

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006
(amended by Regulation (EU) 2015/830)

GRANIT Antifreeze concentrate for field sprayers

1. Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product code 320320084
Synonyms XPERT PROTECT+

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

Use of the Substance/Mixture Anti-freezing agents
Categories of users: professional AND private users.

1.3. Details of the supplier of the safety data sheet

Company/Undertaking Identification GRANIT PARTS
Agritec Griesser GmbH
Gewerbstrasse 23
8451 Kleinandelfingen
Schweiz

Telefon +41 52 305 21 40 [8-17h] / Telefax +41 52 305 21 44

Help Desk: sales.ch@granit-parts.com / www.granit-parts.ch

1.4. Emergency telephone number Tox Info Suisse : [24h/7d]
Tel. 145 / +41 (0)44 251 51 51 – info@toxi.ch

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Version 1

2. Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 Flammable liquids, Cat. 3, H226

Additional information For the full text of the phrases mentioned in this Section, see Section 16.

2.2. Label elements



Signal Word	Warning
Hazard Statements	H226: Flammable liquid and vapour.
Precautionary statements	P102: Keep out of reach of children. P262: Do not get in eyes, on skin, or on clothing. P210c: Keep away from open flames / hot surfaces. No smoking. P260s: Do not breathe spray. P501e: This material and its container must be disposed of in a safe way.
Supplemental information	None.
Product identifier	None.

Contents of package < 125 ml



Warning
P101: If medical advice is needed, have product container or label at hand.
P102: Keep out of reach of children.

2.3. Other hazards In use, may form flammable/explosive vapour-air mixture.

3. Composition/information on ingredients

Chemical characterization Formulated product.

Components		CLP Classification	Product identifier
Glycerin	75% - 90%		CAS-No.: 56-81-5 EC-No.: 200-289-5
Ethanol	20% - 25%	Flam. Liq. 2 H225	CAS-No.: 64-17-5 EC-No.: 200-578-6 Index-No: 603-002-00-5

For the full text of the phrases mentioned in this Section, see Section 16.

Hazardous impurities None known.

4. First aid measures

4.1. Description of first aid measures

Inhalation	Move to fresh air in case of accidental inhalation of vapours.
Skin contact	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. If skin irritation persists, call a physician.
Eye contact	Rinse thoroughly with plenty of water, also under the eyelids. If eye irritation persists, consult a specialist.
Ingestion	Rinse mouth. Obtain medical attention.

4.2. Most important symptoms and effects, both acute and delayed If you feel unwell, seek medical advice (show the label where possible).

4.3. Indication of any immediate medical attention and special treatment needed None known.

5. Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media Use dry chemical, CO₂, water spray or alcohol foam.

Extinguishing media which must not be used for safety reasons High volume water jet.

5.2. Special hazards arising from the substance or mixture Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Flammable.

5.3. Advice for firefighters

Special protective equipment for firefighters Standard procedure for chemical fires. In the event of fire, wear self-contained breathing apparatus. Wear protective suit.

Specific methods Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Water mist may be used to cool closed containers.

6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Advice for non-emergency personnel

Use personal protective equipment. Avoid contact with skin and eyes. Do not breathe aerosol / mist.
Remove all sources of ignition.

Advice for emergency responders

Immediately evacuate personnel to safe areas. Remove all sources of ignition. Vapours are heavier than air and may spread along floors.

6.2. Environmental precautions

Do not flush into surface water or sanitary sewer system.

6.3. Methods and material for containment and cleaning up

Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).

6.4. Reference to other sections

See chapter 8 and 13.

7. Handling and storage

7.1. Precautions for safe handling

Wear personal protective equipment. Keep product and empty container away from heat and sources of ignition. Take precautionary measures against static discharges.

7.2. Conditions for safe storage, including any incompatibilities

Store in a place accessible by authorized persons only. Store in original container. Keep containers tightly closed in a dry, cool and well-ventilated place. Storage class 3.

7.3. Specific end use(s)

Use only in accordance with our recommendations.

8. Exposure controls/personal protection

8.1. Control parameters

Exposure limit(s)

No data is available on the product itself.

Glycerin (CAS 56-81-5)

Switzerland - Occupational Exposure Limits - TWAs - (MAKs)

50 mg/m³ TWA [MAK] (inhalable dust)

Switzerland - Occupational Exposure Limits - STELs - (KZWs)

100 mg/m³ STEL [KZW] (inhalable dust)

Germany - DFG - Recommended Exposure Limits - TWAs (MAKs)

200 mg/m³ TWA MAK (inhalable fraction)

Germany - DFG - Recommended Exposure Limits - Ceilings (Peak Limitations)

400 mg/m³ Peak (inhalable fraction)

Ethyl alcohol (CAS 64-17-5)

Switzerland - Occupational

500 ppm TWA [MAK]

