

Safety Data Sheet

OSHA HazCom Standard 29 CFR 1910.1200(g) revised in 2024 and GHS Rev 07.

Date of issue: 11/06/2024

Reviewed on 11/06/2024

1 Identification

- **Product identifier**
- **Trade name:** Florikan CRF 13-6-8 NPK
- **Other means of identification**
- **Product Description:** Polymer Coated 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
www.Florikan.com
- **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 does not need classification according to OSHA HazCom Standard 29 CFR paragraph (d) of §1910.1200(g) revised in 2024 and GHS Rev 07.
The product is not classified, according to the Globally Harmonized System (GHS).
- **Additional information:** Harmful to aquatic life with long lasting effects.
- **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:**
This value refers to knowledge of known, established toxicological or ecotoxicological values.
0 % of the mixture consists of component(s) of unknown toxicity.
- **Information pertaining to particular dangers for man and environment:**
- **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.
- **Classification according to (d)(1)(ii) of § 1910.12000**
The SDS issuer does not object to the classifications provided by importers or manufacturers of precursor products.

(Contd. on page 2)

Safety Data Sheet

OSHA HazCom Standard 29 CFR 1910.1200(g) revised in 2024 and GHS Rev 07.

Date of issue: 11/06/2024

Reviewed on 11/06/2024

 Trade name: **Florikan CRF 13-6-8 NPK**

(Contd. of page 1)

· Hazards not otherwise classified

There are no adverse physical or health effects known that are not covered by the hazard classes of the Hazard Communications Standard.

3 Composition/information on ingredients

· Chemical characterization: Mixtures

· **Description:** Mixture of the substances listed below with nonhazardous additions.

· Dangerous components:

CAS: 7727-37-9 RTECS: QW 9700000	Nitrogen ⚠ Gases under pressure - Compressed gas, H280	7–13%
CAS: 7440-50-8 RTECS: GL 5325000	Copper	5–10%
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	≥5–≤7%
CAS: 7440-70-2 RTECS: EV 8040000	calcium ⚠ Substances and mixtures which, in contact with water, emit flammable gases 2, H261	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 Monoammonium Phosphate; Methylene DiUrea, UreaForm, Sufate of Potash Magnesia, Sulfate of Potash, Calcium Carbonate, Iron Sulfate, Iron Sucrate, Iron EDTA, Iron Citrate, Magnesium Sulfate, Manganese Sucrate, Zinc Sucrate, Copper Sucrate, Sdium Borate and Sodium Molybdate | *The following nutrients have been polymer coated to provide 1.2% Slow Release Nitrogen (N), and 6% Slow Release Available Phosphate

4 First-aid measures

· Description of first aid measures

· General information:

If symptoms persist, call a physician.

No special measures required.

· After inhalation:

Breathing dust may be irritating to respiratory system.

Supply fresh air; consult doctor in case of complaints.

· After skin contact:

Wash with plenty of water and soap.

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.

· **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.

(Contd. on page 3)

Safety Data Sheet

OSHA HazCom Standard 29 CFR 1910.1200(g) revised in 2024 and GHS Rev 07.

Date of issue: 11/06/2024

Reviewed on 11/06/2024

Trade name: **Florikan CRF 13-6-8 NPK**

(Contd. of page 2)

5 Fire-fighting measures

· **Extinguishing media**

· **Suitable extinguishing agents:**

Use fire fighting measures that suit the environment.

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

· **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.

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.

· **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.

7727-37-9	Nitrogen	7.96E+05 ppm
7440-50-8	Copper	3 mg/m ³
1314-56-3	Available Phosphate (P ₂ O ₅)	1 mg/m ³
7439-95-4	Magnesium	18 mg/m ³
7439-89-6	iron	3.2 mg/m ³
7782-50-5	chlorine	0.50 ppm
7439-96-5	manganese	3 mg/m ³

· **PAC-2:**

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

7727-37-9	Nitrogen	832000 ppm
7440-50-8	Copper	33 mg/m ³
1314-56-3	Available Phosphate (P ₂ O ₅)	10 mg/m ³
7439-95-4	Magnesium	200 mg/m ³
7439-89-6	iron	35 mg/m ³
7782-50-5	chlorine	2.0 ppm
7439-96-5	manganese	5 mg/m ³

· **PAC-3:**

PAC 3: Life-threatening health effects.

