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SAFETY DATA SHEET

Material Safety Data Sheet

Safety Data Sheet according to regulation No 1907/2006/EU, as it has been adjusted and is currently in vigour.

1 - Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Product name: FAST GROW 0-0-51 (Potassium Sulphate SOP)

Catalogue No.: PR.116.009

1.2 Relevant identified uses of the substance or mixture and non-indicated uses

Identified uses: Fertilizer.

1.3 Details of the supplier of the safety data sheet

Company Identity: DEMIRTZOGLOU & ASSOCIATES SA

Address: 1 Ermou & Theotokopoulou str.,

ZIP. 144 52, Metamorphosis

Telephone: +30 210 284 5891 **email:** info@humofert.gr

1.4 Emergency call number:

Poison Center num: +30 210 7793777

2 - Hazards identification

2.1 Classification of the substance or mixture

According to Regulation (EC) No 1272/2008 (CLP): Irriversible eye damage (Category 1), H318

2.2 Labeling

According to Regulation (EC) No 1272/2008 (CLP):



Pictogram: GHS05

Signal Word: DANGER

Hazard Statements

H318: Causes serious eye damage.

Precautionary statements- Prevention

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P280: Wear protective gloves/protective clothing/eye protection/face protection.

Precautionary statements- Response

P305 + P351 + P338: IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing.

P310: Immediately call a POISON CENTER or doctor/physician.

Other information:

"It contains Potassium sulfate"

2.3 Other hazards

According to Regulation (EC) No 1272/2008 (CLP):

Not known.

3 - Composition / Information on ingredients

3.1 Substance

3.2 Mixture

4 – First aid measures

4.1 First aids

Inhalation: Remove victim to fresh air and keep at rest in a position comfortable for breathing. There are no hazards requiring first aids, however people with acute allergies may (rarely) express asthma. If the person breaths with difficulty remove him to fresh air (provide oxygen if necessary) and seek medical advice.

Swallowing: Drink a lot of water. Do not provide from mouth anything to people without their senses. If symptoms persist, seek medical advice. Immediately call a POISON CENTER or doctor/physician.

Skin contact: Wash with soap and plenty of water for about 15 min. Remove immediately all contaminated clothing and shoes. Wash shoes before putting them on. Seek medical advice for dermatitis cure.

Eye contact: Rinse with water for about 15 minutes above and below the eyelids. Remove contact lenses, if present and easy to do. Continue rinsing. If symptoms persist, seek medical advice.

4.2 Most significant symptoms and impacts, acute or subsequent *Symptoms*:

After inhalation: intense cough

After contact with eyes: eye inflammation and damage of the eye tissue After swallowing: gastroenterological irritations, such as diarrhea, nausea, vomiting, heart pulse increase.

4.3 Indication of any required immediate medical treatment and special cure Treat symptomatically. No specific antidote is known.

5 – Fire fighting measures

5.1 Extinguishing means

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Suitable extinguishing means: Water (spray), dry powder, foam water sprayers, foam

of carbon dioxide.

5.2 Special hazards arising from the substance or mixture

In case of fire toxic and corrosive gases are produced, such as Sulphur oxides.

5.3 Recommendations to the firemen

In case of fire put on a suitable fire-extinguishing-protective equipment a self-contained breathing apparatus.

Additional information: This product is not combustible. During fire extinction take into consideration the local circumstances and the surrounding environment. Contaminated fire-extinguishing water must be discarded according to the official regulations.

6 – Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions: It is recommended to use protective gloves (protection according to EN374). Use work uniform. Avoid contact with skin, eyes and mouth.

6.2 Environmental Precautions

Dust-related precautions are required.

6.3 Methods and materials for restriction and cleaning

Methods for cleaning up: In case of leakage clean immediately with a shovel or broom. Avoid dust mixing up. Sweep under a humidity cloud in order to reduce dust. In case of contact with skin, wash your skin with soap and water. Transfer the waste in suitable (labeled) and sealed containers for obliteration.

