SAFETY DATA SHEET

Protega Top 1FR Eco

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

1.1. Product identifier:

Trade name:	Protega Top 1FR Eco
Product no.:	2220-15, -25
Unique formula identifier (UFI):	3FUC-VMGM-XCH9-VD1S

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

▼Relevant identified uses of the substance or mixture:	Paint Restricted to professional and industrial use.
Uses advised against :	None known.

1.3. Details of the supplier of the safety data sheet:

Company and address:	**Protega AB** Verkstadsgatan 6B 23166 Trelleborg, Sverige +46 410 56 780
E-mail:	info@protega.se, www.protega.se
▼Revision:	31/08/2026
▼SDS Version:	5.0
▼Date of previous version:	20/08/2024 (4.0)

1.4. ▼Emergency telephone number:

Healthcare professionals: Dial 0344 892 0111 to reach The National Poisons Information Service (NPIS) (24 hour service)
General public:
England - Dial 111 to reach NHS 111 (24 hour service)
Scotland - Dial 111 to reach NHS 24 (24 hour service)
Wales - Dial 111 or 0845 4647 to reach NHS Direct (24 hour service)
See section 4 “First aid measures”.

SECTION 2: Hazards identification

Classified according to Regulation (EC) No. 1272/2008 (CLP) as retained and amended in UK law.

2.1. ▼Classification of the substance or mixture:

Flam. Liq. 2; H225, Highly flammable liquid and vapour.
Eye Dam. 1; H318, Causes serious eye damage.
STOT SE 3; H336, May cause drowsiness or dizziness.

2.2. ▼Label elements:

▼Hazard pictogram(s):

Signal word: Danger

▼Hazard statement(s):	Highly flammable liquid and vapour. (H225) Causes serious eye damage. (H318) May cause drowsiness or dizziness. (H336)
▼Precautionary statement(s):	
▼General:	Not applicable.
▼Prevention:	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. (P210) Wear eye protection/protective gloves/protective clothing. (P280)
▼Response:	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. (P305+P351+P338) Immediately call a POISON CENTER/doctor. (P310)
Storage:	Store in a well-ventilated place. Keep cool. (P403+P235)
▼Disposal:	Dispose of contents/container in accordance with local regulation. (P501)
Hazardous substances:	Aliphatic acid ester 2 ethyl lactate;ethyl (S)-2-hydroxypropionate;ethyl DL-lactate;ethyl L-lactate;ethyl-(S)-lactate
Additional labelling:	EUH066, Repeated exposure may cause skin dryness or cracking. UFI: 3FUC-VMGM-XCH9-VD1S
VOC:	VOC content: 500 g/L MAXIMUM VOC CONTENT (Phase II, category A/i (SB): 500 g/L)

2.3. Other hazards:

▼Additional warnings:	This mixture/product does not contain any substances known to fulfil the criteria for PBT and vPvB classification. This product does not contain any substances considered to be endocrine disruptors in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2023/707.

SECTION 3: Composition/information on ingredients

3.1. Substances:

Not applicable. This product is a mixture.

3.2. ▼Mixtures:

Product/substance	Identifiers	% w/w	Classification	Note
Aliphatic acid ester 2	CAS No.: EC No.: UK-REACH: Index No.:	15-25%	EUH066 Flam. Liq. 3, H226 STOT SE 3, H336	
ethyl lactate;ethyl (S)-2-hydroxypropionate;ethyl DL-lactate;ethyl L-lactate;ethyl-(S)-lactate	CAS No.: 687-47-8 EC No.: 211-694-1 UK-REACH: 01-2119516234-49-XXXX Index No.: 607-129-00-7	10-15%	Flam. Liq. 3, H226 Eye Dam. 1, H318 STOT SE 3, H335	
Aliphatic alcohol	CAS No.: EC No.: UK-REACH: Index No.:	5-10%	Flam. Liq. 2, H225 Eye Irrit. 2, H319	

Ester of aliphatic acid	CAS No.: EC No.: UK-REACH: Index No.:	1-3%	EUH066 Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336	
Xylene	CAS No.: 1330-20-7 EC No.: 215-535-7 UK-REACH: Index No.:	<1%	Flam. Liq. 3, H226 Asp. Tox. 1, H304 Acute Tox. 4, H312 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Acute Tox. 4, H332 STOT SE 3, H335 STOT RE 2, H373	[1]

See full text of H-phrases in section 16. Occupational exposure limits are listed in section 8, if these are available.

Other information:

[1] European occupational exposure limit.

