

SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of:
Regulation (EC) No. 1907/2006 and Regulation (EC) No. 1272/2008



Revision date 03-Jun-2021

Revision Number 1

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

1.1. Product identifier

Product Name **PERFECT 1.92 EC**

Product Code(s) TP.3022.I.1

Pure substance/mixture Mixture

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

Recommended use Insecticide; For professional users only

Uses advised against No information available

1.3. Details of the supplier of the safety data sheet

Manufacturer

Tapazol Chemical Works Ltd.
1st HaSolela st.
West. Ind. Zone
Beit Shemesh, Israel 9905415
Tel: +972-2-992-6040
Fax: +972-2-9926050
For further information, please contact sds@tapazol.co.il

1.4. Emergency telephone number

Emergency Telephone +972 4 777 1900

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

Acute toxicity - Oral	Category 4 - (H302)
Acute toxicity - Inhalation (Dusts/Mists)	Category 4 - (H332)
Serious eye damage/eye irritation	Category 2 - (H319)
Specific target organ toxicity (single exposure)	Category 2 - (H371)
Specific target organ toxicity (repeated exposure)	Category 2 - (H373)
Acute aquatic toxicity	Category 1 - (H400)
Chronic aquatic toxicity	Category 1 - (H410)
Flammable liquids	Category 3 - (H226)

2.2. Label elements

Contains Hexyl Alcohol, Emamectin Benzoate



Signal word

Warning

Hazard statements

- H302 - Harmful if swallowed
- H319 - Causes serious eye irritation
- H332 - Harmful if inhaled
- H371 - May cause damage to organs
- H373 - May cause damage to organs through prolonged or repeated exposure
- H410 - Very toxic to aquatic life with long lasting effects
- H226 - Flammable liquid and vapor
- EUH401 - To avoid risks to human health and the environment, comply with the instructions for use

Precautionary Statements - EU (§28, 1272/2008)

- P102 - Keep out of reach of children
- P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking
- P260 - Do not breathe dust/fume/gas/mist/vapors/spray
- P270 - Do not eat, drink or smoke when using this product
- P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
- P312 - Call a POISON CENTER or doctor/physician if you feel unwell
- P403 + P235 - Store in a well-ventilated place. Keep cool
- P405 - Store locked up
- P501 - Dispose of contents/ container to an approved waste disposal plant

Additional information

SP1 - Do not contaminate water with the product or its container (Do not clean application equipment near surface water/Avoid contamination via drains from farmyards and roads).
 This product requires tactile warnings if supplied to the general public.

2.3. Other hazards

SECTION 3: Composition/information on ingredients

3.1 Substances

Not applicable

3.2 Mixtures

Chemical name	EC No	CAS No	Weight-%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Emamectin Benzoate	605-015-1	155569-91-8	1-3	Acute Tox. 3 (H301) Acute Tox. 3 (H311) Eye Dam. 1 (H318) Acute Tox. 3 (H331) STOT SE 1 (H370) (nervous system) STOT RE 1 (H372) (nervous system) Aquatic Acute 1 (H400) M=10000 Aquatic Chronic 1

Hexyl Alcohol	203-852-3	111-27-3	57-63	(H410) M=10000 Acute Tox. 4 (H302) Acute Tox. 4 (H312) Eye Irrit. 2 (H319) Flam. Liq. 3 (H226)
DISTILLATES (PETROLEUM), HYDROTREATED LIGHT PARAFFINIC (<3% DMSO extract)	265-158-7	64742-55-8	5-9	Asp. Tox. 1 (H304)

Full text of H- and EUH-phrases: see section 16

This product does not contain candidate substances of very high concern at a concentration $\geq 0.1\%$ (Regulation (EC) No. 1907/2006 (REACH), Article 59)

SECTION 4: First aid measures

4.1. Description of first aid measures

General advice	Show this safety data sheet to the doctor in attendance.
Inhalation	Remove to fresh air. If symptoms persist, call a physician. If breathing has stopped, give artificial respiration. Get medical attention immediately.
Eye contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep eye wide open while rinsing. Do not rub affected area.
Skin contact	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. If symptoms persist, call a physician.
Ingestion	Do NOT induce vomiting. Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Get medical attention.
Self-protection of the first aider	Remove all sources of ignition. Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Avoid breathing vapors or mists. Use personal protective equipment as required. See section 8 for more information.