6.4 Reference to other sections

More information in sections: 7 for handling, 8 for personal protection and 13 for disposal.

7 – Handling and Storage

7.1 Protections for safe handling

Recommendation for safe handling: Avoid contact with eyes and skin. Avoid dust formation. Handle in accordance with good industrial hygiene and safety practice.

Recommendation for fire prevention and explosion protection: No special precautions are required for fire prevention.

7.2 Safe storage conditions, including possible non-compatibilities

Storage and packaging requirements: Store the product with its label on it, tightly closed. Store the product in a cool, dry and well-ventilated place. It must be stored separately from food. It is not a hazardous product if transferred according to the proper rules of transport (P405), (P403+P233). It must be stored in a container made of polyethylene. Containers made of aluminum and metals should be avoided. **Storage recommendation:** the product should be stored separately from food.

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Other clues: it is not a hazardous product if transferred according to the proper rules

of transport.

8 – Exposure Control

8.1 Control parameters

Components with occupational exposure limit values

Potassium sulfate (7778-80-5)

DNEL/DMEL (Workers)

Long term systemic effects, skin: 21.3mg/kg body weight/ day

Long term systemic effects, inhalation: 37.6 mg/m³

DNEL/DMEL (All population)

Long term systemic effects, mouth: 12.8 mg/kg body weight/ day

Long term systemic effects, inhalation: 11.1 mg/m³

Long term systemic effects, skin: 12.8 mg/kg body weight/ day

ΡΝΕΟ (Νερό)

PNEC aqua (fresh water): 0,68 mg/l PNEC aqua (sea water): 0,068 mg/l

PNEC aqua (interrupted fresh water): 6.8mg/l

PNEC (STP: sewage treatment plant)

PNEC 10 mg/l

The general dust limit should be obeyed.

8.2 Exposure controls

Individual protection measures:

Eyes/face protection: Use appropriate protective glasses (EN166)

Hands protection: It is recommended to use appropriate protective gloves when using the product (The selected protective gloves must satisfy the specifications of EU Directive 89/689/EEC and the standard EN 374 deriving from it).

Respiratory system protection: Be sure to work in well ventilated area. In case inhalable dust is formed (total dust concentration above 10 mg/m³), you should use a dust protective filter mask (EN 143 or 149, type P1 or FFP1).

Personal hygiene measures: Avoid contact with eyes, skin and clothing. The use of self-contained work uniform is recommended. It is not allowed to drink or smoke or use smoke in the working area. Work clothes should be stored away from foods and drinks. Handle in accordance with good industrial hygiene and safety practice.

9 – Physical and chemical properties

9.1 Basic physical and chemical properties information

Form: Crystalline powder Color: Colorless-white

Odor! Odorless

pH in 10% solution (25°C): No information available

Boiling point : 1067°C

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Melting point: 1689°C

Flammability temperature: Not flammable >>

Vaporization rate: The product does not evaporate

Flammability: Not combustible
Lower explosion limit: Not applicable
Upper explosion limit: >>>

Vapour pressure:

Density: 1.21 g/ml (25°C) **Solubility:** Soluble in water **Oxidizing properties:** Not oxidizing

Viscosity: No information available

9.2 Other information

10 – Stability and reactivity

Stable product under the recommended handling and storage conditions (section 7).

10.1 Reactivity

Stable product

10.2 Chemical Stability

Stable product under the recommended handling and storage conditions (section 7).

10.3 Hazardous reactions possibility

Not known.

10.4 Conditions to avoid

Avoid dust formation. Keep away from flames and high temperature.

10.5 Not compatible materials

Aluminium

10.6 Hazardous decomposition products

In case of fire toxic and corrosive gases are produced, such as Sulphur oxides.