SECTION 4: First aid measures

4.1. Description of first aid measures:

General information: In the case of accident: Contact a doctor or casualty department – take the label or this safety data sheet.
Contact a doctor if in doubt about the injured person's condition or if the symptoms persist. Never give an unconscious person water or other drink.

▼Inhalation: IF INHALED: Move to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTRE or a doctor.

Skin contact: IF ON SKIN: Wash with plenty of water and soap.
Remove contaminated clothing and shoes. Ensure to wash exposed skin thoroughly with water and soap. DO NOT use solvents or thinners.
If skin irritation occurs: Get medical advice/attention.

▼Eye contact: If in eyes: Flush eyes with plenty of water or saline solution (20-30 °C) for at least 30 minutes and continue until irritation stops. Remove contact lenses. Make sure you flush under the upper and lower eyelids. Seek medical assistance immediately and continue flushing during transport.

Ingestion: If the person is conscious, rinse the mouth with water and stay with the person. Never give the person anything to drink.
In case of malaise, seek medical advice immediately and bring the safety data sheet or label from the product. Do not induce vomiting, unless recommended by the doctor. Have the person lean forward with head down to avoid inhalation of or choking on vomited material.

Burns: Rinse with water until pain stops then continue to rinse for 30 minutes.

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

The product contains substances that cause serious eye damage. Contact with these substances can cause irreversible effects on the eye / serious eye damage.

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

IF exposed or concerned:
Get immediate medical advice/attention.

Information to medics:

Bring this safety data sheet or the label from this product.

SECTION 5: Firefighting measures

5.1. Extinguishing media:

Suitable extinguishing media: Alcohol-resistant foam, carbon dioxide, powder, water mist.
Unsuitable extinguishing media: Waterjets should not be used, since they can spread the fire.

5.2. Special hazards arising from the substance or mixture:

Highly flammable liquid and vapour.
In use may form flammable/explosive vapour-air mixture.
Fire will result in dense smoke. Exposure to combustion products may harm your health. Closed containers, which are exposed to fire, should be cooled with water. Do not allow fire-extinguishing water to enter the sewage system and nearby surface waters.
If the product is exposed to high temperatures, e.g. in the event of fire, dangerous decomposition compounds are produced. These are:
Carbon oxides (CO / CO2)

5.3. ▼Advice for firefighters:

Wear self-contained breathing apparatus and protective clothing to prevent contact. Upon direct exposure contact The National Poisons Information Service (dial 111, 24 h service) in order to obtain further advice.

SECTION 6: Accidental release measures

6.1. ▼Personal precautions, protective equipment and emergency procedures:

Storages not yet ignited must be cooled by water mist. Remove flammable materials if conditions allow it. Ensure sufficient ventilation.
Avoid direct contact with spilled substances.
Ensure adequate ventilation, especially in confined areas.
Avoid inhalation of vapours from spilled material.
Contaminated areas may be slippery.

6.2. Environmental precautions:

Avoid discharge to lakes, streams, sewers, etc.
Keep unauthorized persons away from the spill

6.3. Methods and material for containment and cleaning up:

Limit spillage and collect using granular absorbent or similar materials, and dispose of it in accordance with the regulations on dangerous waste.
Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations.
Wherever possible cleaning should be performed with normal cleaning agents. Avoid use of solvents.

6.4. Reference to other sections:

See section 13 “Disposal considerations” on handling of waste.
See section 8 "Exposure controls/personal protection" for protective measures.

SECTION 7: Handling and storage

7.1. ▼Precautions for safe handling:

Ground and bond container and receiving equipment.

Use explosion-proof electrical/lighting/ventilating equipment.
Use non-sparking tools.
Take action to prevent static discharges.
Avoid direct contact with the product.
Smoking, drinking and consumption of food is not allowed in the work area.
See section 8 "Exposure controls/personal protection" for information on personal protection.

7.2. Conditions for safe storage, including any incompatibilities:

Containers that have been opened must be carefully resealed and kept upright to prevent leakage.
Take action to prevent static discharges.
Must be stored in a cool and well-ventilated area, away from possible sources of ignition.

Recommended storage material:	Always store in containers of the same material as the original container.
Storage conditions:	5°C < T < 35°C
Incompatible materials:	Strong acids, strong bases, strong oxidizing agents, and strong reducing agents.

7.3. Specific end use(s):

This product should only be used for applications quoted in section 1.2.

SECTION 8: Exposure controls/personal protection

8.1. ▼Control parameters:

No substances are listed in the national list of substances with an occupational exposure limit.

