

Safety Data Sheet (SDS)

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

Issue date 11/16/2015

Reviewed on 11/16/2015

1 Identification

- **Product Identifier**
- **Trade name: 18-6-11-150**
- **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
 Young Living
 3125 West Executive Parkway
 Lehi, UT 84043
 (801) 418-8900 (product info)
- **Emergency telephone number:**
 Chemtrec 1-800-424-9300 or outside USA 1-703-527-3887
 Chemtrec (US): (800) 424-9300
 Chemtrec (Outside US): (703) 527-3887 (Collect calls accepted)

www.Florikan.com

www.youngliving.com

2 Hazard(s) Identification

- **Classification of the substance or mixture:**
 Aquatic Acute 3 H402 Harmful to aquatic life.
 Aquatic Chronic 3 H412 Harmful to aquatic life with long lasting effects.
- **Label elements:**
- **GHS label elements**
 The product is classified and labeled according to the Globally Harmonized System (GHS).
- **Hazard pictograms:** Non-Regulated Material
- **Signal word:** Non-Regulated Material
- **Hazard statements:**
 Harmful to aquatic life.
 Harmful to aquatic life with long lasting effects.
- **Precautionary statements:**
 Avoid release to the environment.
 Dispose of contents/container in accordance with local/regional/national/international regulations.
- **Unknown acute toxicity:**
 21.8 % of the mixture consists of component(s) of unknown toxicity.
- **Classification system:**
- **NFPA ratings (scale 0 - 4)**



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

HEALTH	2	Health = 2
FIRE	0	Fire = 0
REACTIVITY	0	Reactivity = 0

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

3 Composition/Information on Ingredients

- **Chemical characterization: Mixtures**
- **Description:** Mixture: consisting of the following components.

- **Dangerous Components:**

CAS: 57-13-6 RTECS: YR 6250000	Urea	25-50%
CAS: 1309-48-4	Magnesium Oxide	2-12%
	☞ Skin Irrit. 2, H315; Eye Irrit. 2A, H319; STOT SE 3, H335	
CAS: 7720-78-7 RTECS: NO 8510000	iron(II) sulfate	2-12%
	☞ Acute Tox. 4, H302; Skin Irrit. 2, H315; Eye Irrit. 2A, H319	
CAS: 7758-99-8 RTECS: GL 8800000	Copper Sulfate Pentahydrate	≤ 2.5%
	☞ Aquatic Acute 1, H400; Aquatic Chronic 1, H410; ☞ Acute Tox. 4, H302; Skin Irrit. 2, H315; Eye Irrit. 2, H319	
CAS: 7733-02-0	Zinc Sulphate (anhydrous)	≤ 2.5%
	☞ Eye Dam. 1, H318; ☞ Aquatic Acute 1, H400; Aquatic Chronic 1, H410; ☞ Acute Tox. 4, H302	
CAS: 1314-13-2 RTECS: ZH 4810000	Zinc Oxide	≤ 2.5%
	☞ Aquatic Acute 1, H400; Aquatic Chronic 1, H410	
CAS: 14977-38-8	Sulfate of Potash Magnesia	15-35%
	☞ Skin Irrit. 2, H315; STOT SE 3, H335; Eye Irrit. 2B, H320	
CAS: 7487-88-9 RTECS: OM 4500000	Magnesium Sulphate	2-12%
	☞ STOT SE 3, H335	

4 First-Aid Measures

- **Description of first aid measures:**
- **General information:**
Symptoms of poisoning may occur after exposure to dust, fumes or particulates; seek medical attention if feeling unwell.
- **After inhalation:**
Supply fresh air. If required, provide artificial respiration. Consult doctor if symptoms persist.
In case of unconsciousness place patient stably in side position for transportation.
- **After skin contact:**
Generally the product does not irritate the skin.
If skin irritation occurs, consult a doctor.
- **After eye contact:**
Rinse opened eye for several minutes under running water.
If eye irritation occurs, consult a doctor.
- **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.

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- **Special hazards arising from the substance or mixture:** No further relevant information available.
- **Advice for firefighters:**
- **Protective equipment:**
Mouth respiratory protective device.
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:**
Inform respective authorities in case of seepage into water course or sewage system.
Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up:**
Dispose 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.

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:** No further relevant information available..
- **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:

57-13-6 Urea

WEEL Long-term value: 10 mg/m³

1309-48-4 Magnesium Oxide

PEL Long-term value: 15* mg/m³
fume; *total particulate

TLV Long-term value: 10* mg/m³
*as inhalable fraction

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7720-78-7 iron(II) sulfate	
REL	Long-term value: 1 mg/m ³ as Fe
TLV	Long-term value: 1 mg/m ³ as Fe

- **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.
Wash hands before breaks and at the end of work.
- **Breathing equipment:** Use suitable respiratory protective device in case of insufficient ventilation.
- **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:** Whitish
- **Odor:** Slight
- **Odor threshold:** Not determined.
- **pH-value:** Not applicable.
- **Change in condition**
 - Melting point/Melting range:** Not determined.
 - Boiling point/Boiling range:** -195 °C (-319 °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.
 - Evaporation rate:** Not applicable.

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- **Solubility in / Miscibility with:**
 - Water:** Insoluble.
- **Partition coefficient (n-octanol/water):** Not determined.
- **Viscosity:**
 - Dynamic:** Not applicable.
 - Kinematic:** Not applicable.
- **Solvent content:**
 - Organic solvents:** 0.0 %
 - Water:** 0.2 %
- **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:**

57-13-6 Urea

Oral LD50 8471 mg/kg (rat)

7720-78-7 iron(II) sulfate

Oral LD50 1520 mg/kg (mouse)

7758-99-8 Copper Sulfate Pentahydrate

Oral LD50 300 mg/kg (rat)

1314-13-2 Zinc Oxide

Oral LD50 > 5000 mg/kg (rat)

- **Primary irritant effect:**
- **On the skin:** No irritating effect.
- **On the eye:** No irritating effect.
- **Additional toxicological information:**
When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

- **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.

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

None of the ingredients are listed.

12 Ecological Information

· **Toxicity:**

· **Aquatic toxicity:**

Avoid release into the environment. Runoff from fire control or dilution water may cause pollution.

57-13-6 Urea

EC50 >10000 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.

· **Ecotoxicological effects:**

· **Remark:** Harmful to fish

· **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.

Harmful to aquatic organisms

· **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:**

Must not be disposed of together with household garbage. Do not allow product to reach sewage system. Observe all federal, state and local environmental regulations when disposing of this material.

· **Uncleaned packagings:**

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

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.

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· **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):**

11129-60-5 Manganese oxide

10034-96-5 Manganese(II) Sulfate Monohydrate

7758-99-8 Copper Sulfate Pentahydrate

7733-02-0 Zinc Sulphate (anhydrous)

1314-13-2 Zinc Oxide

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

57-13-6 Urea

7778-80-5 Potassium Sulfate

7487-88-9 Magnesium Sulphate

1317-61-9 Iron Oxide

1309-48-4 Magnesium Oxide

7720-78-7 iron(II) sulfate

25791-96-2 Poly(oxypropylene) triol

7727-37-9 Nitrogen

7758-99-8 Copper Sulfate Pentahydrate

7733-02-0 Zinc Sulphate (anhydrous)

1332-58-7 Kaolin

1314-13-2 Zinc Oxide

7631-95-0 Sodium Molybdate

7732-18-5 Water, distilled water, deionized water

· **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.

· **Carcinogenic categories:**

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

57-13-6 Urea

II

11129-60-5 Manganese oxide

D

10034-96-5 Manganese(II) Sulfate Monohydrate

D

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7733-02-0	Zinc Sulphate (anhydrous)	D, I, II
1314-13-2	Zinc Oxide	D, I, II
• TLV (Threshold Limit Value established by ACGIH):		
1309-48-4	Magnesium Oxide	A4
1332-58-7	Kaolin	2 mg/m3
• NIOSH-Ca (National Institute for Occupational Safety and Health):		
None of the ingredients are listed.		

• **GHS label elements**

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

• **Hazard pictograms:** Non-Regulated Material

• **Signal word:** Non-Regulated Material

• **Hazard statements:**

Harmful to aquatic life.

Harmful to aquatic life with long lasting effects.

• **Precautionary statements:**

Avoid release to the environment.

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.

• **State Right to Know:**

CAS: 57-13-6 RTECS: YR 6250000	Urea	25-50%
CAS: 7778-80-5 RTECS: TT5900000	Potassium Sulfate	15-35%
CAS: 14977-38-8	Sulfate of Potash Magnesia	15-35%
	☞ Skin Irrit. 2, H315; STOT SE 3, H335; Eye Irrit. 2B, H320	
CAS: 7487-88-9 RTECS: OM 4500000	Magnesium Sulphate	2-12%
	☞ STOT SE 3, H335	
CAS: 98059-61-1	Phosphate	2-12%
	Polyurethane elastomer	2-12%
All ingredients are listed.		

• **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:** 11/16/2015 / -

• **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

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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
Acute Tox. 4: Acute toxicity, Hazard Category 4
Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2
Eye Dam. 1: Serious eye damage/eye irritation, Hazard Category 1
Eye Irrit. 2: Serious eye damage/eye 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
STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3
Aquatic Acute 1: Hazardous to the aquatic environment - AcuteHazard, Category 1
Aquatic Acute 3: Hazardous to the aquatic environment - AcuteHazard, Category 3
Aquatic Chronic 1: Hazardous to the aquatic environment - Chronic Hazard, Category 1
Aquatic Chronic 3: Hazardous to the aquatic environment - Chronic Hazard, Category 3

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

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