

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

1.1 Product identifier

- Trade name: **NANOPROTECT + TM nano liquid protector (NanoProtectPlus)**
- 1.2 Relevant identified uses of the substance or mixture and uses advised against
No further relevant information available.
- Application of the substance / the preparation : Screen protection

1.4 Emergency telephone number:

France (INRS 24h/24) - Tel : +33 (0)1 45 42 59 59

Ireland - Tel : 00 353 1 8092568 - 00 353 1 8379964 (24h/24) EU Tel: 112

Belgique - Tel : 32 070/245 245

UK : Call NHS 999 in a medical emergency. If you urgently need medical help or advice but it's not a life-threatening situation, call 111 (24/7). The NHS 111 number is currently only available in certain areas. If you're outside of these areas, you should call NHS Direct on 0845 4647

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

- Classification according to Regulation (EC) No 1272/2008 :



GHS02

Flam. Liq. 2 H225 Highly flammable liquid and vapour.



GHS07

Eye Irrit. 2 H319 Causes serious eye irritation.

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



GHS02



GHS07

- Signal word Danger

- Hazard statements

H225 Highly flammable liquid and vapour.

H319 Causes serious eye irritation.

- Precautionary statements

P102 Keep out of reach of children.

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P233 Keep container tightly closed.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].

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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.
P501 **Dispose of contents/container in accordance with local/regional/national/international regulations.**

- **Labelling of packages where the contents do not exceed 125 ml**
- **Hazard pictograms**



- **Signal word** Danger
- **Hazard statements** Not classified as hazardous
- **Precautionary statements**
P102 Keep out of reach of children.
- **2.3 Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

SECTION 3: Composition/information on ingredients

- **3.2 Chemical characterisation: Mixtures**
- **Description:** Mixture: consisting of the following components.
- **Dangerous components:**

CAS: 64-17-5 EINECS: 200-578-6 Index number: 603-002-00-5 RTECS: KQ 6300000 Reg.nr.: 01-2119457610-43-xxxx	ethanol ⚠ Flam. Liq. 2, H225; ⚠ Eye Irrit. 2, H319	50-100%
CAS: 78-93-3 EINECS: 201-159-0 Index number: 606-002-00-3 RTECS: EL 6475000 Reg.nr.: 01-2119457290-43-XXXX	butanone ⚠ Flam. Liq. 2, H225; ⚠ Eye Irrit. 2, H319; STOT SE 3, H336	≤ 2.5%

- **SVHC** No
- **Additional information:** For the wording of the listed risk phrases, refer to section 16.

SECTION 4: First aid measures

- **4.1 Description of first aid measures**
- **After excessive inhalation:** Provide fresh air; consult a doctor in case of medical complaints.
- **After skin contact:** Generally the product does not irritate the skin.
- **After eye contact:** Rinse opened eye for several minutes under running water.
- **After swallowing:** Do not induce vomiting; call for medical help immediately.
- **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 :**
No further relevant information available.

SECTION 5: Firefighting measures

- **5.1 Suitable extinguishing agents:** CO₂, sand, extinguishing powder. Do not use water.

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- **For safety reasons unsuitable extinguishing agents:** Water with full jet
- **5.2 Special hazards arising from the substance or mixture :** No further relevant information available.
- **5.3 Advice for firefighters**
- **Protective equipment:** No special measures required.

SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures :**
Wear protective equipment. Keep unprotected persons away.
- **6.2 Environmental precautions:** Do not allow the product to enter sewers/ surface water or ground water.
- **6.3 Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Ensure adequate ventilation.
Do not flush with water or aqueous cleansing agents
- **6.4 Reference to other sections :**
See Section 7 for information on safe handling.
See Section 8 for information on personal protective equipment.
See Section 13 for disposal information.

SECTION 7: Handling and storage

- **7.1 Precautions for safe handling :**
Keep receptacles tightly sealed.
Keep away from heat and direct sunlight.
- **Information about fire - and explosion protection:**



Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** Store in a cool location.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:**
Keep container tightly sealed.
Store in cool, dry conditions in well sealed receptacles.
- **7.3 Specific end use(s) :** No further relevant information available.