Exposure Limits - TWAs - (MAKs)	960 mg/m ³ TWA [MAK]
Switzerland - Occupational Exposure Limits - STELs - (KZWs)	1000 ppm STEL [KZW]
Austria - Occupational Exposure Limits - STELs - (MAK-KZWs)	1920 mg/m ³ STEL [KZW]
Austria - Occupational Exposure Limits - TWAs - (MAK-TMWs)	2000 ppm STEL [KZW]
Germany - DFG - Recommended Exposure Limits - TWAs (MAKs)	3800 mg/m ³ STEL [KZW]
Germany - DFG - Recommended Exposure Limits - Ceilings (Peak Limitations)	1000 ppm TWA [TMW]
Germany - TRGS 900 - Occupational Exposure Limits - TWAs (AGWs)	1900 mg/m ³ TWA [TMW]
	500 ppm TWA MAK
	960 mg/m ³ TWA MAK
	1000 ppm Peak
	1920 mg/m ³ Peak
	500 ppm TWA AGW (The risk of damage to the embryo or fetus can be excluded when AGW and BGW values are observed, exposure factor 2)
	960 mg/m ³ TWA AGW (The risk of damage to the embryo or fetus can be excluded when AGW and BGW values are observed, exposure factor 2)

8.2. Exposure controls

Occupational exposure controls

Avoid contact with skin, eyes and clothing. Handle in accordance with good industrial hygiene and safety practice. Keep away from food, drink and animal feedingstuffs.

Personal protection equipment

Respiratory protection

Breathing apparatus needed only when aerosol or mist is formed. Respirator with filter for organic vapour Respirator with filter.

Hand protection

Gloves made of Nitril. Protective gloves complying with EN 374.

Eye protection

Safety glasses with side-shields conforming to EN166.

Skin and body protection

Long sleeved clothing. Choose body protection according to the amount and concentration of the dangerous substance at the work place.

Thermal hazards

Keep product and empty container away from heat and sources of ignition.

Environmental exposure controls

Prevent product from entering surface water or sewage.

9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Form	Liquid.
Colour	Pink.
Odour	Characteristic.
Odour Threshold	No information available.
pH:	No information available.
Melting point/range:	No information available.
Boiling point/range:	No information available.
Flash point:	<55
Evaporation Rate:	No information available.

Flammability:	No information available.
Explosion limits:	No information available.
Vapour pressure:	No information available.
Vapor density:	No information available.
Relative density:	>1
Water solubility:	completely miscible
Partition coefficient (n-octanol/water):	No information available.
Autoignition temperature:	No information available.
Decomposition temperature:	No information available.
Viscosity:	No information available.
Combustion/explosion hazards:	Combustible liquid n.o.s.
Oxidizing properties:	none

9.2. Other information

General Product Characteristics No information available.

10. Stability and reactivity

10.1. Reactivity	Risk of ignition. May form explosive mixtures in air.
10.2. Chemical stability	Stable at normal conditions.
10.3. Possibility of hazardous reactions	May be ignited by open flame. Vapours may form explosive mixture with air.
10.4. Conditions to avoid	Heat, flames and sparks. Take precautionary measures against static discharges.
10.5. Incompatible materials	Incompatible with strong acids and oxidizing agents.
10.6. Hazardous decomposition products	Carbon oxides.

11. Toxicological information

11.1. Information on toxicological effects

Acute toxicity	<p>Glycerin (CAS 56-81-5) Dermal LD50 Rabbit > 10 g/kg (NLM_CIP) Inhalation LC50 Rat > 570 mg/m³ 1 h(NLM_CIP) Oral LD50 Rat = 12600 mg/kg (NLM_CIP)</p> <p>Ethyl alcohol (CAS 64-17-5) Inhalation LC50 Rat = 124.7 mg/L 4 h(OECD_SIDS) Oral LD50 Rat = 7060 mg/kg (NLM_CIP)</p>
Skin corrosion/irritation	None.
Serious eye damage/eye irritation	None.
Respiratory / Skin Sensitisation	None.

Carcinogenicity	Contains no ingredient listed as a carcinogen.
Germ cell mutagenicity	Contains no ingredient listed as a mutagen.
Reproductive toxicity	Contains no ingredient listed as toxic to reproduction.
Specific target organ toxicity (single exposure)	No data available.
Specific target organ toxicity (repeated exposure)	No data available.
Aspiration hazard	No aspiration toxicity classification.
Human experience	No data available.

12. Ecological information

12.1. Toxicity	No data is available on the product itself.
Glycerin (CAS 56-81-5) EU - Ecolabel (66/2010) - Detergent Ingredient Database - Anaerobic Degradation	Biodegradable under anaerobic conditions.
EU - Ecolabel (66/2010) - Detergent Ingredient Database - Aerobic Degradation	Readily biodegradable according to OECD guidelines.
Ecotoxicity - Freshwater Fish - Acute Toxicity Data	96 h LC50 <i>Oncorhynchus mykiss</i> : 51 - 57 mL/L [static] (EPA)
Ethyl alcohol (CAS 64-17-5) Ecotoxicity - Freshwater Fish - Acute Toxicity Data	96 h LC50 <i>Oncorhynchus mykiss</i> : 12.0 - 16.0 mL/L [static] (EPA) 96 h LC50 <i>Pimephales promelas</i> : >100 mg/L [static] (EPA) 96 h LC50 <i>Pimephales promelas</i> : 13400 - 15100 mg/L [flow-through] (EPA)
Ecotoxicity - Water Flea - Acute Toxicity Data	48 h LC50 <i>Daphnia magna</i> : 9268 - 14221 mg/L (IUCLID)
Ecotoxicity - Earthworm - Acute Toxicity Data	48 h EC50 <i>Daphnia magna</i> : 2 mg/L [Static] (EPA) 48 h LC50 <i>Eisenia foetida</i> : 0.1 - 1 mg/cm ² [filter paper] (IUCLID)
12.2. Persistence and degradability	Expected to be biodegradable.
12.3. Bioaccumulative potential	Bioaccumulation is unlikely.
12.4. Mobility in soil	No data is available on the product itself.
12.5. Results of PBT and vPvB assessment	This preparation contains no substance considered to be persistent, bioaccumulating nor toxic (PBT).
12.6. Other adverse effects	Water contaminating class (CH): A

13. Disposal considerations

13.1. Waste treatment methods

Waste from residues / unused products

Do not put residues of product into household waste. It should be given in the original package to the official waste disposal authorities. According to the European Waste Catalogue, Waste Codes are not product specific, but application specific. The following Waste Codes are only suggestions: Waste disposal number 16 01 14 S. Product rest to be treated as hazardous waste.

Contaminated packaging

Dispose of as unused product. Waste code 15 01 02.

14. Transport information

ADR/RID

UN 1993.
Proper shipping name: FLAMMABLE LIQUID, N.O.S. (Ethanol; Ethyl alcohol).
Class 3.
Packing group III.
ADR/RID-Labels 3.
Classification code F1.
Hazard identification no. 30.
Limited quantity 5 L.
Excepted quantity E1 .
Tunnel restriction code D/E

IMDG

UN 1993.
Proper shipping name: Flammable liquid, n.o.s. (Ethanol; Ethyl alcohol).
Class 3.
Packing group III.
IMDG-Labels 3.
Marine pollutant: No.
Limited quantity 5 L.
EmS F-E, S-E.

IATA

UN 1993.
Proper shipping name: Flammable liquid, n.o.s. (Ethanol; Ethyl alcohol).
Class 3.
Packing group III.
IATA label 3.
Packing instruction (passenger aircraft): 355 (60 L).
Packing instruction (LQ): Y344 (10 L).
Packing instruction (cargo aircraft): 366 (220 L).

Inland navigation ADN

UN 1993.
Proper shipping name: FLAMMABLE LIQUID, N.O.S. (Ethanol; Ethyl alcohol).
Class 3.
Packing group III.
ADN labels 3.
ADN danger 3+CMR.

Further Information None.

15. Regulatory information

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

Regulatory Information	Water contaminating class (WGK Germany) = 1. VOC (CH) = 20%
Glycerin (CAS 56-81-5)	
EU - Biocides (1451/2007) - Existing Active Substances	Present
EU - REACH (1907/2006) - List of Registered Substances	Present
Germany - Water Classification (VwVwS) - Annex 2 - Water Hazard Classes	ID Number 116, hazard class 1 - low hazard to waters
Ethyl alcohol (CAS 64-17-5)	
Switzerland - Volatile Organic Compounds (VOCs)	present (as long as it deals with distilled spirits, that does not serve for drinking and consumption purposes)
Germany - Water Classification (VwVwS) - Annex 2 - Water Hazard Classes	ID Number 96, hazard class 1 - low hazard to waters (footnote 10)
15.2. Chemical safety assessment	A Chemical Safety Assessment is not required.

16. Other information

Key or legend to abbreviations and acronyms	CPID: Chemical Product IDentification / Public-product-register [CH] CLP: Classification according to Regulation (EC) No. 1272/2008 (GHS) MAK: Occupational exposure limit. VOC: Volatile organic compounds (VOC) content
Key literature references and sources for data	Information taken from reference works and the literature.
Classification procedure	Calculation method.
Full text of phrases referred to under sections 2 and 3	H225: Highly flammable liquid and vapour. H226: Flammable liquid and vapour.
Training advice	Provide adequate information, instruction and training for operators.
Further information	CPID 516988[CH]
Instructions for use	Keep away from children.

Disclaimer

The information provided in this Safety Data Sheet 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 guidance for safe handling, use, processing, storage, transportation, disposal and release. It is not to be considered a warranty or quality specification.