11 - Toxicological information

11.1 Information about toxicological effects

The product has been tested. The product is not irritating, corrosive, it does not provoke acute or long-term toxicity:

LD₅₀ (oral) rat: >2000 mg/kg body weight (OECD425) LD₅₀ (skin) rat:> 2000 mg/kg body weight (OECD402) LC₅₀ (inhalation) rat: >1.2 mg/kg body weight at 4 hours

Eyes: Causes serious eye damage (OECD 437)

Skin: Not irritating (EU Method B.46)

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NOEL (oral rat, 28 days) >1500mg/ Kg body weight / day (OECD Guideline 422)

NOEL (oral rat, 52 weeks) 256mg/ Kg body weight / day (OECD Guideline 453)

NOEL (oral rat, 52 weeks) 284mg/ Kg body weight / day (OECD Guideline 453)

NOEL (toxicity in development) >1500mg/ Kg body weight rat/ day (OECD 422)

NOEL (in reproduction) >1500mg / Kg body weight / day (OECD 422)

12 - Ecological information

12.1 Toxicity

Evaluation of the toxicity in aquatic environments: The product does not demonstrate toxic effect. These declarations derive from tests.

Toxicity on fish (LC50/96h): 680 mg/L.

Toxicity on daphnias and other aquatic invertebrates (LC50/48h): 720mg/L

Toxicity on aquatic plants-seaweeds (EC50/18 days): 2700 mg/L

EC50 (on aquatic system microorganisms): >100 mg/L

NOEC (on aquatic system microorganisms): 100 mg/L

12.2 Persistence and degradability

The product has been tested. It is not persistent. It is degradable.

12.3 Bioaccumulation potential

The product has been tested. It does not bioaccumulate in organisms.

12.4 Results of PBT and vPvB assessment

The product does not meet the criteria in order to be classified as PBTs (persistent, bioaccumulative and toxic) and vPvBs (very persistent and very bioaccumulative), since the single ingredients do not meet the criteria.

12.5 Other negative effects

The product has been tested. The product does not destroy the ozone layer.

13 – Information regarding disposal

13.1 Waste handling methods

Chemical waste material must be disposed according to the directive 2008/98/EC about wastes as well as to the relative national regulations. Packages must be disposed according to the special regulations of each country or must be returned to packages recycling entity (P501).

Remaining product/ unused product: When feasible, recycling is preferred to disposal or incineration. Collection and waste disposal at an approved disposal plant. Dispose according to local regulations.

Contaminated packages: Dispose according to local regulations.

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14 – Transform information

	14.1. UN Number	14.2. Familiar expediti on name accordin g UN	14.3. Danger order/orders during transportation	14.4. Packaging group	14.5. Environmental hazards
Land transport ADR/RID	-	-	-	-	-
Sea transport ADN	-	-	-	-	-
Sea transport IMDG	-	-	-	-	-
Air transport IATA/ICAO	-	-	-	-	-

14.6 Special precautions for the user

Not known.

14.7 Transportation of bulk material according to Appendix II of MARPOL contract 73/78 and of code IBC.

Not applicable.

15 - Regulatory information

This MSDS complies with the Regulation No 1907/2006/EU (REACH) & the Regulation (EU) No.1272/2008 [CLP].

15.1 Regulations/ legislation concerning safety, health and environment about the substance or the mixture

There is no information available.

15.2 Chemical safety evaluation

There has not been conducted a chemical safety evaluation by the supplier according to Regulation No 1907/2006/EU (REACH).

16 - Other information

The Safety data sheet should be used in combination with the technical documentation of the product. The Safety data sheet is prepared based on information collected up to the day that the Safety Data Sheet is written. It is a guide for the safe use, distribution, storage and transport of the product and it does not intend to provide any warning or detailed description. This information is relevant only for the product. If the product is combined with other material or in procedures other than the ones described this

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safety data sheet may not be applicable. The Safety data sheet meets the risk criteria of the Regulations of the Tested Products according to the directives of the European Union.