▼DNEL:

Aliphatic acid ester 2

Duration:	Route of exposure:	DNEL:
Long term – Systemic effects - Workers	Dermal	11 mg/kg bw/day
Short term – Systemic effects - Workers	Dermal	11 mg/kg bw/day
Long term – Local effects - Workers	Inhalation	300 mg/m3
Long term – Systemic effects - Workers	Inhalation	300 mg/m3
Short term – Local effects - Workers	Inhalation	600 mg/m3
Short term – Systemic effects - Workers	Inhalation	600 mg/m3

Aliphatic alcohol

Duration:	Route of exposure:	DNEL:
Long term – Systemic effects - Workers	Dermal	343 mg/kg bw/day
Long term – Systemic effects - Workers	Inhalation	950 mg/m3
Short term – Systemic effects - Workers	Inhalation	1900 mg/m3

Ester of aliphatic acid

Duration:	Route of exposure:	DNEL:
Long term – Systemic effects - Workers	Dermal	63 mg/kg bw/day
Long term – Local effects - Workers	Inhalation	734 mg/m3
Long term – Systemic effects - Workers	Inhalation	734 mg/m3
Short term – Local effects - Workers	Inhalation	1468 mg/m3
Short term – Systemic effects - Workers	Inhalation	1468 mg/m3

PNEC:

No data available.

8.2. Exposure controls:

Apply general control to prevent unnecessary exposure

General recommendations:	Smoking, drinking and consumption of food is not allowed in the work area.
Exposure scenarios:	There are no exposure scenarios implemented for this product.
Exposure limits:	Occupational exposure limits have not been defined for the substances in this product.
Appropriate technical measures:	Ensure that eyewash stations and safety showers are located within easy reach. Apply standard precautions during use of the product. Avoid inhalation of vapours.
Hygiene measures:	In between use of the product and at the end of the working day all exposed areas of the body must be washed thoroughly. Pay special attention to hands, forearms and face.
Measures to avoid environmental exposure:	No specific requirements.

Individual protection measures, such as personal protective equipment:

Generally: Use only UKCA marked protective equipment.

Respiratory Equipment:

Type	Class	Colour	Standards	
A	Class 1 (low capacity)	Brown	EN14387	

Skin protection:

Recommended	Type/Category	Standards	
Dedicated work clothing should be worn	-	-	

▼Hand protection:

Material	Glove thickness (mm)	Breakthrough time (min.)	Standards	
Nitrile	0,2	> 480	EN374-2, EN16523-1, EN388	

▼Eye protection:

Type	Standards	
Safety glasses	EN 166 / EN ISO 16321-1	

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties:

Physical state:	Liquid
Colour:	Transparent

Odour / Odour threshold:	Aromatic
pH:	Not applicable
Density (g/cm^3):	1.05 (23 °C)
Kinematic viscosity:	2000 mPa.s (23 °C)
Particle characteristics:	Not applicable

Phase changes:

Melting point/Freezing point (°C):	Not applicable
Softening point/range (°C):	Does not apply to liquids.
Boiling point (°C):	No data available
Vapour pressure:	No data available
Relative vapour density:	No data available
Decomposition temperature (°C):	Not applicable

Data on fire and explosion hazards:

▼Flash point (°C):	20
Flammability (°C):	The material is ignitable.
Auto-ignition temperature (°C):	No data available
Lower and upper explosion limit (% v/v):	Not applicable

Solubility:

Solubility in water:	Insoluble
n-octanol/water coefficient (LogKow):	No data available
Solubility in fat (g/L):	No data available

9.2. Other information:

Evaporation rate (n-butylacetate = 100):	No data available
VOC (g/L):	500
Other physical and chemical parameters:	No data available.
Oxidizing properties:	Not applicable

SECTION 10: Stability and reactivity

10.1. Reactivity:

No data available.

10.2. Chemical stability:

The product is stable under the conditions, noted in section 7 “Handling and storage”.

10.3. Possibility of hazardous reactions:

None known.

10.4. Conditions to avoid:

Avoid static electricity.

Do not expose to any forms of heat (e.g. solar radiation). May lead to excess pressure.

10.5. Incompatible materials:

Strong acids, strong bases, strong oxidizing agents, and strong reducing agents.

10.6. ▼Hazardous decomposition products:

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

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.

Skin corrosion/irritation:

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

▼Serious eye damage/irritation:

Causes serious eye damage.

Respiratory sensitization:

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

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:

May cause drowsiness or dizziness.

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.

▼Symptoms related to the physical, chemical and toxicological characteristics:

The product contains substances that cause serious eye damage. Contact with these substances can cause irreversible effects on the eye / serious eye damage.

11.2. Information on other hazards:

▼Endocrine disrupting properties:

This mixture/product does not contain any substances known to have hormone-disrupting properties in relation to health.

Other information:

Xylene has been classified by IARC as a group 3.

SECTION 12: Ecological information

12.1. ▼Toxicity:

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

12.2. Persistence and degradability:

Product/substance	Aliphatic acid ester 2
Result:	80% efter 5 dagar, 83% efter 28 dagar
Conclusion:	Readily biodegradable
Test:	OECD 301 D

Product/substance	ethyl lactate;ethyl (S)-2-hydroxypropionate;ethyl DL-lactate;ethyl L-lactate;ethyl-(S)-lactate
Result:	85%
Conclusion:	Readily biodegradable

Product/substance	Aliphatic alcohol
Result:	84% på 20 dagar
Conclusion:	Readily biodegradable

Product/substance	Ester of aliphatic acid
Result:	100% på 28 dagar
Conclusion:	Readily biodegradable

12.3. ▼Bioaccumulative potential:

Product/substance	ethyl lactate;ethyl (S)-2-hydroxypropionate;ethyl DL-lactate;ethyl L-lactate;ethyl-(S)-lactate
LogKow:	0.31
Conclusion:	No potential for bioaccumulation

Product/substance	Ester of aliphatic acid
Conclusion:	No potential for bioaccumulation

12.4. Mobility in soil:

No data available.

12.5. Results of PBT and vPvB assessment:

This mixture/product does not contain any substances known to fulfil the criteria for PBT and vPvB classification.

12.6. ▼Endocrine disrupting properties:

This mixture/product does not contain any substances considered to have endocrine-disrupting properties in relation to the environment.

12.7. Other adverse effects:

None known.

SECTION 13: Disposal considerations

13.1. ▼Waste treatment methods:

Product is covered by the regulations on hazardous waste. (*)

HP 3 - Flammable

HP 4 - Irritant (skin irritation and eye damage)

Dispose of contents/container to an approved waste disposal plant.

Regulation (EU) No 1357/2014 of 18 December 2014 on waste as retained and amended in UK law.

EWC code:	08 01 11* Waste paint and varnish containing organic solvents or other dangerous substances

Contaminated packing:

Packaging containing residues of the product must be disposed of similarly to the product.

SECTION 14: Transport information

	14.1 UN / ID ***	14.2 UN proper shipping name	14.3 Hazard class(es)	14.4 PG*	14.5 Env**	Other information:
ADR/ADN/RID	UN1263	PAINT	Transport hazard class: 3 Label: 3 Classification code: F1	III	No	Limited quantities: 5 L Tunnel restriction code: (D/E) See below for additional information.

	14.1 UN / ID ***	14.2 UN proper shipping name	14.3 Hazard class(es)	14.4 PG*	14.5 Env**	Other information:
						
IMDG	UN1263	PAINT	Transport hazard class: 3 Label: 3 Classification code: F1 	III	No	Limited quantities: 5 L EmS: F-E S-E See below for additional information.
IATA	UN1263	PAINT	Transport hazard class: 3 Label: 3 Classification code: F1 	III	No	See below for additional information.

* Packing group
** Environmental hazards
*** UN number or ID number

▼Additional information:

This product is within scope of the regulations of transport of dangerous goods.

ADR/ADN/RID / See Table A, section 3.2.1 for any information on special provisions, requirements, or warnings in connection with transport. See section 5.4.3, for instructions in writing regarding mitigation of damages in relation to incidents or accidents during transport.

IMDG / See section 3.2.1, for any information on special provisions, requirements, or warnings in connection with transport.

IATA / See Table 4.2 for any information on special provisions, requirements, or warnings in connection with transport.

14.6. Special precautions for user:

Not applicable.

14.7. Maritime transport in bulk according to IMO instruments:

No data available.

SECTION 15: Regulatory information

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

Restrictions for application:	Restricted to professional users. People under the age of 18 shall not be exposed to this product.
Demands for specific education:	No specific requirements.
SEVESO - Categories / dangerous substances:	P5c - FLAMMABLE LIQUIDS, Qualifying quantity (lower-tier): 5.000 tonnes / (upper-tier): 50.000 tonnes
REACH, Annex XVII:	Aliphatic acid ester 2 is subject to UK-REACH restrictions (entry 40). ethyl lactate;ethyl (S)-2-hydroxypropionate;ethyl DL-lactate;ethyl L-lactate;ethyl-(S)-lactate is subject to UK-REACH restrictions (entry 40). Aliphatic alcohol is subject to UK-REACH restrictions (entry 40). Ester of aliphatic acid is subject to UK-REACH restrictions (entry 40). Xylene is subject to UK-REACH restrictions (entry 40).
Additional information:	Not applicable.
▼Sources:	The Management of Health and Safety at Work Regulations 1999.

Control of Major Accident Hazards (COMAH) Regulations 2015.
2012 No. 1715 ENVIRONMENTAL PROTECTION: The Volatile Organic Compounds in Paints, Varnishes and Vehicle Refinishing Products Regulations 2012.
Regulation (EU) No 1357/2014 of 18 December 2014 on waste as retained and amended in UK law.
Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures (CLP) as retained and amended in UK law.
Regulation (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) as retained and amended in UK law.

15.2. Chemical safety assessment:

No

SECTION 16: Other information

▼Full text of H-phrases as mentioned in section 3:

EUH066, Repeated exposure may cause skin dryness or cracking.
H225, Highly flammable liquid and vapour.
H226, Flammable liquid and vapour.
H304, May be fatal if swallowed and enters airways.
H312, Harmful in contact with skin.
H315, Causes skin irritation.
H318, Causes serious eye damage.
H319, Causes serious eye irritation.
H332, Harmful if inhaled.
H335, May cause respiratory irritation.
H336, May cause drowsiness or dizziness.
H373, May cause damage to organs through prolonged or repeated exposure.

▼Abbreviations and acronyms:

ADN = European Provisions concerning the International Carriage of Dangerous Goods by Inland Waterway
ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor
CAS = Chemical Abstracts Service
CE = Conformité Européenne (European conformity)
CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]
CSA = Chemical Safety Assessment
CSR = Chemical Safety Report
DMEL = Derived Minimal Effect Level
DNEL = Derived No Effect Level
EC = Effective concentration
ED = Effective dose
EINECS = European Inventory of Existing Commercial chemical Substances
EL = Effective Loading
ErC = Concentration associated with x% growth rate response
ES = Exposure Scenario
EUH statement = CLP-specific Hazard statement

EuPCS = European Product Categorisation System
EWC = European Waste Catalogue
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
GWP = Global warming potential
HP = Hazardous Property code
IARC = International Agency for Research on Cancer (IARC)
IATA = International Air Transport Association
IBC = Intermediate Bulk Container
IC = X maximum inhibitory concentration
IMDG = International Maritime Dangerous Goods
LC = Lethal concentration
LCLo = Value is the lowest concentration of a material in air reported to have caused the death of animals or humans
LD = Lethal dose
LOAEC = Lowest Observed Adverse Effect Concentration
LOAEL = Lowest Observed Adverse Effect Level
LOEC = Lowest Observed Effect Concentration
LogKow = logarithm of the n-octanol/water coefficient
LL = Lethal Loading
M = For multiplication factor
MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
NOAEC = No Observed Adverse Effect Concentration
NOAEL = No Observed Adverse Effect Level
NOEC = No Observed Effect Concentration
NOELR = No Observable Effect Loading Rate
OECD = Organisation for Economic Co-operation and Development
PBT = Persistent, Bioaccumulative and Toxic
PNEC = Predicted No Effect Concentration
RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail
RRN = REACH Registration Number
SCL = A specific concentration limit
SVHC = Substances of Very High Concern
STOT-RE = Specific Target Organ Toxicity - Repeated Exposure
STOT-SE = Specific Target Organ Toxicity - Single Exposure
TWA = Time weighted average
UN = United Nations
UVCB = Unknown or variable composition, complex reaction products or of biological materials
VOC = Volatile Organic Compound
vPvB = Very Persistent and Very Bioaccumulative

Additional information:

The classification of the substance/mixture in regard of health hazards are in accordance with the calculation methods given by Regulation (EC) No. 1272/2008 (CLP) as retained and amended in UK law.
The classification of the mixture in regard to physical hazards has been based on experimental data.

The safety data sheet is validated by:

MD

:

Other:

A change (in proportion to the last essential change (first cipher in SDS version, see section 1)) is marked with a triangle.
The information in this safety data sheet applies only to this specific product (mentioned in section 1) and is not necessarily correct for use with other chemicals/products.
It is recommended to hand over this safety data sheet to the actual user of the product. Information in this safety data sheet cannot be used as a product specification.
Country-language: GB-en