

* **SECTION 1: Identification of the substance/mixture and of the company/undertaking**

1.1 Product identifier

Trade name: X-FACTOR N 24-0-0 + Mo

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

Application of the substance / the mixture Foliar Nutrient

Uses advised against

To be used only where there is a recognized need. Do not exceed the appropriate dose rates.

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier:

TURF Handels GmbH

Am Hartboden 48

A-8101 Gratkorn

T: +43 3124 29064

F: +43 3124 29062

Further information obtainable from: Email: office@turf.at

1.4 Emergency telephone number:

+43 3124 29064

Available during office hours:

Mo - Th: 8 a.m. - 4.30 p.m.

Fr: 8 a.m. - 2.30 p.m.

Call the national emergency number!

* **SECTION 2: Hazards identification**

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

Eye Irrit. 2 H319 Causes serious eye irritation.

Additional information: For the wording of the hazard categories, see section 16.

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008

The product is classified and labelled according to the CLP regulation.

Hazard pictograms



GHS07

Signal word Warning

Hazard statements

H319 Causes serious eye irritation.

Precautionary statements

P264 Wash thoroughly after handling.

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P280 Wear eye protection / face protection.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337+P313 If eye irritation persists: Get medical advice/attention.

Additional information:

Product contains: Reportable explosives precursors. Making available, introduction, possession and use according to Regulation (EU) 2019/1148, Article 9.

2.3 Other hazards

Results of PBT and vPvB assessment

PBT: No data available.

vPvB: No data available.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Description: Mixture of substances listed below with nonhazardous additions.

Dangerous components:

[% (w/w)]

CAS: 6484-52-2	ammonium nitrate	Ox. Sol. 3, H272	< 20.0%
EINECS: 229-347-8		Eye Irrit. 2, H319	
Reg.nr.: 01-2119490981-27-XXXX			

Additional information: For the wording of the listed hazard phrases refer to section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General information:

In case of discomfort or doubt, seek medical advice.

If unconscious, use a stable lateral position and do not administer anything through mouth.

Immediately remove any clothing soiled by the product.

After inhalation:

Supply fresh air; consult doctor in case of complaints.

In case of unconsciousness place patient stably in side position for transportation.

After skin contact:

Immediately wash with water and soap and rinse thoroughly.

Take off immediately all contaminated clothing and wash it before reuse.

Seek medical treatment in case of complaints.

After eye contact:

Rinse opened eye for several minutes under running water.

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

Seek medical treatment.

After swallowing:

Rinse mouth.

Do NOT induce vomiting.

Drink water.

Call a doctor immediately.

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4.2 Most important symptoms and effects, both acute and delayed

No further relevant information available.

4.3 Indication of any immediate medical attention and special treatment needed

Depending on the condition of the patients, the doctor must assess the symptoms and the overall general condition.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing agents:

CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

For safety reasons unsuitable extinguishing agents: Water with full jet

5.2 Special hazards arising from the substance or mixture

In case of fire, dangerous combustion gases or vapours may be generated.

Possible oxidizer when dry. Dry material in contact with combustible materials may cause fire or accelerate burning if involved in fire.

5.3 Advice for firefighters

Protective equipment:

Wear self-contained respiratory protective device.

Wear fully protective suit.

Additional information Cool endangered receptacles with water spray.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Restricted access to the affected area until cleaning work is completed.

Wear protective equipment. Keep unprotected persons away.

Ensure adequate ventilation

Avoid contact with skin and eyes.

Do not breathe vapour/spray.

6.2 Environmental precautions:

Do not allow to enter sewers/ surface or ground water.

Inform respective authorities in case of seepage into water course or sewage system.

6.3 Methods and material for containment and cleaning up:

Absorb with liquid-binding, inert material (sand, diatomite, acid binders, universal binders).

Dispose contaminated material as waste according to section 13.

Ensure adequate ventilation.

6.4 Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace.

Keep receptacles tightly sealed.

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- Prevent formation of aerosols.
- Avoid contact with skin and eyes.
- Avoid breathing mist/vapours/spray.
- Use personal protective equipment as required.
- Observe protective measures and safety instructions.

Information about fire - and explosion protection: Substance/product is oxidising when dry.

7.2 Conditions for safe storage, including any incompatibilities

Storage:

Requirements to be met by storerooms and receptacles:

- Store in a dry, cool, well-ventilated area.
- Store in accordance with local/regional/national/international regulations.

Information about storage in one common storage facility:

- Store away from feeding stuff.
- Store away from foodstuffs.

Further information about storage conditions:

- Store in original container.
- Keep container tightly sealed.
- Protect from frost.

Recommended storage temperature: room temperature

Storage class: 12

7.3 Specific end use(s) No further relevant information available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Ingredients with limit values that require monitoring at the workplace:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

DNELs

CAS: 6484-52-2 ammonium nitrate

Oral	Long-term exposure - systemic effects	2.56 mg/kg bw/d (consumer)
Dermal	Long-term exposure - systemic effects	2.56 mg/kg bw/d (consumer) 5.12 mg/kg bw/d (workers)
Inhalative	Long-term exposure - systemic effects	8.9 mg/m ³ (consumer) 36 mg/m ³ (workers)

PNECs

CAS: 6484-52-2 ammonium nitrate

STP	18 mg/l
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Additional information: The lists valid during the making were used as basis.

8.2 Exposure controls

Appropriate engineering controls

No further data; see section 7.

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Technical measures and the use of suitable working methods take priority over the use of personal protective equipment.

Individual protection measures, such as personal protective equipment

General protective and hygienic measures:

The usual precautionary measures are to be adhered to when handling chemicals.

Keep away from foodstuffs, beverages and feed.

Do not eat or drink while working.

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

Immediately remove all soiled and contaminated clothing.

Store protective clothing separately.

Do not inhale gases / fumes / aerosols.

Ensure good ventilation/exhaustion at the workplace.

Protective clothing needs to be selected specifically for the workplace, depending on concentrations and quantities of the hazardous substances handled. The chemical resistance of the protective equipment should be enquired at the respective supplier.

Respiratory protection: Normally not required.

Hand protection



Protective gloves

EN 374

The glove material has to be impermeable and resistant to the product/ the substance/ the mixture.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation.

Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

Eye/face protection



Tightly sealed goggles

EN 166

Body protection: Protective work clothing

Environmental exposure controls Do not allow to enter sewers/ surface or ground water.

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SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

General Information

Physical state	Fluid
Colour:	Brown
Odour:	Ammonia-like
Odour threshold:	No information available.
Melting point/freezing point:	No information available.
Boiling point or initial boiling point and boiling range	104 – 110 °C
Flammability	No information available.
Lower and upper explosion limit	
Lower:	No information available.
Upper:	No information available.
Flash point:	Not applicable.
Decomposition temperature:	No information available.
pH at 20 °C	7.7
Viscosity:	
Kinematic viscosity	No information available.
Dynamic:	No information available.
Solubility	
water:	Fully miscible.
Partition coefficient n-octanol/water (log value)	Not determined.
Vapour pressure:	Not determined.
Density and/or relative density	
Density at 20 °C:	1.196 g/cm ³
Vapour density	No information available.

9.2 Other information

Appearance:

Form: Fluid

Important information on protection of health and environment, and on safety.

Ignition temperature: Product is not selfigniting.

Explosive properties: Product does not present an explosion hazard.

Change in condition

Softening point/range

Oxidising properties

No oxidising properties in the present form.
Substance/product is oxidising when dry.

Evaporation rate

No information available.

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Information with regard to physical hazard classes

Explosives	void
	void
Flammable gases	void
	void
Aerosols	void
	void
Oxidising gases	void
	void
Gases under pressure	void
	void
Flammable liquids	void
	void
Flammable solids	void
	void
Self-reactive substances and mixtures	void
	void
Pyrophoric liquids	void
	void
Pyrophoric solids	void
	void
Self-heating substances and mixtures	void
	void
Substances and mixtures, which emit flammable gases in contact with water	void
	void
Oxidising liquids	void
	void
Oxidising solids	void
	void
Organic peroxides	void
	void
Corrosive to metals	void
	void
Desensitised explosives	void
	void

SECTION 10: Stability and reactivity

10.1 Reactivity No further relevant information available.

10.2 Chemical stability No decomposition if used and stored according to specifications.

10.3 Possibility of hazardous reactions

When heated to decomposition, it may produce vapors containing nitrogen oxide and ammonia. Pumps operated with block discharge have been known to detonate.

Exothermic reaction with strong oxidising agents.

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10.4 Conditions to avoid Protect from heat and direct sunlight.

10.5 Incompatible materials: reducing agent

10.6 Hazardous decomposition products: No dangerous decomposition products known.

* SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity Based on available data, the classification criteria are not met.

LD/LC50 values relevant for classification:

CAS: 6484-52-2 ammonium nitrate

Oral	LD50	2,217 mg/kg (rat)
Dermal	LD50	> 5,000 mg/kg (rat)

Skin corrosion/irritation

Based on available data, the classification criteria are not met.

Slight irritation possible.

Serious eye damage/irritation Causes serious eye irritation.

Respiratory or skin sensitisation Based on available data, the classification criteria are not met.

Germ cell mutagenicity Based on available data, the classification criteria are not met.

Carcinogenicity Based on available data, the classification criteria are not met.

Reproductive toxicity Based on available data, the classification criteria are not met.

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

Endocrine disrupting properties

None of the ingredients is listed.

* SECTION 12: Ecological information

12.1 Toxicity

Aquatic toxicity:

CAS: 6484-52-2 ammonium nitrate

EC50 (48 h)	111 – 840 mg/l (daphnia) (Daphnia magna)
LC50 (48 h)	95 – 102 mg/l (fish)

12.2 Persistence and degradability No further relevant information available.

12.3 Bioaccumulative potential No further relevant information available.

12.4 Mobility in soil In the soil, product follows natural cycle to provide plant nutrients.

12.5 Results of PBT and vPvB assessment

PBT: No data available.

vPvB: No data available.

12.6 Endocrine disrupting properties

The product does not contain substances with endocrine disrupting properties.

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12.7 Other adverse effects

Additional ecological information:

General notes:

Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water
Do not allow product to reach ground water, water course or sewage system.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Recommendation

Must not be disposed together with household garbage. Do not allow product to reach sewage system.
Only dispose of product residues via authorised companies according to local legislation.

European waste catalogue

Notes: The European Waste Catalogue (EWC) classifies waste materials and categorises them according to what they are and how they were produced. This may cause other classifications. The final decision belongs to the last user.

16 03 05*	organic wastes containing hazardous substances
02 01 08*	agrochemical waste containing hazardous substances

Uncleaned packaging:

Recommendation:

Dispose of packaging according to regulations on the disposal of packagings.
Packagings that may not be cleansed are to be disposed of in the same manner as the product.

SECTION 14: Transport information

14.1 UN number or ID number

ADR/RID/ADN, IMDG, IATA not regulated

14.2 UN proper shipping name

ADR/RID/ADN, IMDG, IATA not regulated

14.3 Transport hazard class(es)

ADR/RID/ADN, ADN, IMDG, IATA

Class not regulated

14.4 Packing group

ADR/RID/ADN, IMDG, IATA not regulated

14.5 Environmental hazards: Not applicable.

14.6 Special precautions for user Not applicable.

14.7 Maritime transport in bulk according to IMO

instruments Not applicable.

UN "Model Regulation": not regulated

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SECTION 15: Regulatory information

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

Directive 2012/18/EU

Named dangerous substances - ANNEX I None of the ingredients is listed.

REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3, 65

DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment – Annex II

None of the ingredients is listed.

REGULATION (EU) 2019/1148

Annex I - RESTRICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing under Article 5(3))

None of the ingredients is listed.

Annex II - REPORTABLE EXPLOSIVES PRECURSORS

None of the ingredients is listed.

Regulation (EC) No 273/2004 on drug precursors

None of the ingredients is listed.

Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors

None of the ingredients is listed.

National regulations:

Information about limitation of use: Employment restrictions concerning juveniles must be observed.

Global Automotive Declarable Substance List (GADSL):

All substances have the value D(FI).

15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Relevant phrases

H272 May intensify fire; oxidiser.

H319 Causes serious eye irritation.

Training hints

Before handling, storage or use for the first time, employees must be informed about the properties of the substance and about measures taken to ensure safety and environmental protection.

Classification according to Regulation (EC) No 1272/2008

Serious eye damage/irritation	The classification of the mixture is generally based on the calculation method using substance data according to Regulation (EC) No 1272/2008.
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Department issuing SDS:

UmEnA GmbH

<http://umena.at>

Email: office@umena.at

Date of previous version: 21.01.2021

Version number of previous version: 1.0

Abbreviations and acronyms:

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

DNEL: Derived No-Effect Level (REACH)

PNEC: Predicted No-Effect Concentration (REACH)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Ox. Sol. 3: Oxidizing solids – Category 3

Eye Irrit. 2: Serious eye damage/eye irritation – Category 2

*** Data compared to the previous version altered.**