



Chemical and Agricultural Industry, Research S.A.

SAFETY DATA SHEET

AVANTAGE 15-5-30+ 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	Fertilizer NPK, powder, water-soluble
Trade name	AVANTAGE 15-5-30+ trace elements

1.2 Product use

Product Use	Recommended for the flowering and fruiting stages of trees, vegetables and ornamentals. For foliar and soil uses
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1.1 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

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

Mixture of blending of simple and compound fertilizers with micronutrients.

Non of its ingredients labels the product according to the Regulation EC 1272/2008.

4. FIRST AID MEASURES

Eyes: Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. If irritation develops, get medical aid.

Skin: Wash skin with water and soap.

Ingestion: Never give anything by mouth to an unconscious person. Get medical aid. Do NOT induce vomiting. If conscious and alert, rinse mouth and drink 2 cupfuls of milk or water.

Inhalation: Remove from exposure and move to fresh air.

Long-term effects: no adverse effects have been reported.

Thermal decomposition products: Inhalation of decomposition gases can cause irritation to the respiratory system. When heated urea decomposes and releases ammonia. In case of fire, toxic fumes can be released.

5. **FIRE FIGHTING MEASURES**

5.1 **If the fertilizer is not directly involved in the fire**

Use the best available means to limit fire.

5.2 **If the product is exposed to fire**

Prevent any contamination with petrol, oil or other combustible materials. When exposed to fire, or at very high temperatures, components of this product may produce vapors and toxic gases (ammonia, carbon, nitrate and sulfur oxides). May ignite and support fire.

6. **ACCIDENTAL RELEASE MEASURES**

-Any spillage of the product should be cleaned immediately wiped dry and placed in a clean container for safe disposal.

-Never mix the product with sawdust and various combustible or organic substances.

-Depending on the extent and nature of the infection dispose of the product in suitable places.

-Pay special attention to prevent water pollution with the dense fertilizer. Inform responsible authorities in case of accidental contamination of water

7. **HANDLING and STORAGE**

7.1 **Handling**

-Avoid unnecessary inhalation of the product.

-Do not blend the product with other incompatible materials.

-Wear gloves when handling the product.

7.2 **Storage**

-Keep away from sources of heat or fire.

-Keep away from combustible materials and substances

-In-store, make sure that the product is not close to hay, straw, wheat and oils.

-Keep storage area clean.

-Do not allow smoking and the use of flame uncovered storage areas.

-The building used for the storage of the product should be dry and well ventilated.

-Store at room temperature.

8. **EXPOSURE CONTROLS, PERSONAL PROTECTION**

8.1 **Exposure Limits**

According to ACGIH (1995-96) for respirable particulate: TLV / TWA: 10mg/m³

8.2 **Prevention**

Avoid unnecessary inhalation and provide the required ventilation where necessary.

8.3 **Personal protection**

Wear suitable gloves when handling the product for a long time.

Wear protective safety glasses.

After using the product, wash your hands.

9. **PHYSICAL AND CHEMICAL PROPERTIES**

Physical State:	crystal powder
Color:	light peach
Odor:	salty
pH:	3.22 (1% deionized water 20°C)
Boiling Point:	Decomposes on heating
Solubility in water:	Totally soluble in cold water
Specific Gravity/Density:	0.935kg/m ³
Explosive properties	Not explosive
Oxidizing properties	Not classified as oxidizing material

10. STABILITY AND REACTIVITY

10.1 Chemical Stability

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

10.2 Conditions to Avoid

Do not do blend with incompatible materials.

Avoid unnecessary exposure of the product to the atmosphere.

Do not store near heat sources.

10.3 Compatibility

May be corrosive to metals. Avoid storage with combustible substances, agents, acids, alkali, sulphur, chlorates, chlorides, chromates, nitrites, permanganates, metal powders and substances containing such materials as copper, nickel, cobalt, zinc and alloys of these materials.

10.4 Hazardous Polymerization

Not reported.

10.5 Reactions/Dangerous decomposition products

When heated to high temperatures, it melts and releases toxic fumes of ammonia, phosphorus, and sulfur oxide, carbon monoxide and carbon dioxide.

If in contact with alkaline materials, can emit ammonia gas.

11. TOXICOLOGICAL INFORMATION

11.1 General

When used and handled according to specifications, the product does not have any harmful effects according to information provided to us.

11.2 Toxicity

Potassium nitrate: oral toxicity LD50 (oral, rat) > 2000 mg / kg

urea: LD50 (oral, rat) > 2000 mg / kg

MAP: LD50 (oral, rat) > 2000 mg / kg

12. ECOLOGICAL INFORMATION

12.1 Mobility in soil

NO₃ - is mobile, NH₄ + is adsorbed by soil particles. Phosphorus moves in the ground shortly and then immobilizes. Potassium is absorbed mainly by the particles of clay, or remains as K + in soil and practically immobilized.

12.2 Persistence and degradability

The nitrogen follows the natural cycle of nitrification / denitrification to give oxides of nitrogen.

Phosphorus binds to soil organic matter.

Potassium is absorbed mainly by clay particles, or remains as K + in the soil.

12.3 Bioaccumulation

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

12.4 Ecotoxicity

The product is a fertilizer. Only the release of large quantities of fertilizer may alter the nutrient composition of the soil and affect the ecological chain.

13. DISPOSAL CONSIDERATIONS

Dispose of in a manner consistent with local regulations. Do not dispose of waste into sewer. Dispose the product, depending on the degree and type of contamination, either as fertilizer by spreading thinly, not more than 100kg/ha on open ground or in an authorized waste disposal site.

14. TRANSPORT INFORMATION

Not classified as hazardous material, according to the international transport codes RID (rail), ADR (road), ICAO-TI and IATA-DGR(air) 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 transport IMDG

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 in this Safety Data Sheet is given in good faith and belief in its accuracy based on our knowledge of the substance/preparation concerned at the date of publication. It does not imply the acceptance of any legal liability or responsibility whatsoever by the Company for the consequences of its use or misuse in any particular circumstances.

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