SECTION 8: Exposure controls/personal protection

- **Additional information about design of technical facilities:** No further data; see section 7.
- **8.1 Control parameters**

· **Ingredients with limit values that require monitoring at the workplace:**

CAS: 64-17-5 ethanol (50-100%)

WEL (Great Britain)	Long-term value: 1920 mg/m ³ , 1000 ppm
MAK (Switzerland)	Short-term value: 1920 mg/m ³ , 1000 ppm
	Long-term value: 960 mg/m ³ , 500 ppm
	SSc;

CAS: 78-93-3 butanone (≤2.5%)

WEL (Great Britain)	Short-term value: 899 mg/m ³ , 300 ppm
	Long-term value: 600 mg/m ³ , 200 ppm
	Sk, BMGV

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IOELV (EU)		Short-term value: 900 mg/m ³ , 300 ppm Long-term value: 600 mg/m ³ , 200 ppm
MAK (Switzerland)		Short-term value: 590 mg/m ³ , 200 ppm Long-term value: 590 mg/m ³ , 200 ppm H B SSc;
· DNELs		
CAS: 64-17-5 ethanol		
Dermal	DNEL Worker long-term systemic	343 mg/kg bw/d
Inhalative	DNEL Worker long-term systemic	950 mg/m ³
	DNEL Worker acute/short-term local effects	19 mg/m ³
CAS: 78-93-3 butanone		
Oral	DNEL Public long-term systemic	31 mg/kg bw/d
Dermal	DNEL Worker long-term systemic	1,161 mg/kg bw/d
Inhalative	DNEL Public long-term systemic	106 mg/m ³
	DNEL Worker long-term local effects	600 mg/m ³
· PNECs		
CAS: 64-17-5 ethanol		
Oral	PNEC sediment (fresh water)	3.6 mg/kg
	PNEC STP	0.72 mg/L
	PNEC aqua (fresh water)	0.96 mg/L
	PNEC aqua (marine water)	0.79 mg/L
	PNEC sediment (marine water)	2.9 mg/kg
	PNEC soil	0.63 mg/kg
CAS: 78-93-3 butanone		
	PNEC STP	709 mg/L
	PNEC aqua (fresh water)	55.8 mg/L
	PNEC aqua (intermittent releases)	55.8 mg/L
	PNEC aqua (marine water)	55.8 mg/L
	PNEC sediment (marine water)	284.7 mg/kg
	PNEC soil	22.5 mg/kg
· Ingredients with biological limit values:		
CAS: 78-93-3 butanone (≤2.5%)		
BMGV (Great Britain)	70 µmol/L	
	Medium: urine	
	Sampling time: post shift	
	Parameter: butan-2-one	
BAT (Switzerland)	2 mg/l	
	Medium: U	
	Sampling time: b	
	Parameter: 2-Butanon (MEK)	

· Additional information:

The most current valid lists have been used as a basis for the production of this document.

· 8.2 Exposure controls

· Personal protective equipment:

· General protective and hygienic measures: Wash hands before breaks and at the end of work.

· Respiratory protection: Not required.

· Protection of hands: Not required.

· Gloves material : -

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· **Eye protection:**



Tightly sealed goggles

SECTION 9: Physical and chemical properties

· 9.1 Information on basic physical and chemical properties

· General Information

· Appearance:

Form:	Liquid
Colour:	Colourless
Odour:	Alcohol-like
Odour threshold:	Not determined.

· pH-value: Not determined.

· Change in condition

Melting point/freezing point:	-114.5 °C
Initial boiling point and boiling range:	78 °C

· Flash point: <21 °C

· Flammability (solid, gas): Not applicable.

· Ignition temperature: >425 °C

· Decomposition temperature: Not determined.

· Auto-ignition temperature: Product is not self igniting.

· Explosive properties: Product is not explosive. However, formation of explosive air/vapour mixtures are possible.

· Explosion limits:

Lower:	3.5 Vol %
Upper:	15 Vol %

· Vapour pressure at 20 °C: 59 hPa

· Density at 20 °C: 0.8+/-0.03 g/cm³

· Relative density : Not determined.

· Vapour density : Not determined.

· Evaporation rate : Not determined.

· Solubility in / Miscibility with water at 20 °C:

1 g/l

· Segregation coefficient (n-octanol/water): Not determined.

· Viscosity:

Dynamic:	Not determined.
Kinematic:	Not determined.

· 9.2 Other information : No further relevant information available.

SECTION 10: Stability and reactivity

· 10.1 Reactivity No further relevant information available.

· 10.2 Chemical stability

· Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.

· 10.3 Possibility of hazardous reactions : No dangerous reactions known.

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- **10.4 Conditions to avoid :** No further relevant information available.
- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:** No dangerous decomposition products known.

SECTION 11: Toxicological information

- **11.1 Information on toxicological effects**
- **Acute toxicity** Based on available data, the classification criteria are not met.

