

Safety Data Sheet

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

Printing date 06/24/2024

Reviewed on 06/24/2024

* 1 Identification

- **Product identifier**
- **Trade name: Florikan CRF 11-3-14**
- **Product Description:** Fertilizer
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
FLORIKAN E.S.A. LLC
2404 Commerce Court
Bowling Green, Florida 33834
(941) 379-4048
- **Emergency telephone number:**
For Chemical Emergency Spill, Leak, Fire, Exposure, or Accident
Call CHEMTREC Day or Night
Within USA and Canada: 1-800-424-9300
Outside USA and Canada: +1 703-527-3887 (collect calls accepted)

* 2 Hazard(s) identification

- **Classification of the substance or mixture**
The product is not classified, according to the Globally Harmonized System (GHS).
- **Additional information:**
Harmful to aquatic life with long lasting effects.
Avoid release to the environment - dispose per US laws.
- **Label elements**
- **GHS label elements** Non-Regulated Material
- **Hazard pictograms** Non-Regulated Material
- **Signal word** Non-Regulated Material
- **Hazard statements** Non-Regulated Material
- **Unknown acute toxicity:**
0 % 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)**



- **Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

* 3 Composition/information on ingredients

- **Chemical characterization: Mixtures**
- **Description:** Mixture of the substances listed below with nonhazardous additions.

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· Dangerous components:		
CAS: 7704-34-9	sulfur ⚠ Skin Irritation 2, H315	≥5–<10%
CAS: 1314-56-3 RTECS: TH 3945000	Available Phosphate (P ₂ O ₅) ⚠ Skin Corrosion 1A, H314	≥1–<5%
CAS: 7439-95-4 RTECS: OM 2100000	magnesium powder (pyrophoric) ⚠ Pyrophoric Solids 1, H250; Substances and mixtures which, in contact with water, emit flammable gases 1, H260	1–5%
CAS: 6484-52-2	ammonium nitrate ⚠ Oxidizing Solids 3, H272; ⚠ Skin Irritation 2, H315; Eye Irritation 2A, H319; Specific Target Organ Toxicity - Single Exposure 3, H335-H336	1–5%
CAS: 57-13-6 RTECS: YR 6250000	urea	1–5%
CAS: 7782-50-5 RTECS: FO 2100000	chlorine ⚠ Oxidizing Gases 1, H270; ⚠ Acute Toxicity - Inhalation 3, H331; ⚠ Skin Irritation 2, H315; Eye Irritation 2A, H319; Specific Target Organ Toxicity - Single Exposure 3, H335	0.1–1%

· 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.

Derived From: Polymer Coated Ammonium Nitrate, Polymer Coated Urea, Polymer Coated Potassium Nitrate, Polymer Coated Ammonium Phosphate, Polymer Coated Calcium Phosphate, Polymer Coated Sulfate of Potash Magnesia, Ureaformaldehyde, Sulfate of Potash Magnesia, Iron Sulfate, Iron HEEDTA, Copper Sulfate, Manganese Sulfate, Magnesium Sucrate, Iron Sucrate, Manganese Sucrate, Zinc Sucrate, and Copper Sucrate | The following nutrients have been polymer coated to provide 11% Slow Release Nitrogen (N), 3% Slow Release Available Phosphate (P₂O₅), 14% Slow Release Soluble Potash (K₂O), 2.8% Slow Release Magnesium (Mg), 9.3% Slow Release Sulfur, 1.0% Slow Release Chlorine (Cl), 0.63% Slow Release Iron (Fe), and 0.15% Slow Release Molybdenum (Mo)

4 First-aid measures

· Description of first aid measures

- **General information:** Keep out of reach of children.
- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:** If skin irritation occurs, consult a doctor.
- **After eye contact:** 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** Treat symptomatically.

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**

· 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.

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* 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:** Pick up mechanically.

· **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.

· **Protective Action Criteria for Chemicals**

Protective Action Criteria (PACs) are essential components for planning and response to uncontrolled releases of hazardous chemicals.

· **PAC-1:**

PAC 1: Mild, transient health effects.