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

Symptoms	Coughing and/ or wheezing. Difficulty in breathing.
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4.3. Indication of any immediate medical attention and special treatment needed

Note to physicians	Treat symptomatically.
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SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable Extinguishing Media	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Small Fire	Dry chemical, CO ₂ , water spray or regular foam.
Large Fire	Water spray, fog or regular foam Dike fire-control water for later disposal Move containers from fire area if you can do it without risk
Unsuitable extinguishing media	Do not scatter spilled material with high pressure water streams.

5.2. Special hazards arising from the substance or mixture

Specific hazards arising from the chemical Risk of ignition. Keep product and empty container away from heat and sources of ignition. In the event of fire, cool tanks with water spray. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

5.3. Advice for firefighters

Special protective equipment for fire-fighters Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions Evacuate personnel to safe areas. See section 8 for more information. Keep people away from and upwind of spill/leak. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Pay attention to flashback. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Do not touch or walk through spilled material. Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Avoid breathing vapors or mists. Use personal protective equipment as required.

Other information Ventilate the area. Refer to protective measures listed in Sections 7 and 8. Do not get water inside containers.

For emergency responders Use personal protection recommended in Section 8.

6.2. Environmental precautions

Environmental precautions Refer to protective measures listed in Sections 7 and 8. Prevent product from entering drains. Prevent further leakage or spillage if safe to do so.

6.3. Methods and material for containment and cleaning up

Methods for containment Stop leak if you can do it without risk. Do not touch or walk through spilled material. A vapor suppressing foam may be used to reduce vapors. Dike far ahead of spill to collect runoff water. Keep out of drains, sewers, ditches and waterways. Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal.

Methods for cleaning up Take precautionary measures against static discharges. Dam up. Soak up with inert absorbent material. Pick up and transfer to properly labeled containers.

Prevention of secondary hazards Clean contaminated objects and areas thoroughly observing environmental regulations.

6.4. Reference to other sections

Reference to other sections See section 8 for more information. See section 13 for more information.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling Use personal protection equipment. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use grounding and bonding connection when transferring this material to prevent static discharge, fire or explosion. Use with local exhaust ventilation. Use spark-proof tools and explosion-proof equipment. Keep in an area equipped with sprinklers. Use according to package label instructions. Avoid contact with skin, eyes or clothing. Handle in accordance with good industrial hygiene and safety practice. Avoid breathing vapors or mists. In case of insufficient ventilation, wear suitable respiratory equipment. Do not eat, drink or smoke when using this product.

General hygiene considerations Contaminated work clothing should not be allowed out of the workplace. Regular cleaning

of equipment, work area and clothing is recommended. Wash hands before breaks and immediately after handling the product. Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this product.

7.2. Conditions for safe storage, including any incompatibilities

Storage Conditions

Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity). Keep in properly labeled containers. Do not store near combustible materials. Keep in an area equipped with sprinklers. Store in accordance with the particular national regulations. Store in accordance with local regulations. Store locked up. Keep containers tightly closed in a dry, cool and well-ventilated place. Keep out of the reach of children.

7.3. Specific end use(s)

Risk Management Methods (RMM) The information required is contained in this Safety Data Sheet.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure Limits

Chemical name	Denmark	Germany	France	United Kingdom	Spain
Hexyl Alcohol 111-27-3	-	TWA: 25 ppm TWA: 105 mg/m ³	-	-	-

Biological occupational exposure limits

This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies

8.2. Exposure controls

Personal protective equipment

Eye/face protection

Tight sealing safety goggles.

Hand protection

Impervious gloves. Wear suitable gloves.

Skin and body protection

Chemical resistant apron. Antistatic boots. Wear suitable protective clothing. Long sleeved clothing.

Respiratory protection

No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

General hygiene considerations

Contaminated work clothing should not be allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended. Wash hands before breaks and immediately after handling the product. Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this product.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	Trasparent Liquid
Physical state	Liquid
Color	yellow to green

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH		
pH (as aqueous solution)	5.0 - 6.0	solution (1 %)
Melting point / freezing point		
Boiling point / boiling range		
Flash point	60 °C	ASTM D-93/A
Evaporation rate	No data available.	
Flammability (solid, gas)	No data available.	
Flammability Limit in Air		
Upper flammability or explosive limits	No data available.	
Lower flammability or explosive limits	No data available.	
Vapor pressure	No data available.	
Vapor density	No data available.	
Relative density	0.83 - 0.93	20-25 C
Water solubility	No data available.	
Solubility(ies)	No data available.	
Partition coefficient	No data available.	
Autoignition temperature	No data available.	
Decomposition temperature		
Kinematic viscosity	No data available.	
Dynamic viscosity	No data available.	