7727-37-9	Nitrogen	869000 ppm
7440-50-8	Copper	200 mg/m ³
1314-56-3	Available Phosphate (P ₂ O ₅)	50 mg/m ³
7439-95-4	Magnesium	1,200 mg/m ³
7439-89-6	iron	150 mg/m ³
7782-50-5	chlorine	20 ppm

(Contd. on page 4)

Safety Data Sheet

OSHA HazCom Standard 29 CFR 1910.1200(g) revised in 2024 and GHS Rev 07.

Date of issue: 11/06/2024

Reviewed on 11/06/2024

Trade name: Florikan CRF 13-6-8 NPK

(Contd. of page 3)

7439-96-5	manganese	1,800 mg/m ³
-----------	-----------	-------------------------

- **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

- **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:**
Keep container tightly closed.
Store in a cool, dry place.
Keep out of reach of children.
Protect from moisture.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** Store in dry conditions.
- **Specific end use(s)** No further relevant information available.

8 Exposure controls/personal protection

- **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.

7727-37-9 Nitrogen	
TLV	see App. F Minimal oxygen content (D)
7440-50-8 Copper	
PEL	Long-term value: 1* 0.1** mg/m ³ as Cu *dusts and mists **fume
REL	Long-term value: 1* 0.1** mg/m ³ as Cu *dusts and mists **fume
TLV	Long-term value: 1* 0.2** mg/m ³ *dusts and mists; **fume; as Cu
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**
- **Appropriate engineering controls** No further data; see section 7.
- **Personal protective equipment:**
- **General protective and hygienic measures:** Wash hands before breaks and at the end of work.
- **Breathing equipment:** Not required.

(Contd. on page 5)

Safety Data Sheet

OSHA HazCom Standard 29 CFR 1910.1200(g) revised in 2024 and GHS Rev 07.

Date of issue: 11/06/2024

Reviewed on 11/06/2024

Trade name: **Florikan CRF 13-6-8 NPK**

(Contd. of page 4)

· **Protection of hands:**



Protective gloves

· **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

9 Physical and chemical properties

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

· **General Information**

· **Physical state**

Solid

· **Color:**

Whitish

· **Odor:**

Slight

· **Odor threshold:**

Not determined.

· **Melting point/Melting range:**

Undetermined.

· **Boiling point/Boiling range:**

3,600 °C (38.500 °F)

· **Flammability:**

Not determined.

· **Explosion limits:**

· **Lower:**

Not determined.

· **Upper:**

Not determined.

· **Flash point:**

Not applicable.

· **Decomposition temperature:**

Not determined.

· **pH-value:**

Not applicable.

· **Viscosity:**

· **Kinematic:**

Not applicable.

· **Dynamic:**

Not applicable.

· **Solubility in / Miscibility with**

· **Water:**

Soluble.

· **Partition coefficient (n-octanol/water):**

Not determined.

· **Vapor pressure:**

Not applicable.

· **Vapor pressure:**

· **Density:**

Not determined.

· **Relative density**

Not determined.

· **Vapor density**

Not applicable.

· **Particle characteristics**

Not determined.

· **Other information**

· **Appearance:**

· **Form:**

Granulate

· **Important information on protection of health and environment, and on safety.**

· **Ignition temperature:**

Product is not selfigniting.

· **Danger of explosion:**

Product does not present an explosion hazard.

· **Solvent content:**

· **VOC content:**

0.00 %

(Contd. on page 6)

Safety Data Sheet

OSHA HazCom Standard 29 CFR 1910.1200(g) revised in 2024 and GHS Rev 07.

Date of issue: 11/06/2024

Reviewed on 11/06/2024

Trade name: **Florikan CRF 13-6-8 NPK**

(Contd. of page 5)

- **Solids content:** 100.0 %
- **Change in condition**
- **Oxidizing properties** None

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.
- **Conditions to avoid** Moisture
- **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)

7782-50-5 chlorine		
Inhalative	LC50/4 h	293 mg/l (rat)

- **Primary irritant effect:**
- **on the skin:** No irritant effect.
- **on the eye:** No irritating effect.
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:**
- **Interactive effects** No interactive effects between components are known.

- **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.	

- **Alternative sources for toxicological information**
No non-standard sources for toxicological information where used.

12 Ecological information

- **Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.

(Contd. on page 7)

Safety Data Sheet

OSHA HazCom Standard 29 CFR 1910.1200(g) revised in 2024 and GHS Rev 07.

Date of issue: 11/06/2024

Reviewed on 11/06/2024

Trade name: **Florikan CRF 13-6-8 NPK**

(Contd. of page 6)

- **vPvB:** Not applicable.
- **Other adverse effects**
- **Remark:** Harmful to fish
- **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.

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** Non-Regulated Material
- **UN proper shipping name**
- **DOT, IMDG, IATA** Non-Regulated Material
- **Transport hazard class(es)**
- **DOT, ADN, IMDG, IATA**
- **Class** Non-Regulated Material
- **Packing group**
- **DOT, IMDG, IATA** Non-Regulated Material
- **Environmental hazards:** Not applicable.
- **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code** Not applicable.
- **Special precautions for user** 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.
- **Sara**

· Section 355 (extremely hazardous substances):

1314-56-3	Available Phosphate (P ₂ O ₅)
7782-50-5	chlorine

· Section 313 (Specific toxic chemical listings):

7440-50-8	Copper
7782-50-5	chlorine
7439-96-5	manganese

· TSCA (Toxic Substances Control Act):

7727-37-9	Nitrogen	ACTIVE
-----------	----------	--------

(Contd. on page 8)

Safety Data Sheet

OSHA HazCom Standard 29 CFR 1910.1200(g) revised in 2024 and GHS Rev 07.

Date of issue: 11/06/2024

Reviewed on 11/06/2024

Trade name: **Florikan CRF 13-6-8 NPK**

(Contd. of page 7)

7440-50-8	Copper	ACTIVE
7704-34-9	sulfur	ACTIVE
7447-40-7	potassium chloride	ACTIVE
1314-56-3	Available Phosphate (P_2O_5)	ACTIVE
7439-95-4	Magnesium	ACTIVE
7439-89-6	iron	ACTIVE
7440-70-2	calcium	ACTIVE
7782-50-5	chlorine	ACTIVE
7439-96-5	manganese	ACTIVE
7647-14-5	sodium chloride	ACTIVE

· **Hazardous Air Pollutants**

7782-50-5	chlorine
7439-96-5	manganese

· **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.

· **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:**

7727-37-9	Nitrogen
7440-50-8	Copper
7704-34-9	sulfur
1314-56-3	Available Phosphate (P_2O_5)
7439-95-4	Magnesium
7440-70-2	calcium
7782-50-5	chlorine
7439-96-5	manganese

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

1314-56-3	Available Phosphate (P_2O_5)	CO, R2
7440-70-2	calcium	R2
7439-96-5	manganese	F3, R1

· **Pennsylvania Right-to-Know List:**

7727-37-9	Nitrogen
7440-50-8	Copper
7704-34-9	sulfur
1314-56-3	Available Phosphate (P_2O_5)
7439-95-4	Magnesium
7440-70-2	calcium

(Contd. on page 9)

Safety Data Sheet

OSHA HazCom Standard 29 CFR 1910.1200(g) revised in 2024 and GHS Rev 07.

Date of issue: 11/06/2024

Reviewed on 11/06/2024

Trade name: Florikan CRF 13-6-8 NPK

(Contd. of page 8)

7782-50-5	chlorine
7439-96-5	manganese

· Pennsylvania Special Hazardous Substance List:

7440-50-8	Copper	E
1314-56-3	Available Phosphate (P_2O_5)	E
7782-50-5	chlorine	E
7439-96-5	manganese	E

· Carcinogenic categories
· EPA (Environmental Protection Agency)

7440-50-8	Copper	D
7439-96-5	manganese	D
7440-66-6	zinc powder -zinc dust (stabilized)	II

· TLV (Threshold Limit Value)

7782-50-5	chlorine	A4
-----------	----------	----

· 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

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.

· SDS created by: Access GHS, LLC - 888-363-4870 - Team@access-ghs-sds.com

· Date of preparation 11/06/2024

· 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

Gases under pressure - Compressed gas: Gases under pressure – Compressed gas

Substances and mixtures which, in contact with water, emit flammable gases 2: Substances and mixtures which in contact with water emit flammable gases – Category 2

(Contd. on page 10)

Safety Data Sheet

OSHA HazCom Standard 29 CFR 1910.1200(g) revised in 2024 and GHS Rev 07.

Date of issue: 11/06/2024

Reviewed on 11/06/2024

Trade name: Florikan CRF 13-6-8 NPK

(Contd. of page 9)

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