

SDS COMPLETED 28TH FEBRUARY 2022

VERSION 02
SUPERSEDES 06/12/2019

1. Identification of the Substance and the Company

1.1. Product identifier

Product name NPK 12-0-9+1%Fe+0.5%Mg Mini Granular

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

Identified uses Fertiliser

1.3. Details of the supplier of the safety data sheet

Company name:

Origin Amenity Solutions Ltd
 1-3 Freeman Court,
 Jarman Way,
 Orchard Road,
 Royston,
 Hertfordshire,
 SG8 5HW

Tel: 0800 138 7222

Email: sales.symbio@originamenity.com

1.4 Emergency Telephone No. :

Emergency phone No. 0800 138 7222 (09.00 – 17.00 GMT Monday – Friday)

National emergency telephone number 111

2. Hazards Identification

2.1. Classification of the substance or mixture Classification

Physical hazards	Not Classified
Health hazards	Not Classified
Environmental hazards	Not Classified

2.2. Label elements

None required – not classified as hazardous

2.3. Other hazards

This substance is not classified as PBT or vPvB according to current EU criteria.

The bacteria and fungi in this mixture are considered to belong to hazard group 1 as defined by the Advisory Committee on Dangerous Pathogens (ACDP) as “a biological agent unlikely to cause human disease”. It should NOT be assumed. However, that these organisms will be innocuous in all situations or that infections can never occur. The mixture should therefore not be used by, or in the presence of immunocompromised persons.

3. Composition/Information on Ingredients

3.2. Mixtures

Compound fertiliser containing 12% nitrogen, 9% potassium oxide, 1% iron, 0.5% magnesium

	CAS/EINECS	Classification	% w/w
Ferrous Sulphate	7720-78-7	Acute tox 4 H302	1-5%
Heptahydrate		Skin irr 2 H315	
		Eye irr 2 H319	

The full text for all Hazard Statements are displayed in Section 16

4. First Aid Measures

4.1. Description of first aid measures

Eye contact – Immediately rinse with clean water for 15 minutes. Seek medical attention if symptoms persist or develop.

Skin contact – Wash exposed areas of skin with soap and water following use. Wash all contaminated clothing before reuse.

Ingestion – wash out mouth with water and seek medical advice.

Inhalation – remove to fresh air.

4.2. Most important symptoms and effects, both acute and delayed

Eye Contact: Prolonged or repeated exposure may cause severe irritation. May cause severe eye irritation.

Skin Contact: Repeated and/or prolonged contact may cause irritation.

Ingestion: Based on components, product is considered to present little hazard by oral exposure.

Inhalation: Unlikely to cause harmful effects under normal handling and use.

4.3. Indication of any immediate medical attention and special treatment needed

None

Additional medical guidance is available to doctors from the National Poisons Information Service.

5. Fire-Fighting Measures

Non flammable

5.1. Extinguishing media

Use foam, carbon dioxide, dry powder, sand. The mixture is not classified as flammable. As such extinguishing media appropriate for surrounding materials should be chosen.

5.2. Special hazards arising from the substance or mixture

Possible irritant fumes arising from product decomposition.

5.3. Advice for firefighters

Contain spread of extinguishing fluids. Wear self-contained breathing apparatus in confined spaces.

6. Accidental Release Measures

6.1. Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation. Wear protective gloves and eye protection. Wash hands and exposed skin after handling.

6.2. Environmental precautions

Do not allow to enter drains or sewers.

6.3. Methods and material for containment and cleaning up

Sweep up and shovel product or use other means and place in container for reuse (preferred) or disposal.

7. Handling and Storage

7.1. Precautions for safe handling

Ensure good ventilation at workplace. Ensure good hygiene practices are observed. Do not eat, drink or smoke when handling this product. Do not breathe dust. Avoid contact with skin and eyes. Ensure workplace exposure limits are observed. Do not block stack pallets.

7.2. Conditions for safe storage, including any incompatibilities

Store in original containers, tightly closed in a secure, well ventilated, cool but frost-free, dry area. Store clear of foodstuffs and in a separate stack from herbicides.

7.3. Specific end use(s)

Fertiliser

8. Exposure controls/ Personal protection

8.1. Control parameters Occupational exposure limits

Occupational Exposure Limits

Follow workplace regulatory exposure limits for all types of airborne dust (e.g. total dust, respirable dust). Nuisance dust: Inhalable dust 10 mg/m³, Respirable dust 4 mg/m³

Ammonium Sulphate, Long-term Exposure Limit (LTEL)

Long-term Exposure Limit (8 hour TWA)	10	mg/m ³
---------------------------------------	----	-------------------

Gypsum, Long-term Exposure Limit (LTEL)

Long-term Exposure Limit (8 hour TWA) WEL	4	mg/m ³
---	---	-------------------

Dolomite, Long-term Exposure Limit (LTEL)

Long-term Exposure Limit (8 hour TWA) WEL	10	mg/m ³ inhalable dust
Long-term Exposure Limit (8 hour TWA) WEL	4	mg/m ³ respirable dust

Ferrous Sulphate Heptahydrate (CAS 7782-63-0), Desired No Effect Level (DNEL)

Worker

Acute systemic effects dermal:	2.8	mg/kg/day
Acute systemic effects inhalative:	9.9	mg/m ³
Systemic long-term effects dermal:	2.8	mg/kg/day
Systemic long-term effects inhalative:	9.9	mg/m ³

General Population

Acute systemic effects oral:	1.4	mg/kg/day
Acute systemic effects dermal:	1.4	mg/kg/day
Acute systemic effects inhalative:	2.5	mg/m ³
Systemic long-term effects oral:	1.4	mg/kg/day
Systemic long-term effects dermal:	1.4	mg/kg/day
Systemic long-term effects inhalative:	2.5	mg/m ³

Ferrous Sulphate Heptahydrate (CAS 7782-63-0), Predicted No Effect Concentration (PNEC) The PNECs given in this section were derived based on the concentration which would cause a 10% increase above typical natural background levels of iron in soil and sediment. Thus the respective PNEC is equal to 110% of the typical natural background level of iron.

Water

Iron is an essential trace element for fish, aquatic invertebrates and plants. A direct toxicity could not be demonstrated in tests. Therefore no PNEC was derived.

Sewage Treatment Plants, Sediment and Soil

STP	500	mg/L
Sediment (Fresh Water)	49.5	g/kg
Sediment (Marine Water)	49.5	g/kg
Soil	55.5	g/kg

Oral (food chain)

Iron is an essential trace element for fish, aquatic invertebrates and plants. A direct toxicity could not be demonstrated in tests, therefore no PNEC was derived.

SDS COMPLETED 28TH FEBRUARY 2022

VERSION 02
SUPERSEDES 06/12/2019

Urea, Long-term Exposure Limit (LTEL)

Long-term Exposure Limit (8 hour TWA) WEL	10	mg/m ³ inhalable dust
Long-term Exposure Limit (8 hour TWA) WEL	4	mg/m ³ respirable dust

Potash (CAS 7447-40-7), Desired No Effect Level (DNEL)

Worker

Systemic long-term effects dermal:	580	mg/kg/day
Systemic long-term effects inhalative:	292	mg/m ³
Systemic short-term effects dermal:	580	mg/kg/day
Systemic short-term effects inhalative:	292	mg/m ³

Potash (CAS 7447-40-7), Predicted No Effect Concentration (PNEC)

Fresh water	0.047	mg/L
Marine water	0.047	mg/m ³

8.2. Exposure controls

Protective equipment



Gloves: wear protective gloves.

Eye/face protection: wear eye protection.

Engineering controls: all handling should only take place in well-ventilated areas.

Clothing: wear appropriate clothing to prevent repeated or prolonged skin contact.

Hygiene measures: wash hands thoroughly after handling. Do not eat, drink or smoke when using this product.

Respiratory protection: no specific recommendations

9. Physical and Chemical properties

9.1. Information on basic physical and chemical properties

Appearance	Granules.
Colour	Beige to Dark brown granules
Odour	Mild.
Odour threshold	n/a
pH	Slightly Acidic
Melting point	Not relevant.
Initial boiling point and range	Not relevant.
Flash point	Not relevant.
Evaporation rate	Not relevant.
Flammability (solid, gas)	The product is not flammable.
Vapour pressure	Not relevant.
Vapour density	Not relevant.
Relative density	Not relevant.
Solubility(ies)	Not known.
Partition coefficient	Not known.
Auto-ignition temperature	Not relevant.
Decomposition Temperature	Not relevant.
Viscosity	Not relevant.
Explosive properties	Not relevant.
Oxidising properties	Does not meet the criteria for classification as oxidising.