9.2. Other information**SECTION 10: Stability and reactivity****10.1. Reactivity****10.2. Chemical stability**

Stability Stable under normal conditions.

Explosion data

Sensitivity to mechanical impact None.

Sensitivity to static discharge Yes.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions None under normal processing.

10.4. Conditions to avoid

Conditions to avoid Heat, flames and sparks. Excessive heat.

10.5. Incompatible materials

Incompatible materials None known based on information supplied.

10.6. Hazardous decomposition products

Hazardous decomposition products None known based on information supplied.

SECTION 11: Toxicological information**11.1. Information on toxicological effects**

Oral LD50	300-2000 mg/kg. (rat); Acute Tox. 4 - H302
Dermal LD50	> 2000 mg/kg. (rat); Based on available data, the classification criteria are not met.
Inhalation LC50	1.6658 mg/l air 4 h (rat); Acute Tox. 4 - H332
Skin corrosion/irritation	Non-irritating to the skin; Based on available data, the classification criteria are not met.
Serious eye damage/eye irritation	Irritating to eyes; Eye Irrit. 2 - H319.
Respiratory or skin sensitization	Not a skin sensitizer. Based on available data, the classification criteria are not met.

Germ cell mutagenicity

Chemical name	European Union
Emamectin Benzoate	Not classified

Carcinogenicity

Chemical name	European Union
Emamectin Benzoate	Not classified

Reproductive toxicity

Chemical name	European Union
Emamectin Benzoate	Not classified

STOT - single exposure	STOT SE 1 - H370. Causes damage to organs. (Emamectin Benzoate).
STOT - repeated exposure	STOT RE 1 - H372. Causes damage to organs through prolonged or repeated exposure. (Emamectin Benzoate).
Aspiration hazard	Not classified. (Based on available data, the classification criteria are not met). (Emamectin Benzoate).

SECTION 12: Ecological information**12.1. Toxicity**

Ecotoxicity	Very toxic to aquatic life.: H400 - Classification based on calculation method. Very toxic to aquatic life with long lasting effects.: H410 - Classification based on calculation method.
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Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Emamectin Benzoate	-	Acute toxicity: LC50=0.174 mg/L	-	Acute toxicity: LC50=0.00004 mg/L Chronic toxicity: NOEC=0.000088 mg/L

12.2. Persistence and degradability

Persistence and degradability	Not rapidly degradable. (Emamectin Benzoate).
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12.3. Bioaccumulative potential

Bioaccumulation	Low potential for bioaccumulation. (Emamectin benzoate).
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Bioconcentration factor (BCF)	82 L/kg
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Component Information

Chemical name	Partition coefficient
Emamectin Benzoate	5.0

12.4. Mobility in soil

Mobility in soil No data available.

12.5. Results of PBT and vPvB assessment

PBT and vPvB assessment The components in formulation do not meet the criteria for classification as PBT or vPvB.

12.6. Other adverse effects**SECTION 13: Disposal considerations**13.1. Waste treatment methods

Waste from residues/unused products Should not be released into the environment. Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

Contaminated packaging Empty containers pose a potential fire and explosion hazard. Do not cut, puncture or weld containers.

SECTION 14: Transport informationIMDG

14.1 UN number 1993
 14.2 UN proper shipping name Flammable liquid, n.o.s. (Hexyl Alcohol)
 14.3 Transport hazard class(es) 3
 14.4 Packing group III
 14.5 Marine pollutant Yes
 Environmental hazards Yes
 14.6 Special precautions for user
 Special Provisions None
 14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

RID

14.1 UN number 1993
 14.2 UN proper shipping name Flammable liquid, n.o.s. (Hexyl Alcohol)
 14.3 Transport hazard class(es) 3
 14.4 Packing group III
 14.5 Environmental hazards Yes
 14.6 Special precautions for user
 Special Provisions None

