

Safety data sheet

Flex Foliar general

Version 1.0

Effective date: 04-11-2015



SECTION 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY / UNDERTAKING

1.1 Product identifier

Trade name: Flex Foliar general

1.2 Relevant identified uses of the substance or mixture and uses advised against

Product Use: Fertilizer

1.3 Details of the supplier of the safety data sheet

Company: Technical advisor:
Flex Fertilizer System ApS
Hvidkaervej 3
5250 Odense SV
Tel. No. 66158513

Contact: info@flex-fertilizer.com

1.4 Emergency telephone number:

Use your national or local emergency number.

SECTION 2. HAZARDS IDENTIFICATION

2.1 Classification according to 1272/2008 CLP

Acute Tox. 4 – H302.

Skin Irrit. 2 – H315.

Eye Dam. 1 – H318.

Aquatic Chronic 3 – H412.

2.2 Label elements 1272/2008 CLP:

Hazard pictograms:



Signal word:

Danger

Hazard statements:

H302 Harmful if swallowed.

H315 Causes skin irritation.

H318 Causes serious eye damage.

H412 Harmful to aquatic life with long lasting effects.

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Precautionary statements:

Prevention:

P260 Do not breathe mist/vapours/spray.

P264 Wash exposed areas thoroughly after handling.

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

Response:

P302+352: IF ON SKIN: Wash with soap and water.

P305+351+338 + P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing. Immediately call a POISON CENTER or doctor/physician.

P362 Take off contaminated clothing and wash before reuse.

Storage:

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Disposal:

P501 Dispose of contents/container to an approved waste disposal plant.

Additional labelling:

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2.3 Other hazards

This mixture does not meet the criteria for PBT or vPvB according to Regulation.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1/2 Substance/Mixture

CAS/EC-nr.	REACH-nr	Name	Content %	Classification CLP
6484-52-2 / 229-347-8	-	Ammonium nitrate	0-1,5	Ox. Sol. 3; H272, Skin Irrit. 2; H315, Eye Irrit. 2; H319, STOT SE 3; H335.
7664-38-2 / 231-633-2	01-2119485924- 24-xxxx	Phosphoric acid	0-1	Skin Corr. 1B; H314.
7757-79-1 / 231-818-8	01-2119488224- 35-xxxx	Potassium nitrate	0-15	Ox. Sol. 3; H272.
1043-52-4 / 233-140-8	01-2119494219- 28-xxxx	Calcium Chloride	0-22	Eye Irrit. 2; H319.
10124-37-5 / 233-332-1	01-2119495093- 35-xxxx	Calcium nitrate	0-17	Acute Tox. 4; H302, Eye Dam. 1; H318.
13446-18-9 / -	01-2119458838- 20-xxxx	Magnesium nitrate- hexahydrate	0-5	Ox. Sol. 3; H272, Skin Irrit. 2; H315.

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20694-39-7 / -	-	Manganese(II) nitrate tetrahydrate	0-3	Ox. Sol. 3; H272, Skin Irrit. 2; H315, Eye Irrit. 2; H319, STOT SE 3; H335.
7758-99-8 / 231-847-6	-	Copper Sulphate	0-3	Acute Tox. 4; H302, Skin Irrit. 2; H315, Eye Irrit. 2; H319, Aquatic Acute. 1; H400, Aquatic Chronic 1; H410.
10196-18-6 / 231-943-8	-	Zinc nitrate hexadrate	0-3	Acute Tox. 4; H302, Skin Irrit. 2; H315, Eye Irrit. 2; H319, STOT SE 3; H335.
7446-19-7 / 231-793-3	-	Zinc sulphate monohydrate	0-3	Acute Tox. 4; H302, Aye Dam. 1; H318, Aquatic Acute. 1; H400, Aquatic Chronic 1; H410.
10026-24-1 / 233-334-2	-	Cobalt(II) sulfate heptahydrate	0<0,1	Acute Tox. 4; H302, Skin Sens. 1; H317, Resp. Sens. 1; H334, Muta. 2; H341, Carc. 1B; H350i, Repr. 1B; H360, Aquatic Acute. 1; H400, Aquatic Chronic 1; H410.
10102-18-8 / 233-267-9	-	Sodium selenite	0<0,1	Acute Tox. 2; H300, Skin Sens. 1; H317, Acute Tox. 2; H331, Aquatic Chronic 2; H411.
13977-65-6 / -	-	Potassium phosphite	0-5	Eye irrit. 2; H319.

