 %
 - **Other information:** No further relevant information available.

10 Stability and Reactivity

- **Reactivity:** No further relevant information available.
- **Chemical stability:** 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:**

6484-52-2 Ammonium Nitrate

Oral	LD50	2217 mg/kg (rat)
------	------	------------------

7778-80-5 Potassium Sulfate

Oral	LD50	6600 mg/kg (rat)
Inhalative	LC50/96 hours	680 mg/l (Pimephales)

7487-88-9 Magnesium Sulphate

Oral	LD50	>2000 mg/kg (rat)
Inhalative	LC50/4 h	>2000 mg/l (rabbit)
	LC50/96 hours	2820 mg/l (Pimephales)

7722-76-1 Ammonium phosphate monobasic

Oral	LD50	5750 mg/kg (rat)
Dermal	LD50	7640 mg/kg (rabbit)

60-00-4 Edetic acid

Oral	LD50	4500 mg/kg (rat)
------	------	------------------

7720-78-7 iron(II) sulfate

Oral	LD50	1520 mg/kg (mouse)
------	------	--------------------

10043-35-3 Boric Acid

Oral	LD50	2660 mg/kg (rat)
------	------	------------------

(Contd. on page 6)

Safety Data Sheet (SDS)

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

Issue date 03/15/2016

Reviewed on 03/15/2016

Trade name: 17-3-9

- **Primary irritant effect:**
- **On the skin:** No irritating effect.
- **On the eye:** No irritating effect.
- **Additional toxicological information:**
- **Carcinogenic categories:**
- **IARC (International Agency for Research on Cancer):**
 - Group 1 - Carcinogenic to humans
 - Group 2A - Probably carcinogenic to humans
 - Group 2B - Possibly carcinogenic to humans
 - Group 3 - Not classifiable as to its carcinogenicity to humans
 - Group 4 - Probably not carcinogenic to humans

14807-96-6	Talc (Mg ₃ H ₂ (SiO ₃) ₄) not containing asbestos or asbestiform fibres	2B
14807-96-6	Talc	2B
69012-64-2	Silica-Amorphous Silica fume	3

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

None of the ingredients are listed.
- **OSHA-Ca (Occupational Safety & Health Administration):**

None of the ingredients are listed.

12 Ecological Information

- **Toxicity:**
- **Aquatic toxicity:**

7487-88-9 Magnesium Sulphate

EC50	2700 mg/l (Green algae)
	343.56 mg/l (Water flea)

- **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 packagings**
- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleansing agent:** Water, if necessary with cleansing agents.

(Contd. on page 7)

Safety Data Sheet (SDS)

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

Issue date 03/15/2016

Reviewed on 03/15/2016

Trade name: 17-3-9

14 Transport Information

- **UN-Number:**
- **DOT, ADR, IMDG, IATA** Non-Regulated Material
- **UN proper shipping name:**
- **DOT, ADR, IMDG, IATA** Non-Regulated Material
- **Transport hazard class(es):**
- **DOT, ADR, IMDG, IATA**
- **Class:** Non-Regulated Material
- **Packing group:**
- **DOT, ADR, 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:**
- **SARA (Superfund Amendments and Reauthorization):**

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

7720-78-7 iron(II) sulfate

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

6484-52-2 Ammonium Nitrate

7783-20-2 Ammonium Sulfate

10034-96-5 Manganese(II) Sulfate Monohydrate

7758-99-8 Copper Sulfate Pentahydrate

7733-02-0 Zinc Sulphate (anhydrous)

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

6484-52-2 Ammonium Nitrate

7778-80-5 Potassium Sulfate

7487-88-9 Magnesium Sulphate

7722-76-1 Ammonium phosphate monobasic

14807-96-6 Talc (Mg₃H₂(SiO₃)₄) not containing asbestos or asbestiform fibres

60-00-4 Edetic acid

7757-93-9 Calcium Phosphate, dibasic

14807-96-6 Talc

7720-78-7 iron(II) sulfate

7783-20-2 Ammonium Sulfate

69012-64-2 Silica-Amorphous Silica fume

15708-41-5 EDTA feric sodium complex

10043-35-3 Boric Acid

25791-96-2 Poly(oxypropylene) triol

7758-99-8 Copper Sulfate Pentahydrate

(Contd. on page 8)

Safety Data Sheet (SDS)

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

Issue date 03/15/2016

Reviewed on 03/15/2016

Trade name: 17-3-9

• **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

14807-96-6 Talc (Mg₃H₂(SiO₃)₄) not containing asbestos or asbestiform fibres

60-00-4 Edetic acid

14807-96-6 Talc

7720-78-7 iron(II) sulfate

13397-24-5 Gypsum (Calcium sulfate)

69012-64-2 Silica-Amorphous Silica fume

7733-02-0 Zinc Sulphate (anhydrous)

1332-58-7 Kaolin

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

6484-52-2 Ammonium Nitrate

R3

14807-96-6 Talc (Mg₃H₂(SiO₃)₄) not containing asbestos or asbestiform fibres

CA

14807-96-6 Talc

CA

• **Pennsylvania Special Hazardous Substance List:**

6484-52-2 Ammonium Nitrate

E

60-00-4 Edetic acid

E

7720-78-7 iron(II) sulfate

E

7783-20-2 Ammonium Sulfate

E

7733-02-0 Zinc Sulphate (anhydrous)

E

• **Carcinogenic categories:**

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

10034-96-5 Manganese(II) Sulfate Monohydrate

D

10043-35-3 Boric Acid

I (oral)

7733-02-0 Zinc Sulphate (anhydrous)

D, I, II

1319-33-1 Boron

I

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

14807-96-6 Talc (Mg₃H₂(SiO₃)₄) not containing asbestos or asbestiform fibres

A4

14807-96-6 Talc

A4

10043-35-3 Boric Acid

A4

1332-58-7 Kaolin

2 mg/m³

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

None of the ingredients are listed.

(Contd. on page 9)

Safety Data Sheet (SDS)

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

Issue date 03/15/2016

Reviewed on 03/15/2016

Trade name: 17-3-9

• **GHS label elements**

The product is classified and labeled according to the Globally Harmonized System (GHS).

• **Hazard pictograms:**



GHS08

• **Signal word:** Danger

• **Hazard statements:**

H360 May damage fertility or the unborn child.

• **Precautionary statements:**

P280 Wear protective gloves / eye protection / face protection.

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read and understood.

P308+P313 IF exposed or concerned: Get medical advice/attention.

P405 Store locked up.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

• **National regulations:**

The product is subject to be classified according with the latest 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.

• **Date of preparation / last revision:** 03/15/2016 / -

• **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

ACGIH: American Conference of Governmental Industrial Hygienists

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)

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

OSHA: Occupational Safety & Health

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit

Ox. Sol. 3: Oxidising Solids, Hazard Category 3

Acute Tox. 4: Acute toxicity, Hazard Category 4

Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2

Eye Irrit. 2A: Serious eye damage/eye irritation, Hazard Category 2A

Eye Irrit. 2B: Serious eye damage/eye irritation, Hazard Category 2B

Repr. 1: Reproductive toxicity, Hazard Category 1

(Contd. on page 10)

Safety Data Sheet (SDS)

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

Issue date 03/15/2016

Reviewed on 03/15/2016

Trade name: 17-3-9

Repr. 1B: Reproductive toxicity, Hazard Category 1B

STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3

· *** Data compared to the previous version altered.**SDS created by MSDS Authoring Services www.msdsauthoring.com +1-877-204-9106