

SAFETY DATA SHEET

According to EC Regulation 1907/2006/EC - revision 2020/878

Print Date 27/11/2025

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Revision No. 2.7
Revision date 31/12/2024

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

1.1. Product identifier

Product Name: ECOSTORM NUTRIENT LIQ
Product Code: EP_2385G
UFI: KTY2-X0NH-G00U-V923

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

Recommended use

Water treatment chemical. Nutrient solution.

1.3. Details of the supplier of the safety data sheet

NCH UK & Ireland,
Arrowmere House, Bilston,
WV14 0QL
Tel (UK): 01902 510200, Tel (Ireland): 042 939 5502
E-mail address: technical_uk@nch.com
Website address: www.ncheurope.com

1.4. Emergency telephone number

UK - 01902 510200 (available during Office Hours)
In Republic of Ireland (available from 8am to 10pm daily): 01 809 2166

SECTION 2. HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 (CLP/GHS) and its adaptations

Acute toxicity: Category 4
Serious damage to eyes: Category 1
H302 - Harmful if swallowed
H318 - Causes serious eye damage

2.2. Label elements

Labelling according to Regulation (EC) No 1272/2008 (CLP/GHS)

Contains CALCIUM NITRATE TETRAHYDRATE

Hazard pictograms



Signal word Danger

Hazard statements

H302 - Harmful if swallowed
H318 - Causes serious eye damage

Precautionary statements

P301+P310 - IF SWALLOWED: Immediately call a POISON CENTRE or doctor.
P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P280 - Wear protective gloves/protective clothing/eye protection/face protection
Keep out of reach of children

For industrial and institutional use only.

2.3. Other hazards

No additional hazards identified.

The components in this formulation do not meet the criteria for classification as PBT or vPvB. As defined under the regulation EC 1907/2006.

The product does not contain substances that have been identified as an endocrine disruptor (REACH - Article 57(f))

SECTION 3. COMPOSITION / INFORMATION OF INGREDIENTS

Chemical name	CAS No.	EC No (EU Index No)	EU - REACH reg number	Weight-%	Classification according to Regulation (EC) No. 1272/2008 [CLP]	Notes
CALCIUM NITRATE TETRAHYDRATE	13477-34-4			50 - 100	Acute Tox. 4 (H302) Eye Dam. 1 (H318)	

For any H statements mentioned in this section, see the full text in section 16.

SECTION 4. FIRST AID MEASURES

4.1. Description of first aid measures

General advice

Avoid contact with skin, eyes and clothing. Avoid breathing vapours or mists. Get medical attention immediately if symptoms occur. Do not get in eyes, on skin or on clothing.

Eye Contact

In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention immediately.

Skin Contact

Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes. Get medical attention if irritation develops and persists.

Ingestion

Rinse mouth with water. Do NOT induce vomiting. Get medical attention immediately. Show the Label to the Doctor.

Inhalation

Remove from the area to fresh air. Seek medical attention if respiratory irritation develops or if breathing becomes difficult.

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

Sensitisation

No information available.

Eye contact

May cause severe irritation to eyes. May cause burns which could lead to permanent eye damage.

Skin contact

May cause irritation as itching or redness. May cause burns on prolonged or repeated exposure.

Ingestion

Contains component(s) known to be harmful if swallowed.

Inhalation

Inhalation of mists may result in irritation to the respiratory tract.

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

Notes to physician

The product causes burns of eyes, skin and mucous membranes. Treat symptomatically.

SECTION 5. FIRE-FIGHTING MEASURES

5.1. Extinguishing media

Suitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Use: Water spray. Alcohol-resistant foam. Dry chemical. Carbon dioxide (CO₂).

5.2. Special hazards arising from the substance or mixture

At high temperatures: Nitrogen oxides (NO_x), Oxygen, Calcium oxides.
Material can create slippery conditions.

5.3. Advice for firefighters

Firefighters should wear a self-contained breathing apparatus and full protective gear.

SECTION 6. ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Avoid contact with skin, eyes, and clothing. Use personal protective equipment. Refer to protective measures listed in sections 7 and 8. Prevent further leakage or spillage if safe to do so. Material can create slippery conditions.

6.2. Environmental precautions

Avoid release of neat product into surface water and sanitary sewage system.

6.3. Methods and material for containment and cleaning up

Methods for Containment

Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local / national regulations (see section 13).

Methods for Cleaning up

Clean preferably with a detergent, do not use solvents.

6.4. Reference to other sections

Refer to sections 7, 8 and 13.

SECTION 7. HANDLING AND STORAGE

7.1. Precautions for safe handling

Avoid contact with skin, eyes and clothing. Avoid breathing vapours or mists. Do not eat, drink or smoke when using this product. Ensure adequate ventilation.

7.2. Conditions for safe storage, including any incompatibilities

Store in original container. Keep containers tightly closed in a dry, cool and well-ventilated place.

7.3. Specific end use(s)

No information available.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Exposure Limits

The product does not contain any hazardous materials with occupational exposure limits established.

DNEL (Derived No-Effect Level)

Not applicable

PNEC (Predicted No-Effect Concentration)

Not applicable

8.2. Exposure controlsControl parameters

Provide an eyewash station. Provide washing facilities.

Engineering Measures

General ventilation is normally adequate.

Personal Protective Equipment

Use personal protection equipment as per Regulation (EU) 2016/425.

Respiratory Protection

Not required under normal use.

Hand Protection

Wear suitable protective gloves conforming to EN 374. Long term use eg continuous wear or immersion ;. Type of gloves suggested :. Nitrile rubber (0.4 mm). Neoprene gloves (0.4 mm). Suitability and durability of a glove is dependent upon usage factors such as frequency, duration of use, temperature and chemical resistance. The use of a chemical-protective glove may in practice be much shorter than the permeation time determined through testing. For break through times, refer to glove manufacturers recommendations.

Eye Protection

Safety glasses with side-shields. For large volumes, faceshields should be used.

General Hygiene Considerations

Do not eat, drink or smoke when using this product. Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**9.1. Information on basic physical and chemical properties**

Information below relates to typical values and does not constitute a specification.

Appearance	Clear, colorless solution
Odour	Odourless
Physical state	Liquid
pH	6
Flash Point	Not applicable
Specific gravity	1.430
Viscosity	No data available
Solubility(ies)	Soluble in water
Autoignition Temperature	No information available
Decomposition temperature	No information available
Boiling Point/Range	No information available
Melting Point/Range	- 20 °C
Flammability Limits in Air %	No information available
Evaporation Rate	No information available
Vapour pressure	No information available
Relative vapour density	No information available
Explosive properties	Not explosive
Oxidising Properties	No information available
VOC content	0 %

9.2. Other information

No other information available

SECTION 10. STABILITY AND REACTIVITY**10.1. Reactivity**

Not considered as highly reactive. See further information below.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

The mixture itself will not dangerously react or polymerise to create hazardous conditions in normal use.

10.4. Conditions to avoid

Keep away from combustible material.

10.5. Incompatible materials

Reducing agents.

10.6. Hazardous decomposition products

None under normal storage conditions and use.

At high temperatures: Nitrogen oxides (NOx), Oxygen, Calcium oxides.

SECTION 11. TOXICOLOGICAL INFORMATION**11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008**Product Information

The product itself has not been tested.

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
CALCIUM NITRATE TETRAHYDRATE	> 300 - <2000 mg/kg (rat)		

Sensitisation

No information available.

Skin contact

May cause irritation as itching or redness. May cause burns on prolonged or repeated exposure.

Inhalation

Inhalation of mists may result in irritation to the respiratory tract.

Ingestion

Contains component(s) known to be harmful if swallowed.

Eye contact

May cause severe irritation to eyes. May cause burns which could lead to permanent eye damage.

Carcinogenicity

There are no known carcinogenic substances in this product.

Mutagenic Effects

There are no known mutagenic substances in this product.

Reproductive Effects

There are no known substances in this product with effects on reproduction.

STOT - single exposure

Based on available data, the classification criteria are not met

STOT - repeated exposure

Based on available data, the classification criteria are not met

Aspiration hazard

Based on available data, the classification criteria are not met

11.2 Information on Other Hazards

The product does not contain substances that have been identified as an endocrine disruptor (REACH - Article 57(f))

SECTION 12. ECOLOGICAL INFORMATION**12.1. Toxicity**Product Information

The product itself has not been tested.

Chemical name	Toxicity to Fish	Crustacea	Toxicity to Algae
CALCIUM NITRATE TETRAHYDRATE	LC50 = 10000 mg/L <i>Lepomis macrochirus</i> 96 h		

12.2. Persistence and degradability

Persistence and degradability are substance specific, no test data is available on the constituents of this mixture to degrade or persist in the environment, either through biodegradation or other processes, such as oxidation or hydrolysis.

12.3. Bioaccumulative potential

No information available.

12.4. Mobility in soil

Partially soluble in water.

12.5. Results of PBT and vPvB assessment

The components in this formulation do not meet the criteria for classification as PBT or vPvB. As defined under the regulation EC 1907/2006.

12.6 Endocrine disrupting properties

The product does not contain substances that have been identified as an endocrine disruptor (REACH - Article 57(f))

12.7 Other adverse effects

No data available

SECTION 13. DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Waste from Residues / Unused Products

Dispose of in accordance with local regulations.

Contaminated Packaging

Empty containers should be taken for local recycling, recovery or waste disposal. Empty remaining contents. Recycle according to official regulations.

EWC waste disposal No

The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process

Other Information

According to the European Waste Catalogue, Waste Codes are not product specific, but application specific

SECTION 14. TRANSPORT INFORMATION

14.1, 14.2, 14.3, 14.4.

Not classified for transport as dangerous goods

14.5. Environmental hazards

The mixture is not environmentally hazardous for transport

14.6. Special precautions for user

No special precautions.

14.7 Maritime transport in bulk according to IMO instruments

Packaged product, not typically transported in IBC's

Additional information

The above information is based on latest transport regulations i.e. ADR for road, RID for rail, IMDG for sea and ICAO/IATA for air transport.

SECTION 15. REGULATORY INFORMATION

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

This mixture was classified in compliance with EC Regulation 1272/2008 (CLP) and its adaptations.

The preparation is classified as dangerous in accordance with Directive 1999/45/EC. In addition, Directive 2009/2/EC with the 31st Adaptation of Directive 67/548/EEC (Hazardous substances) has been taken into account.

Other regulatory information

This product contains substances that are regulated by Regulation (EU) 2019/1148: all suspicious transactions, and significant disappearances and thefts should be reported to the relevant national contact point. Please see.

https://ec.europa.eu/home-affairs/system/files/2021-09/list_of_competent_authorities_and_national_contact_points_en.pdf.

UK - The Control of Poisons and Explosives Precursors Regulations 2023. This product contains an Explosive precursor that is on

the Reportable substance list in the UK. Acquisition, introduction, possession or use of this product by the general public is restricted. All suspicious transactions, and significant disappearances and thefts should be reported. Please see details <https://www.gov.uk/government/publications/supplying-explosives-precursors/supplying-explosives-precursors-and-poison>.

15.2. Chemical safety assessment

No chemical safety assessment has been carried out for this mixture by the supplier

SECTION 16. OTHER INFORMATION

Text of H statements mentioned in Section 3

H302 - Harmful if swallowed. H318 - Causes serious eye damage.

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]

Calculation method. H302 - Harmful if swallowed. H318 - Causes serious eye damage.

Prepared By PR

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Revision summary

SDS sections updated 9 16

Abbreviations

REACH: Registration Evaluation Authorisation Restriction of Chemicals

EU: European Union

EC: European community

EEC: European Economic Community

UN: United Nations

CAS: Chemical Abstracts Service

PBT: Persistent Bioaccumulative Toxic

vPvB: very Persistent very Bioaccumulative

LC50: Lethal concentration, 50 percent

LD50 : Lethal dose, 50 percent

EC50: Effective concentration, 50 percent

LogPow: LogP octanol/water

VwVwS: Verwaltungsvorschrift wassergefährdende Stoffe (Administrative order relating to substances hazardous to water - Germany)

WGK: Wassergefährdungsklasse (Water Hazard Class - Germany).

AVV: Abfallverzeichnis-Verordnung (Waste Code - Germany)

ADR: Accord européen relatif au transport international des marchandises Dangereuses par Route (European agreement governing the international carriage of dangerous goods by road)

IMDG: International Maritime Dangerous Goods

IATA: International Air Transport Association

ICAO: International Civil Aviation Organisation

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations concerning the International carriage of Dangerous goods by rail)

EmS: Emergency Response Procedures for Ships Carrying Dangerous Goods

ERG: Emergency Response Guidebook

IUCLID / RTECS International Uniform Chemical Information Database / Registry of Toxic Effects of Chemical Substances

GHS: Globally Harmonised System of classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

VOC: Volatile Organic Chemical

w/w: weight for weight

DMSO: Dimethyl sulphoxide

OECD: Organization for Economic Cooperation and Development

STEL: Short Term Exposure Limit

TWA: Time Weighted Average

Further Information

Component test results displayed in sections 11 and 12 are typically supplied by Chemadvisor and assembled from publicly available literature sources e.g. IUCLID / RTECS

It is at all times the responsibility of the user to take all necessary measures to comply with legal requirements and local regulations

Disclaimer

The information provided on this SDS is correct to the best of our knowledge, information and belief at the date of its publication.

The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated

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and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

End of Safety Data Sheet