3.3 Additional information:

See full text of H-phrases in chapter 16. Occupational limits are listed in section 8, if these are available.

SECTION 4. FIRST AID MEASURES

4.1 Description of first aid measures

General information: Remove victim immediately from source of exposure. General first aid,

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rest, warmth and fresh air. Get medical attention if any discomfort continues.

Inhalation: Assure fresh air breathing. Get medical attention if any discomfort continues.

Skin contact: Flush contaminated skin with water and soap. Medical attention if any discomfort continues.

Eye contact: Remove contact lenses. Flush eyes with plenty of water (20-30°C) for at least 15 minutes and continue until irritation stops. Make sure you flush under the upper and lower eyelids. Seek medical attention immediately.

Ingestion: Do not induce vomiting. Get medical attention.

4.2 Most important symptoms and effects, both acute and delayed

Eyes: May cause irritation, redness, tears.

Skin: Irritation, redness.

Inhalation: May cause irritation.

Ingestion: May cause discomfort.

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5. FIRE FIGHTING MEASURES

5.1 Extinguishing media: This product does not burn. Use appropriate media for adjacent fire.

5.2 Special hazards arising from the substance or mixture

Fire may produce toxic fumes, avoid inhalation.

5.3 Advice for firefighters: Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

See section 8 for recommendations on the use of personal protective equipment. Avoid contact with skin and eyes. Avoid breathing vapors/mists.

6.2 Environmental precautions:

Prevent entry to sewers and public waters.

6.3 Methods and material for containment and cleaning up:

Use sand, sawdust, earth, vermiculite, diatomaceous earth to contain and collect non-combustible absorbent materials and place in container for disposal, according to local regulations.

6.4 Reference to other sections:

For guidance on selection of personal protective equipment see Chapter 8 of this safety data sheet. For guidance on disposal of spilled material see

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Chapter 13 of this Material Safety Data Sheet.

SECTION 7. HANDLING AND STORAGE

7.1 Precautions for safe handling:

See section 8 for recommendations on the use of personal protective equipment. Wash hands and other exposed areas with mild soap and water before eat, drink or smoke. Avoid contact with skin and eyes. Avoid breathing vapors/mists. Ensure good ventilation at the workplace.

7.2 Conditions for safe storage, including any incompatibilities:

Keep container tightly closed in a cool, well-ventilated place. Keep away from heat sources. Keep only in original packaging. Protect from frost. Keep away from food and feedstuffs. The fertilizer must be stored in tanks of fiberglass, other synthetics, treated steel or other material that will not corrode. The tanks must be collected and brought back into the system or neutralized with lime.

7.3 Specific end use(s):

See section 1.2

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Occupational exposure limits EH40/2007:

CAS-no:	Name:	Limits 8 h:	Limits 15 min.:	Ref:
7664-38-2	Phosphoric acid	1 mg/m ³	1 mg/m ³	EH40/2005

DNEL / PNEC

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8.2 Exposure controls

Appropriate technical measures:

Ensure adequate ventilation of the working area. Use local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

General information:

Smoking, consumption of food or liquid, and storage of tobacco, food or liquid, are not allowed in the workroom. Always wash hands, forearms and face.



Personal protective equipment:

Only CE-marked personal protection equipment should be used.

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Respiratory protection:	Recommended filter type A-P2 during prolonged use, or if limit value is exceeded.
Hand protection:	Wear protective gloves. The most suitable glove must be chosen in consultation with the gloves supplier, who can inform about the breakthrough time of the glove material. Possibility: Nitrile gloves. EN 374. >480 min.
Eye protection:	Wear tightly fitting safety goggles if risk of contact. EN 166.
Body protection:	Wear suitable protective clothing.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance: Liquid	Color: -	Odor: Fertilizer	PH 20 °C: 3-7	Viscosity: -
Flash point: -	Boiling point: -	Vapour pressure: -	Density g/cm³: 1.1-1.3	Melting point: -
Ignition temperature: -	Auto-ignition temperature: -	Explosive limits vol %: -	Solubility in water 20 °C: -	

9.2 Other information:

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SECTION 10. STABILITY AND REACTIVITY

10.1 Reactivity:	None under normal conditions of use.
10.2 Chemical stability:	Stable under normal conditions.
10.3 Possibility of hazardous reactions:	None under normal conditions
10.4 Conditions to avoid:	None known.
10.5 Incompatible materials:	Strong acids, strong oxidizing agents.
10.6 Hazardous decomposition products:	Fire may produce toxic fumes, avoid inhalation.

SECTION 11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity:	Phosphoric acid:			
	Oral:	LD50/OECD 423:	Rat:	2600 mg/kg
	Dermal:	LD50:	Rabbit:	2740 mg/kg

Skin corrosion/irritation:	Causes skin irritation.
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Serious eye

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damage/irritation: Causes serious eye damage.

Respiratory or skin sensitisation:

Not classified.

Germ cell mutagenicity: Not classified.

Carcinogenicity: Not classified.

Reproductive toxicity: Not classified.

Specific target organ toxicity - single exposure: Not classified.

Specific target organ toxicity – repeated exposure: Not classified.

Aspiration hazard: Harmful if swallowed.

Additional information: -

SECTION 12. ECOLOGICAL INFORMATION

12.1 Toxicity:	Phosphoric acid:			
	Fish:	LC50:	96 h:	3-3,25 mg/l
	Daphnia:	LC50:	48 h:	>100 mg/l

12.2 Persistence and degradability:
No data available.

12.3 Bioaccumulative potential:
No data available.

12.4 Mobility in soil: No data available.

12.5 Result of PBT and vPvB assesment:
This mixture does not meet the criteria for PBT or vPvB according to Regulation.

12.6 Other adverse effects: Harmful to aquatic life with long lasting effects.

SECTION 13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods:
Avoid release to the environment.
Dispose in a safe manner in accordance with local/national regulations.
Option:

EWC: 02 01 06

Contaminated packing: Packaging which contains leftovers from the product must be disposed of in the same way as the product.

SECTION 14. TRANSPORT INFORMATION

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This product is not classified as dangerous of transport.

	ADR/RID	IMDG/IMO
14.1 UN number	-	-
14.2 UN proper shipping name	-	-
14.3 Transport hazard class(es)	-	-
14.4 Packing group	-	-
14.5 Environmental hazards - MP	No	No
Other informations	LQ: - Tunnel: -	LQ: - Tunnel: -

14.6 Special precautions for user:

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14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code:

Not applicable.

SECTION 15. REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

Pressure Equipment (Amendment) Regulations 2011. Chemicals (Hazard Information and Packaging for Supply) Regulations 2009. Control of Substances Hazardous to Health Regulations 2002 (as amended). Merchant Shipping (Dangerous Goods and Marine Pollutants) Regulations 1997. Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 1995 (as amended). Personal Protective Equipment Regulations 2002. Personal Protective Equipment at Work Regulations 1992. Hazardous Waste (England and Wales) Regulations 2005(as amended). EC regulation 1907/2006 (REACH) Directive 2000/532/EC. EU 453/2010.

Other regulatory information authorisations and/or restrictions on use

People under the age of 18 must not be exposed to this product cf. Council Directive 94/33/EC. Pregnant or breastfeeding women must not handle this product.

Additional information:

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15.2 Chemical safety assessment:

No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

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SECTION 16. OTHER INFORMATION

Full text of H-phrases as mentioned in section 3:

H272 May intensify fire; oxidizer.

H300 Fatal if swallowed.

H302 Harmful if swallowed.

H314 Causes severe skin burns and eye damage.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H318 Causes serious eye damage.

H319 Causes serious eye irritation.

H331 Toxic if inhaled.

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled

H335 May cause respiratory irritation.

H341 Suspected of causing genetic defects.

H350i May cause cancer by inhalation.

H360 May damage fertility or the unborn child.

H373 May cause damage to organs through prolonged or repeated exposure.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

H411 Toxic to aquatic life with long lasting effects.

Additional information:

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

Validated by:

SRS

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