· **LD/LC50 values relevant for classification:**

CAS: 64-17-5 ethanol

Oral	LD50	7,060 mg/kg (rat)
Inhalative	LC50/4 h	20,000 mg/l (rat)

CAS: 78-93-3 butanone

Oral	LD50	3,300 mg/kg (rat)
Dermal	LD50	5,000 mg/kg (rabbit)

- **Primary irritant effect:**
- **On the skin:** Based on available data, the classification criteria are not met.
- **On the eyes:**
Causes serious eye irritation.
- **Respiratory or skin sensitization** Based on available data, the classification criteria are not met.
- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**
- **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.

SECTION 12: Ecological information

· **12.1 Toxicity**

· **Aquatic toxicity:**

CAS: 64-17-5 ethanol

EC50 72h	275 mg/l (Algae)
EC50 48h	12,340 mg/l (daphnia)
EC50 96h	13,000 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 :** No further relevant information available.
- **Additional ecological information:**
- **General notes:**
Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water.
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **12.6 Other adverse effects :** No further relevant information available.

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SECTION 13: Disposal considerations

- 13.1 Waste treatment methods
- Recommendation :



Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

· European waste catalogue

08 00 00	WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS
08 01 00	wastes from MFSU and removal of paint and varnish
08 01 11*	waste paint and varnish containing organic solvents or other hazardous substances
HP 3	Flammable
HP 4	Irritant - skin irritation and eye damage

- Uncleaned packaging:
- Recommendation: Disposal must be made according to official regulations.

SECTION 14: Transport information

· 14.1 UN-Number	
· ADR, ADN, IMDG, IATA	Not classified as hazardous for transport
· 14.2 UN proper shipping name	
· ADR	NOT REGULATED AS PER SPECIAL PROVISION 56 FOR UN3175; SOLIDS CONTAINING FLAMMABLE LIQUID, N.O.S. (ETHANOL); CLASS 3; PG III ²
· AND	Not classified as hazardous for transport
· IMDG	NOT REGULATED AS PER SPECIAL PROVISION 216 FOR UN3175; SOLIDS CONTAINING FLAMMABLE LIQUID, N.O.S. (ETHANOL); CLASS 3; PG III
· IATA	NOT REGULATED AS PER SPECIAL PROVISION A46 FOR UN3175; SOLIDS CONTAINING FLAMMABLE LIQUID, N.O.S. (ETHANOL); CLASS 3; PG III
· 14.3 Transport hazard class(es)	
· ADR, ADN, IMDG, IATA	
· Class	Not classified as hazardous for transport
· 14.4 Packing group	
· ADR, IMDG, IATA	Not classified as hazardous for transport
· 14.5 Environmental hazards:	Not applicable.
· 14.6 Special precautions for user	Not applicable.
· 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code	Not applicable.
· Transport/Additional information:	Special precautions (transport/conveyance) : None Environmental hazards (IMDG or other) : None Bulk transport (usually more than 450 L in capacity) : Not possible UN 3175, 4.1, transport possible due to special provision A 46 :

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A46 Mixtures of solids which are not subject to these Instructions and flammable liquids may be transported under this entry without first applying the classification criteria of Division 4.1, providing there is no free liquid visible at the time the substance is packaged and the packaging must pass a leakproofness test at the Packing Group II level. Small inner packagings consisting of sealed packets or articles containing less than 10 mL of a Packing Group II or III flammable liquid absorbed into a solid material are not subject to these Instructions provided there is no free liquid in the packet or articles.

· UN "Model Regulation":

Not classified as hazardous for transport

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.
- Seveso category P5c FLAMMABLE LIQUIDS
- Qualifying quantity (tonnes) for the application of lower-tier requirements 5.000 t
- Qualifying quantity (tonnes) for the application of upper-tier requirements 50.000 t
- REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3
- 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
- H225 Highly flammable liquid and vapour.
- H319 Causes serious eye irritation.
- H336 May cause drowsiness or dizziness.

· Classification according to Regulation (EC) No 1272/2008

Flammable liquids	Bridging principles
Serious eye damage/eye irritation	The classification of the mixture is generally based on the calculation method using substance data according to Regulation (EC) No 1272/2008.

· Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
 IMDG: International Maritime Code for Dangerous Goods
 DOT: US Department of Transportation
 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
 SVHC: Substances of Very High Concern
 vPvB: very Persistent and very Bioaccumulative
 Flam. Liq. 2: Flammable liquids – Category 2
 Eye Irrit. 2: Serious eye damage/eye irritation – Category 2
 STOT SE 3: Specific target organ toxicity (single exposure) – Category 3