ADR

14.1 UN number 1993
 14.2 UN proper shipping name Flammable liquid, n.o.s. (Hexyl Alcohol)
 14.3 Transport hazard class(es) 3
 14.4 Packing group III
 14.5 Environmental hazards Yes
 14.6 Special precautions for user
 Special Provisions None

IATA

14.1 UN number 1993
 14.2 UN proper shipping name Flammable liquid, n.o.s. (Hexyl Alcohol)
 14.3 Transport hazard class(es) 3
 14.4 Packing group III

14.5 Environmental hazards	Yes
14.6 Special precautions for user	
Special Provisions	None

SECTION 15: Regulatory information

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

National regulations

France

Occupational Illnesses (R-463-3, France)

Chemical name	French RG number	Title
Hexyl Alcohol 111-27-3	RG 84	-

Germany

Water hazard class (WGK) strongly hazardous to water (WGK 3)

European Union

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work

Authorizations and/or restrictions on use:

This product does not contain substances subject to authorization (Regulation (EC) No. 1907/2006 (REACH), Annex XIV) This product does not contain substances subject to restriction (Regulation (EC) No. 1907/2006 (REACH), Annex XVII)

Persistent Organic Pollutants

Not applicable

Dangerous substance category per Seveso Directive (2012/18/EU)

P5a - FLAMMABLE LIQUIDS

P5b - FLAMMABLE LIQUIDS

P5c - FLAMMABLE LIQUIDS

Ozone-depleting substances (ODS) regulation (EC) 1005/2009 Not applicable

International Inventories

TSCA	Contact supplier for inventory compliance status
DSL/NDL	Contact supplier for inventory compliance status
EINECS/ELINCS	Contact supplier for inventory compliance status
ENCS	Contact supplier for inventory compliance status
IECSC	Contact supplier for inventory compliance status
KECL	Contact supplier for inventory compliance status
PICCS	Contact supplier for inventory compliance status
AICS	Contact supplier for inventory compliance status

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

15.2. Chemical safety assessment

SECTION 16: Other information**Key or legend to abbreviations and acronyms used in the safety data sheet****Full text of H-Statements referred to under section 3**

H226 - Flammable liquid and vapor
 H301 - Toxic if swallowed
 H302 - Harmful if swallowed
 H318 - Causes serious eye damage
 H319 - Causes serious eye irritation
 H311 - Toxic in contact with skin
 H331 - Toxic if inhaled
 H332 - Harmful if inhaled
 H370 - Causes damage to organs
 H371 - May cause damage to organs
 H372 - Causes damage to organs through prolonged or repeated exposure
 H373 - May cause damage to organs through prolonged or repeated exposure
 H400 - Very toxic to aquatic life
 H410 - Very toxic to aquatic life with long lasting effects

Legend

SVHC: Substances of Very High Concern for Authorization:

Legend Section 8: Exposure controls/personal protection

TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
Ceiling	Maximum limit value	*	Skin designation

Classification procedure

H226 - Calculation based on test data
 H302 - Classification based on test data
 H319 - Classification based on test data
 H332 - Classification based on test data
 H371 - Classification based on calculation method
 H373 - Classification based on calculation method
 H400 - Classification based on calculation method
 H410 - Classification based on calculation method

Key literature references and sources for data used to compile the SDS

Agency for Toxic Substances and Disease Registry (ATSDR)
 U.S. Environmental Protection Agency ChemView Database
 European Food Safety Authority (EFSA)
 EPA (Environmental Protection Agency)
 Acute Exposure Guideline Level(s) (AEGL(s))
 U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act
 U.S. Environmental Protection Agency High Production Volume Chemicals
 Food Research Journal
 Hazardous Substance Database
 International Uniform Chemical Information Database (IUCLID)
 Japan GHS Classification
 Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)
 NIOSH (National Institute for Occupational Safety and Health)
 National Library of Medicine's ChemID Plus (NLM CIP)
 National Library of Medicine's PubMed database (NLM PUBMED)
 National Toxicology Program (NTP)
 New Zealand's Chemical Classification and Information Database (CCID)
 Organization for Economic Co-operation and Development Environment, Health, and Safety Publications
 Organization for Economic Co-operation and Development High Production Volume Chemicals Program
 Organization for Economic Co-operation and Development Screening Information Data Set
 World Health Organization

Revision date

03-Jun-2021

This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006

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 and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet