Revised by: Simonne Moses - HSNO Consultant SDS No: 1

Safety Data Sheet Nrich SOA

Classified as: Hazardous according to the EPA Hazardous Substances (Hazard Classification) Notice 2020.

Section 1: SUBSTANCE AND SUPPLIER DETAILS

Product Name: Nrich SOA

Synonyms: Ammonium Sulphate Fertiliser

Supplier: Ballance Agri Nutrients

161 Hewletts Road

Mt Maunganui Tauranga 3116

New Zealand

Phone: +64 7 572 7900

Recommended Use: Fertiliser

In Case of Emergency Contact:

CHEMCALL: 0800 CHEMCALL (243 622)

Section 2: HAZARDS IDENTIFICATION

This product is not classified as a Dangerous Good for Transport.

This product is classified as hazardous according to criteria in the EPA Hazardous Substances (Hazard Classification) Notice 2020.

Classified under the group standard "Fertilisers (Subsidiary Hazard) Group Standard 2020"

HSNO Approval Number: HSR002571

GHS CLASSIFICATIONS: Acute Toxicity, oral – Category 4

Hazardous to terrestrial vertebrates

HSNO Classification: 6.1D oral, Acutely Toxic

9.3C Harmful to terrestrial vertebrates

<u>Label Elements:</u>

Hazard Statements:

H302 Harmful if swallowed Hazardous to terrestrial vertebrates

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GHS Pictograms:



WARNING

GENERAL STATEMENTS:

P101 – If medical advice is needed, have product container or label at hand.

P102 - Keep out of reach of children.

P103 – Read carefully and follow all instructions.

PREVENTION STATEMENTS:

P264 – Wash hands/exposed skin thoroughly after handling.

P270 – Do not eat, drink, or smoke when using this product.

P273 – Avoid release to the environment.

RESPONSE STATEMENTS:

P301 + P312 - IF SWALLOWED: Call a POISON CENTRE or doctor if you feel unwell.

P330 - Rinse mouth.

STORAGE: None

DISPOSAL:

P501 - Recycle where possible. Dispose of non-recyclable product and packaging via an approved waste disposal contractor.

Section 3: COMPOSITION / INFORMATION ON INGREDIENTS

Main Component	CAS Number	Concentration
Ammonium Sulphate	7783-20-2	95%

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Section 4: FIRST AID MEASURES

Workplace Facilities

Required:

Eye wash and safety shower facilities should be provided.

If Inhaled: Remove to fresh air. Keep at rest in a position comfortable for breathing. If breathing

stops apply artificial respiration. Seek immediate medical attention.

In Contact with Eye: Hold eyes open, flush with water for at least 15 minutes. Remove contact lenses if

present, and easy to do. Seek medical attention if irritation develops and persists.

In Contact with Skin: Wash skin with plenty of water, while removing contaminated clothing and shoes. Wash

contaminated clothing before re-use. Seek medical attention if skin irritation develops

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and persists.

If Swallowed: DO NOT INDUCE VOMITING. Rinse mouth. Give small quantities of water. Never give

anything by mouth to an unconscious person. Seek immediate medical attention. If

vomiting occurs, keep head below hips to prevent aspiration to lungs.

Advice to Doctor: Treat symptomatically.

Section 5: FIRE FIGHTING MEASURES

Fire/Explosion Hazard: Product is not flammable or combustible, but when packaged in bags, the bags may

burn if exposed to fire. Remove packages from the path of the fire if safe to do so.

Suitable Extinguishing

Media:

There is no restriction on the type of extinguishant used. Use extinguishant suitable

for the surrounding area.

Precautions in Connection

May give off toxic and/or corrosive fumes in a fire, containing nitrogen and sulphur

oxides.

Advice for firefighters: Wear full firefighting gear and self-contained breathing apparatus.

Section 6: ACCIDENTAL RELEASE MEASURES

Precautions: Clear area of all unprotected personnel. Keep unnecessary and unprotected

personnel from entering area. Avoid contact with skin and eyes. Avoid generating

dust. Avoid release to the environment.

Suitable Protective

Equipment:

Emergency responders must use personal protective equipment, including gloves, protective overalls, and safety glasses or goggles. If ventilation is inadequate, then

respiratory protection may be needed.

Spill or Leak Procedures. Contain the spill. Sweep up and collect spilled material and place in a suitable,

closable chemical waste container. Ensure waste container is properly labelled.

Waste Disposal Methods: Dispose of as per Section 13.

Emergency preparation: Ensure there is appropriate and adequate personal protective equipment, trained

personnel and clean up materials for management of accidental release.

Section 7: HANDLING AND STORAGE

Precautions for Safe

Handling:

Do not eat, drink, or smoke when using this product. Avoid generating dust. Avoid inhaling product. Use in a well-ventilated area. Avoid contact with skin and eyes. Remove contaminated clothing and wash hands and face before entering eating areas. Launder contaminated clothing separately.

Storage: Keep out of reach of children. Protect packages against physical damage.

Ensure any part packages are securely sealed before being stored. Store in a cool, dry, well-ventilated area away from incompatibles (see Section 10). Store in a contained area where any spill cannot be dispersed outside the area. Do not

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store with food related items.

Site Storage Requirements: This substance triggers site signage requirements at 10,000 kg.

Section 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

Workplace Exposure Standards NZ: No Workplace Exposure Standards have been established for this product.

Engineering Controls: Eyewash and safety shower facilities should be provided in the work area where

there is a risk of exposure to eyes and skin. For typical conditions of storage and use, natural ventilation should be adequate. In enclosed areas, mechanical

ventilation may be required.

Personal Protective Equipment:

Avoid contact with skin and eyes. Avoid inhaling product.

Hand protection: Wear protective gloves that are resistant to the product. Refer to Australian and

New Zealand Standard AS/NZS 2161 for protective gloves.

Skin and body protection: Use protective clothing. Remove any contaminated clothing to avoid prolonged

contact with the skin. Wash work clothes regularly. Refer to Australian and New

Zealand Standard AS/NZS 4501 for occupational protective clothing.

Eye protection: Use safety glasses with side shields or safety goggles to protect eyes. Refer to

AS/NZS 1336 for suitable eye and face protection.

Respiratory protection:

Dust mask rated at least P1 if exposure to dust is low. For higher dust

concentrations a P2 mask may be needed. Refer to AS/NZS 1715 and AS/NZS 1716 for suitable respiratory protection. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe

working limits of the selected respirator.

Other information: PPE selected must be impervious to the substance. Do not eat, smoke, or drink

where material is handled, processed, or stored. Wash hands carefully before eating, drinking, or smoking. Handle in accordance with safe industrial hygiene

practices.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Description: Solid, crystals or powder **Colour:** White, pinky/brown

Odour:NoneOdour Threshold:Not applicablepH (20°C):Not availableSolubility (water, 20°C):Very solubleMelting point:235-280°C (decomp.)Boiling Point:Not applicable

Flammability:Non-flammableFlash Point:Not applicableUEL/LEL:Not applicableVapour Pressure (70°C):Not applicableVapour Density:Not applicableEvaporation Rate:Not applicable

Decomposition Temp: 235°C **Autoignition Temp:** Not applicable

Partition Coefficient: noctanol/water

Not available
Relative Density (20°C): 1.6 (water = 1)

Viscosity: Not applicable Particle characteristics: Not available

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Section 10: STABILITY AND REACTIVITY

Stability: Stable under normal dry storage conditions.

Reacts with caustics to form ammonia. Reacts violently with potassium chlorate.

When hot reacts with nitrates, nitrites, chlorates. Attacks metals.

Conditions to Avoid: Avoid generating dust. Do not store with food related items.

Incompatibility: Incompatible with strong alkalis, sulphuric acid, aliphatic amines, alkanolamines,

amides, organic anhydrides, isocyanates, vinyl acetate, alkylene oxides, epichlorohydrin, potassium plus ammonium nitrate, sodium-potassium powder plus ammonium nitrate. Mixtures with sodium hypochlorite form unstable,

explosive nitrogen trichloride

Hazardous Polymerisation: Will not occur.

Hazardous Decomposition: May form toxic fumes containing oxides of nitrogen and sulphur.

Section 11: TOXICOLOGICAL INFORMATION

Acute Exposure

Acute Toxicity: LD50 oral $> 300 - \le 2000 \text{ mg/kg}$.

LD50 dermal > 2000 mg/kg LC50 inhalation > 5 mg/L (dust)

Inhalation: May cause mechanical irritation if dust is inhaled.

Ingestion: Harmful if swallowed. May cause vomiting, diarrhoea, abdominal cramps.

Skin Contact: Not expected to be a skin irritant. May cause mechanical irritation on damp skin.

Eye Contact: Not expected to be an eye irritant. May cause mechanical irritation.

Sensitiser: Not expected to be a contact or respiratory sensitiser.

Chronic Exposure:

Mutagen/Carcinogen/Reproductive

Toxicant

No chronic toxicity effects expected.

Specific Target Organ Systemic

Toxicity:

Not expected to be toxic to target organs or systems.

Section 12: ECOLOGICAL INFORMATION

Ecotoxicity: $LC/EC_{50} > 100 \text{ mg/L}.$

Product is not expected to be harmful in the aquatic environment.

 $LD_{50} > 300 - \le 2000 \text{ mg/kg}$

Hazardous to terrestrial vertebrates. Avoid release to the environment.

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Persistence/degradability: No data.

Bioaccumulation: No data.

Mobility: Soluble in water.

Ecotoxicity data is based on hazardous ingredient classification information.

Section 13: DISPOSAL CONSIDERATIONS

Disposal: Recycle and reuse wherever possible. Dispose of waste product via an approved

waste disposal contractor.

Disposal of Packaging: Packaging may contain product residues and should be treated as hazardous.

Dispose of packaging via an approved waste disposal contractor.

Section 14: TRANSPORT INFORMATION

This product is not classified as a Dangerous Good for transport in accordance with NZS5433:2012, IMDG or IATA.

Ensure transportation methods prevent leakage from packages and collapsing loads.

Section 15: REGULATORY INFORMATION

Group Standard Allocation: Fertilisers (Subsidiary Hazard) Group Standard 2020

Compliance Certificate

HSNO Approval Code: HSR002571

This substance triggers:

Classifications: Acute toxicity, oral – Category 4

Hazardous to terrestrial vertebrates

NZIOC: All hazardous ingredients are listed on the NZ Inventory of Chemicals.

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Certified Handler N/A
Emergency Response Plan 1,000 kg
Secondary Containment N/A
Signage 10,000 kg

This substance is not required to be Tracked. All workplace personnel handling this substance are required to be trained on the safe handling and PPE requirements for

N/A

the hazards associated with this substance.

Section 16: OTHER INFORMATION

The information provided in this Safety Data Sheet relates only to the specific material designated herein. This Safety Data Sheet summarises our best knowledge of the health and safety hazard information of the product and how to safely handle the product in the workplace. Each user should read this SDS and consider the information

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in the context of how the product will be handled and used in the workplace including its use in conjunction with other products.

This substance is approved under HSNO for use as a fertiliser. All reasonable care has been taken to ensure that the information and advice contained herein are from sources believed to be reliable and to represent the most upto-date knowledge available at the date given in Section 16. No liability is assumed for any damages related to the use or misuse of this substance.

All chemical materials may present unknown hazards as people have varying degrees of sensitivity to chemicals. Therefore, this product should be used with caution. The information herein is given in good faith, but no warranty, express or implied is made.

SDS Issued: 17 May 2021

Reason for Revision: Revised in accordance with amended ingredient classification and NZ classification

and labelling system now in line with GHS Version 7.

References:

EPA NZ Inventory of Chemicals Database EPA – Individual Hazardous Substance Approvals Update, April 2021 Global Harmonisation System Version 7 – Annex 3, Label Elements Ballance Nrich SOA SDS, Version 8.1.2.1, November 2019

END OF SAFETY DATA SHEET

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