SDS COMPLETED 28TH FEBRUARY 2022

VERSION 02
SUPERSEDES 06/12/2019

9.2. Other information

None

10. Stability and Reactivity

10.1. Reactivity

Stable under normal conditions of storage and use

10.2. Chemical stability

Stable under normal conditions

10.3. Possibility of hazardous reactions

Information not available

10.4. Conditions to avoid

Extremes of temperature

10.5. Incompatible materials

None known.

10.6. Hazardous decomposition products

Decomposes at high temperatures producing toxic nitrogen and sulphur oxide fumes.

11. Toxicological information

11.1. Information on toxicological effects Acute toxicity - oral

Acute toxicity – oral

No specific test data are available.

Acute toxicity – dermal

Notes (dermal LD50)

No specific test data are available.

Acute toxicity – inhalation

Notes (inhalation LC50)

No specific test data are available.

Serious eye damage/irritation

Irritation of eyes is assumed. In-vitro testing conducted on products with SSP Content <62%, 2015, Result: Reduced classification to Eye Irritant from Eye Damage.

Respiratory sensitisation

No specific test data are available.

Skin sensitisation Not determined.

Germ cell mutagenicity

Genotoxicity - in vitro

This substance has no evidence of mutagenic properties.

Carcinogenicity

No specific test data are available.

Reproductive toxicity

Reproductive toxicity - fertility

Does not contain any substances known to be toxic to reproduction.

Specific target organ toxicity - single exposure

STOT - single exposure

Not classified as a specific target organ toxicant after a single exposure.

SDS COMPLETED 28TH FEBRUARY 2022

VERSION 02
 SUPERSEDES 06/12/2019

Specific target organ toxicity - repeated exposure

STOT - repeated exposure

Not classified as a specific target organ toxicant after repeated exposure.

Aspiration hazard

Not anticipated to present an aspiration hazard, based on chemical structure.

Eye contact

The product is considered to be a low hazard under normal conditions of use. May cause eye irritation.

Ecotoxicity

The product is not expected to be toxic to aquatic organisms

12. Ecological information

12.1. Toxicity

Not classified as hazardous. Provides nutrients essential to plant growth.

12.2. Persistence and degradability

The product is slowly degradable.

12.3. Bioaccumulative potential

Partition coefficient not known.

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

This product does not contain any substances classified as PBT or vPvB.

12.6. Other adverse effects

No Data

13. Disposal considerations

Disposal route should not permit contamination of groundwater.

13.1. Waste treatment methods

Dispose of waste through a reputable waste disposal contractor in accordance with the Environmental Protection Act 1990.

14. Transport information

14.1. UN number

Not applicable.

14.2. UN proper shipping name

Not applicable.

14.3. Transport hazard class(es)

No transport warning sign required.

14.4. Packing group

Not applicable.

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant No.

14.6. Special precautions for user

Not applicable.

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not applicable.

15. Regulatory information

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

Safety, health and environmental regulations/legislation specific to this substance:

This substance is classified and labelled in accordance with regulation 1999/45/EC, 1272/2008, the statutory instrument No.716 2009 Chemicals (Hazard Information and Packaging) regulations and the EC Fertiliser Regulations 2003, Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, including amendments.

15.2. Chemical safety assessment

Not undertaken for this material

16. Other information

Text of the hazard statements mentioned in Section 3:

H302 Harmful if swallowed

H315 Causes skin irritation

H319: Causes serious eye irritation

Reason for revision

Change in ingredients. Removal of Single Superphosphate. Change in classification, product is no longer classified.

Disclaimer

The information in this SDS was obtained from sources which we believe to be reliable. Origin provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate handling of the product by properly trained and qualified personnel. Individuals receiving the information must exercise their independent judgment in determining its appropriateness for a particular purpose.

Origin makes no warranties or guarantees either express or implied with respect to the information contained herein. The conditions or methods of handling, storage, use or disposal of the product are beyond our control, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product.