



Chemical and Agricultural Industry, Research S.A.

SAFETY DATA SHEET

FS-291(16-3-3) +trace elements

According to Annex II of the Regulation 1907/2006 EC as amended by the Regulation No 453/2010EC

Revision: 1-2-2017

1. IDENTIFICATION OF THE PRODUCT AND OF THE COMPANY

1.1 Identification of the Product

Designation	High nitrogen NPK liquid fertilizer, EC fertilizer. Growth and fruiting booster.
Trade name	FS-291(16-3-3) +trace elements

1.2 Product use

Product Use	Fertilizer for olive trees, fruit trees and annual crops (foliar and soil applications)
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1.3 Company details

Vioryl s.a. 28 th km Athens-Lamia National Road,19014 Afidnes, GREECE	Tel. +30 22950 45100
	Fax : +30 22950 45250
	Email agrochemical@vioryl.gr

1.2 Emergency telephone number: In case of poisoning call: +30 210 7793777

2. HAZARDS IDENTIFICATION

2.1 Classification

Classification according to the Regulation (EC) 1272/2008: Not regulated as hazardous material.

2.2 Labeling

According to Regulation (EC) 1272/2008:

P phrases:

P102: Keep out of reach of children.

P405: Store locked up.

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Composition

Solution of simple and compound fertilizers with micronutrients. None of its ingredients results to classification of the product according to the Regulation (EC) 1272/2008.

4. FIRST-AID MEASURES

Skin Contact: Wash the affected area with soap and water.

Eye Contact: Flush/irrigate eye with copious amounts of water for at least 10 minutes.

Obtain medical attention if eyes irritation persists.

Ingestion: Do not induce vomiting. Give water or milk to drink.

Obtain medical attention if more than a small quantity has been swallowed.

Inhalation: Remove to fresh air. Obtain medical attention if ill effects occur.

5. FIRE-FIGHTING MEASURES

5.1 If fertilizer is not directly involved in the Fire

Use the best means available to extinguish the Fire.

5.2 If fertilizer is involved in the Fire

Prevent any contamination of fertilizer by oils or other combustible materials. When involved in a fire and exposed to extremely high temperatures, the component of this product can decompose to produce irritating vapors and toxic gases (e.g. ammonia, phosphorus and sulfur oxide, carbon monoxide and dioxide).

6. ACCIDENTAL RELEASE MEASURES

Any spillage of fertilizer should be cleaned up promptly, swept up and placed in a clean labeled open container for safe disposal. Do not allow to mix with sawdust and other combustible or organic substances.

Depending on the degree and nature of contamination, dispose of by use as a fertilizer or to an authorized waste facility.

Take care to avoid the contamination of watercourses and drains and inform the appropriate authority in case of accidental contamination of watercourses.

7. HANDLING AND STORAGE

7.1 Handling

- Avoid excessive generation of mists.
- Avoid fertilizer contamination by incompatible materials.
- Avoid unnecessary exposure to the atmosphere.
- Wear gloves when handling the product over long periods.

7.2 Storage

- Locate away from the source of heat or Fire.
- Keep away from combustible materials and substances
- On farm, ensure that the fertilizer is not stored near hay, straw, grain diesel oil, etc.
- Ensure high standard of housekeeping in the storage area.
- Any building used for the storage should be dry and well ventilated.
- Store under conditions to avoid product breakdown by thermal cycling (wide variation in temperature).

8. EXPOSURE CONTROL / PERSONAL PROTECTION

8.1 Occupational exposure limits

No specific official limits.

8.2 Precautionary and engineering measures

Avoid high mist concentration and provide ventilation where necessary.

8.3 Personal Protection

Wear suitable gloves when handling the product over long periods.

Wear goggles or safety glasses.

After handling product, wash hands and observe good hygiene practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

<i>Appearance</i>	Dark green-olive liquid
<i>Odor</i>	characteristic odor
<i>pH</i>	4.0-5.0
<i>Explosive properties</i>	Not explosive
<i>Oxidizing properties</i>	Not classed as an oxidizing material
<i>Bulk density</i>	1.2kg/m ³ .
<i>Solubility in water</i>	Completely soluble in cold water

10. STABILITY AND REACTIVITY

10.1 Stability

The product is stable under normal conditions of storage, handling and use.

10.2 Conditions to avoid

Contamination by incompatible materials
Unnecessary exposure to the atmosphere.
Closeness to sources of heat or Fire.

10.3 Materials to avoid Not reported.

10.4 Hazardous reactions/Decomposition Products

When strongly heated, it decomposes releasing toxic vapors of ammonia, phosphorus and sulfur oxide, carbon monoxide and dioxide
When in contact with alkaline material such as lime, may give off ammonia gas.

11. TOXICOLOGICAL INFORMATION

11.1 General See Section 3.1.

11.2 Toxicity Data No data available

12. ECOLOGICAL INFORMATION

12.1 Mobility

The NO₃⁻ ion is mobile; the NH₄⁺ ion is adsorbed by soil particles.
Phosphates, whether water or citrate soluble, are translocated in the soil only over very short periods and are then immobilized
The dissolved K⁺ ion in the soil solution is adsorbed by clay minerals; only in light soils where these are absent can part of the potassium be leached

12.2 Persistence/Degradability

Nitrogen follows the natural nitrification/denitrification cycle to give nitrogen or nitrogen oxides.
Phosphates are converted to calcium or iron/aluminum phosphates, or are incorporated into the organic soil matter.
Potassium is mainly adsorbed by clay minerals, or remains as K⁺ in the soil solution.

12.3 Bio-accumulation

No data available. It is not expected that there is any process for accumulation in living organisms.

12.4 Ecotoxicity

This product is a fertilizer. Releases of large quantities into an area can substantially alter the nutrient composition and affect terrestrial and aquatic animal and plant life.

13. DISPOSAL CONSIDERATIONS

13.1 General

Depending on degree and nature of contamination, dispose as fertilizer by spreading thinly, not more than 100kg/ha, on open ground or to an authorized waste facility.

14. TRANSPORT INFORMATION

UN classification

Considered non-hazardous material according to the UN Orange Book and following international transport codes: IATA(air), RID (rail), ADR (road) and IMDG (sea).

14.1 Land transport ADR/RID

ADR/RID Class: 0
Danger code (Kemler):
UN number: Not regulated
Packaging group: --

14.2 Maritime transportIMDG

IMDG Class: 0

UN number: Not regulated

Packaging group: --

EMS number:

Segregation groups: --

14.3 Air transport ICAO-TI and IATA-DGR

ICAO/IATA Class: 0

UN number: Not regulated

Packaging group: --

15. REGULATORY INFORMATION

Classification according to the Regulation 1272/2008EC.

16. OTHER INFORMATION

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes.

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