1314-56-3	Available Phosphate (P ₂ O ₅)	1 mg/m ³
7439-95-4	magnesium powder (pyrophoric)	18 mg/m ³
6484-52-2	ammonium nitrate	6.7 mg/m ³
57-13-6	urea	30 mg/m ³
7782-50-5	chlorine	0.50 ppm
7439-89-6	iron	3.2 mg/m ³
7439-98-7	molybdenum	30 mg/m ³
7631-99-4	Sodium nitrate	4.1 mg/m ³

· **PAC-2:**

PAC 2: Irreversible or other serious health effects that could impair the ability to take protective action.

1314-56-3	Available Phosphate (P ₂ O ₅)	10 mg/m ³
7439-95-4	magnesium powder (pyrophoric)	200 mg/m ³
6484-52-2	ammonium nitrate	73 mg/m ³
57-13-6	urea	280 mg/m ³
7782-50-5	chlorine	2.0 ppm
7439-89-6	iron	35 mg/m ³
7439-98-7	molybdenum	330 mg/m ³
7631-99-4	Sodium nitrate	45 mg/m ³

· **PAC-3:**

PAC 3: Life-threatening health effects.

1314-56-3	Available Phosphate (P ₂ O ₅)	50 mg/m ³
7439-95-4	magnesium powder (pyrophoric)	1,200 mg/m ³
6484-52-2	ammonium nitrate	440 mg/m ³
57-13-6	urea	1,700 mg/m ³
7782-50-5	chlorine	20 ppm
7439-89-6	iron	150 mg/m ³
7439-98-7	molybdenum	2,000 mg/m ³
7631-99-4	Sodium nitrate	270 mg/m ³

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* 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:**
 Store in the original container.
 Store in a cool, dry place in tightly closed receptacles.
 Fertilizer products can be hygroscopic and may be affected by humidity and/or heat during improper storage. Please keep this fertilizer product in a dry condition and away from heat and moisture which may start release in the bag.
- **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 limit values that require monitoring at the workplace:**
 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.

57-13-6 urea	
WEEL	Long-term value: 10 mg/m ³
7782-50-5 chlorine	
PEL	Ceiling limit value: 3 mg/m ³ , 1 ppm
REL	Ceiling limit value: 1.45 mg/m ³ , 0.5 ppm *15-min
TLV	Short-term value: 0.4 ppm Long-term value: 0.1 ppm A4

- **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**
 The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
- **Penetration time of glove material**
 The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
- **Eye protection:** Not required.
- **Limitation and supervision of exposure into the environment** None

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9 Physical and chemical properties

· Information on basic physical and chemical properties

· General Information

· Appearance:

Form: Granulate

Color: Natural

· Odor: Slight

· Odor threshold: Not determined.

· pH-value: Not applicable.

· Change in condition

Melting point/Melting range: Undetermined.

Boiling point/Boiling range: Undetermined.

· Flash point: Not applicable.

· Flammability (solid, gaseous): Not determined.

· Decomposition temperature: Not determined.

· Ignition temperature: Product is not selfigniting.

· Danger of explosion: Product does not present an explosion hazard.

· Explosion limits:

Lower: Not determined.

Upper: Not determined.

· Vapor pressure: Not applicable.

· Density at 20 °C (68 °F): 1.79402–1.85041 g/cm³ (14.9711–15.44167 lbs/gal)

· Relative density: Not determined.

· Vapor density: Not applicable.

· 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:

VOC content: 0.00 %

Solids content: 100.0 %

· Other information: No further relevant information available.

10 Stability and reactivity

· Reactivity

The product is stable under normal conditions.

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.

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- **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:**

ATE (Acute Toxicity Estimate)

Inhalative	LC50/4 h	29,300 mg/l (rat)
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6484-52-2 ammonium nitrate

Oral	LD50	2,217 mg/kg (rat)
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57-13-6 urea

Oral	LD50	8,471 mg/kg (rat)
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7782-50-5 chlorine

Inhalative	LC50/4 h	293 mg/l (rat)
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- **Primary irritant effect:**
- **on the skin:** No irritant effect.
- **on the eye:** May be irritating
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:**

- **Carcinogenic categories**

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

None of the ingredients is listed.

- **NTP (National Toxicology Program)**

None of the ingredients is listed.

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

None of the ingredients is listed.

*12 Ecological information

- **Toxicity**
- **Aquatic toxicity:** Harmful to aquatic life with long lasting effects.
- **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:**
- Water hazard class 3 (Self-assessment): extremely hazardous for water
- Do not allow product to reach ground water, water course or sewage system, even in small quantities.
- Danger to drinking water if even extremely small quantities leak into the ground.
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

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

14 Transport information

- **UN-Number**
- **DOT, IMDG, IATA** not regulated
- **UN proper shipping name**
- **DOT, IMDG, IATA** not regulated
- **Transport hazard class(es)**
- **DOT, ADN, IMDG, IATA**
- **Class** not regulated
- **Packing group**
- **DOT, IMDG, IATA** not regulated
- **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":** not regulated

* 15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
No further relevant information available.
- **Sara**

· Section 355 (extremely hazardous substances):

1314-56-3	Available Phosphate (P□O□)
7782-50-5	chlorine

· Section 313 (Specific toxic chemical listings):

6484-52-2	ammonium nitrate
7782-50-5	chlorine

· TSCA (Toxic Substances Control Act):

All components have the value ACTIVE.

· Hazardous Air Pollutants

7782-50-5	chlorine
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· Proposition 65

· Chemicals known to cause cancer:

None of the ingredients is listed.

· Chemicals known to cause reproductive toxicity for females:

None of the ingredients is listed.

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· Chemicals known to cause reproductive toxicity for males:		
None of the ingredients is listed.		
· Chemicals known to cause developmental toxicity:		
None of the ingredients is listed.		
· New Jersey Right-to-Know List:		
7704-34-9	sulfur	
1314-56-3	Available Phosphate (P ₂ O ₅)	
7439-95-4	magnesium powder (pyrophoric)	
6484-52-2	ammonium nitrate	
7782-50-5	chlorine	
7439-98-7	molybdenum	
· New Jersey Special Hazardous Substance List:		
1314-56-3	Available Phosphate (P ₂ O ₅)	CO, R2
6484-52-2	ammonium nitrate	R3
· Pennsylvania Right-to-Know List:		
7704-34-9	sulfur	
1314-56-3	Available Phosphate (P ₂ O ₅)	
7439-95-4	magnesium powder (pyrophoric)	
6484-52-2	ammonium nitrate	
7782-50-5	chlorine	
7439-98-7	molybdenum	
7631-99-4	Sodium nitrate	
· Pennsylvania Special Hazardous Substance List:		
1314-56-3	Available Phosphate (P ₂ O ₅)	E
6484-52-2	ammonium nitrate	E
7782-50-5	chlorine	E
· Carcinogenic categories		
· EPA (Environmental Protection Agency)		
57-13-6	urea	II
· TLV (Threshold Limit Value)		
7782-50-5	chlorine	A4
7439-98-7	molybdenum	A3
· NIOSH-Ca (National Institute for Occupational Safety and Health)		
None of the ingredients is listed.		
· GHS label elements Void		
· Hazard pictograms Void		
· Signal word Void		
· Hazard statements Void		
· Chemical safety assessment: A Chemical Safety Assessment has not been carried out.		

* 16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

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

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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.

- **Department issuing SDS:** Environment protection department.
- **Contact:** Access GHS, LLC - 888-363-4870 - Team@access-ghs-sds.com
- **Date of preparation / last revision** 06/24/2024 / -

· **Abbreviations and acronyms:**

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

OSHA: Occupational Safety & Health

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit

Oxidizing Gases 1: Oxidizing gases – Category 1

Pyrophoric Solids 1: Pyrophoric solids – Category 1

Substances and mixtures which, in contact with water, emit flammable gases 1: Substances and mixtures which in contact with water emit flammable gases – Category 1

Oxidizing Solids 3: Oxidizing solids – Category 3

Acute Toxicity - Inhalation 3: Acute toxicity – Category 3

Skin Corrosion 1A: Skin corrosion/irritation – Category 1A

Skin Irritation 2: Skin corrosion/irritation – Category 2

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

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