

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 26-Apr-2022

Revision Number 1

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

1.1. Product identifier

Product Name OR
Product Code(s) TP.1003.H.1___ISR
Chemical name Carfentrazone-ethyl 400 EC
Pure substance/mixture Mixture

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

Recommended use Herbicide; 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
National Institute for Information on Poisoning
Rambam Health Care Campus, Haifa, Israel

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

Aspiration hazard	Category 1 - (H304)
Acute toxicity - Inhalation (Dusts/Mists)	Category 4 - (H332)
Skin corrosion/irritation	Category 2 - (H315)
Serious eye damage/eye irritation	Category 2 - (H319)
Specific target organ toxicity (single exposure)	Category 3 - (H336); - (H335)
Acute aquatic toxicity	Category 1 - (H400)
Chronic aquatic toxicity	Category 1 - (H410)

2.2. Label elements

Contains Solvent Naphtha (Petroleum), Heavy Aromatic, Carfentrazone-ethyl (ISO)



Signal word
Danger

Hazard statements

H304 - May be fatal if swallowed and enters airways
 H315 - Causes skin irritation
 H319 - Causes serious eye irritation
 H332 - Harmful if inhaled
 H335 - May cause respiratory irritation
 H336 - May cause drowsiness or dizziness
 H410 - Very toxic to aquatic life with long lasting effects
 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
 P261 - Avoid breathing dust/fume/gas/mist/vapors/spray
 P264 - Wash face, hands and any exposed skin thoroughly after handling
 P273 - Avoid release to the environment
 P280 - Wear protective gloves/protective clothing/eye protection/face protection
 P301 + P330 + P331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting
 P302 + P352 - IF ON SKIN: Wash with plenty of water/...
 P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
 P310 - Immediately call a POISON CENTER or doctor
 P391 - Collect spillage
 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).

2.3. Other hazards

Endocrine Disruptor Information

Chemical name	EU - Endocrine Disruptors Candidate List	EU - Endocrine Disruptors - Evaluated Substances
Naphthalene	Group III Chemical	-

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]
Carfentrazone-ethyl (ISO)	-	128639-02-1	37-42	Aquatic Acute 1 (H400) M=1 Aquatic Chronic 1 (H410) M=100

Solvent Naphtha (Petroleum), Heavy Aromatic	265-198-5	64742-94-5	41-47	Asp. Tox. 1 (H304) STOT SE 3 (H336) Aquatic Chronic 2 (H411)
Ethoxylated oleyl amine, dodecylbenzenesulphonic salt	613-939-1	66467-20-7	3-6	Acute Tox. 4 (H302) Skin Irrit. 2 (H315) Eye Dam. 1 (H318) Aquatic Chronic 2 (H411)
Benzenesulfonic acid, C10-13-alkyl calcium salt	-	932-231-6	3-6	Skin irrit. 2 (H315) Eye dam.1 (H318) Aquatic Chronic 3 (H412)
2-methylpropan-1-ol iso-butanol	201-148-0	78-83-1	2-4	Skin Irrit. 2 (H315) Eye Dam. 1 (H318) STOT SE 3 (H335) STOT SE 3 (H336) Flam. Liq. 3 (H226)
Poly(oxy-1,2-ethanediyl), .alpha.-[tris(1-phenylethyl)phenyl]-.omega.ga.- hydroxy	619-457-8	99734-09-5	0.5-2	Aquatic Chronic 3 (H412)
Naphthalene	202-049-5	91-20-3	<0.4	Acute Tox.4 (H302) Carc.2 (H351) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410)

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	Immediate medical attention is required. Show this safety data sheet to the doctor in attendance.
Inhalation	Remove to fresh air. Aspiration into lungs can produce severe lung damage. If breathing has stopped, give artificial respiration. Get medical attention immediately. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. If breathing is difficult, (trained personnel should) give oxygen. Get immediate medical advice/attention. Delayed pulmonary edema may occur.
Eye contact	Get immediate medical advice/attention. Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Keep eye wide open while rinsing. Do not rub affected area.
Skin contact	Wash off immediately with soap and plenty of water for at least 15 minutes. Get medical attention if irritation develops and persists.
Ingestion	Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Do NOT induce vomiting. ASPIRATION HAZARD IF SWALLOWED - CAN ENTER LUNGS AND CAUSE DAMAGE. If vomiting occurs spontaneously, keep head below hips to prevent aspiration. Get immediate medical advice/attention.
Self-protection of the first aider	Avoid contact with skin, eyes or clothing. Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Avoid direct contact with skin. Use barrier to give mouth-to-mouth

resuscitation. Use personal protective equipment as required.

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

Symptoms Burning sensation. Difficulty in breathing. Coughing and/ or wheezing. Dizziness. Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting. Prolonged contact may cause redness and irritation.

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

Note to physicians Because of the danger of aspiration, emesis or gastric lavage should not be employed unless the risk is justified by the presence of additional toxic substances.

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, CO₂, 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

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 Avoid contact with skin, eyes or clothing. Use personal protective equipment as required. Ensure adequate ventilation. Evacuate personnel to safe areas.

Other information Refer to protective measures listed in Sections 7 and 8.

For emergency responders Use personal protection recommended in Section 8.

6.2. Environmental precautions

Environmental precautions Prevent further leakage or spillage if safe to do so.

6.3. Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Take up mechanically, placing in appropriate containers for disposal.

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

Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke when using this product. Ensure adequate ventilation. Avoid breathing vapors or mists. In case of insufficient ventilation, wear suitable respiratory equipment.

General hygiene considerations

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 containers tightly closed in a dry, cool and well-ventilated place. Store locked up. Keep out of the reach of children. Store away from other materials.

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	European Union	Austria	Belgium	Netherlands	Bulgaria
2-methylpropan-1-ol iso-butanol 78-83-1	-	TWA: 50 ppm TWA: 150 mg/m ³ STEL 200 ppm STEL 600 mg/m ³	TWA: 50 ppm TWA: 154 mg/m ³	-	-
Naphthalene 91-20-3	TWA: 10 ppm TWA: 50 mg/m ³	TWA: 10 ppm TWA: 50 mg/m ³ H*	TWA: 10 ppm TWA: 53 mg/m ³ STEL: 15 ppm STEL: 80 mg/m ³ *	TWA: 50 mg/m ³ STEL: 80 mg/m ³ H*	STEL: 75.0 mg/m ³ TWA: 50.0 mg/m ³
Chemical name	Denmark	Germany	France	United Kingdom	Spain
2-methylpropan-1-ol iso-butanol 78-83-1	Ceiling: 50 ppm Ceiling: 150 mg/m ³ H*	TWA: 100 ppm TWA: 310 mg/m ³	TWA: 50 ppm TWA: 150 mg/m ³	TWA: 50 ppm TWA: 154 mg/m ³ STEL: 75 ppm STEL: 231 mg/m ³	TWA: 50 ppm TWA: 154 mg/m ³
Naphthalene 91-20-3	TWA: 10 ppm TWA: 50 mg/m ³	TWA: 0.4 ppm TWA: 2 mg/m ³ H*	TWA: 10 ppm TWA: 50 mg/m ³	-	TWA: 10 ppm TWA: 53 mg/m ³ STEL: 15 ppm STEL: 80 mg/m ³ via dérmica*

Biological occupational exposure limits

Chemical name	Denmark	Finland	France	Germany	Germany MAK
Naphthalene 91-20-3	-	-	-	35 µg/L - BAR (end of exposure or end of shift) urine 35 µg/L - BAR (for long-term exposures: at the	-

Chemical name	Hungary	Ireland	Italy	Italy REL
Naphthalene 91-20-3	-	4 µmol/mol Creatinine (urine - 1-Hydroxypyrene post shift)	-	- () - end of shift
Chemical name	Latvia	Luxembourg	Romania	Slovakia
Carfentrazone-ethyl (ISO) 128639-02-1	-	-	5 mg/g Creatinine - urine (Fluorine) - end of shift	-
Naphthalene 91-20-3	-	-	-	5.66 µg/L - urine (1-Hydroxypyrene) - end of exposure or work shift

8.2. Exposure controls

Personal protective equipment

Eye/face protection Tight sealing safety goggles.

Hand protection Wear suitable gloves.

Skin and body protection Wear suitable protective 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 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

Physical state Liquid
Color Clear brown
Odor Aromatic. Solvent.

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	5 - 7	1% solution, 20 °C
pH (as aqueous solution)		
Melting point / freezing point		
Boiling point / boiling range		
Flash point	No data available.	
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	1.0 - 1.1	
Water solubility	Forms an emulsion	
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 None.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions None under normal processing.

10.4. Conditions to avoid

Conditions to avoid None known based on information supplied.

10.5. Incompatible materials

Incompatible materials Strong acids. Strong bases. Strong oxidizing agents.

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 5000 mg/kg. Based on available data, the classification criteria are not met.
Dermal LD50 > 2000 mg/kg. Based on available data, the classification criteria are not met.
Inhalation LC50 >5.205 mg/l air 4 h. Based on available data, the classification criteria are not met.

Skin corrosion/irritation Non-irritating to the skin. Based on available data, the classification criteria are not met.

Serious eye damage/eye irritation Eye Irrit. 2 - H319. Classification based on test data.

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
Carfentrazone-ethyl (ISO)	Not classified
Naphthalene	Not classified

Carcinogenicity

Chemical name	European Union
Carfentrazone-ethyl (ISO)	Not classified

Naphthalene	Carc. 2 (H351)
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Reproductive toxicity

Chemical name	European Union
Carfentrazone-ethyl (ISO)	Not classified
Naphthalene	Not classified

STOT - single exposure Cat 3 (H336) - May cause drowsiness or dizziness. Classification based on calculation method.

STOT - repeated exposure Not classified. (Based on available data, the classification criteria are not met).

Aspiration hazard H304 - May be fatal if swallowed and enters airways. Classification based on calculation method.

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.

Non-toxic to honeybees.

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Carfentrazone-ethyl (ISO)	Acute toxicity: LC50 = 0.0057 mg/l; Chronic toxicity: NOEC = 0.012 mg/l	Acute toxicity: LC50 = 1.6 mg/l; Chronic toxicity: NOEC = 0.11 mg/l	-	Acute toxicity: LC50 = 1.01 mg/l; Chronic toxicity: NOEC = 0.22 mg/l

12.2. Persistence and degradability

Persistence and degradability Non-persistent [Carfentrazone-ethyl].

12.3. Bioaccumulative potential

Bioaccumulation No assessment of the accumulative effects is available [Carfentrazone-ethyl].

Bioconcentration factor (BCF) 176 L/kg [Carfentrazone-ethyl]

12.4. Mobility in soil

Mobility in soil Slightly to moderately mobile [Carfentrazone-ethyl].

12.5. Results of PBT and vPvB assessment**PBT and vPvB assessment**

Chemical name	PBT and vPvB assessment
Carfentrazone-ethyl (ISO)	The substance is not PBT / vPvB
Solvent Naphtha (Petroleum), Heavy Aromatic	The substance is not PBT / vPvB
Ethoxylated oleyl amine, dodecylbenzenesulphonic salt	The substance is not PBT / vPvB
Benzenesulfonic acid, C10-13-alkyl calcium salt	The substance is not PBT / vPvB
2-methylpropan-1-ol	The substance is not PBT / vPvB

iso-butanol	
Poly(oxy-1,2-ethanediyl), .alpha.- [tris(1-phenylethyl)phenyl]-.omega.-hydroxy	The substance is not PBT / vPvB
Naphthalene	The substance is not PBT / vPvB

12.6. Other adverse effects

Endocrine Disruptor Information

Chemical name	EU - Endocrine Disruptors Candidate List	EU - Endocrine Disruptors - Evaluated Substances
Naphthalene	Group III Chemical	-

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste from residues/unused products	Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.
Contaminated packaging	Do not reuse empty containers.

SECTION 14: Transport information

IMDG

14.1 UN number	3082
14.2 UN proper shipping name	Environmentally hazardous substance, liquid, n.o.s. [Carfentrazone-ethyl]
14.3 Transport hazard class(es)	9
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	3082
14.2 UN proper shipping name	Environmentally hazardous substance, liquid, n.o.s. [Carfentrazone-ethyl]
14.3 Transport hazard class(es)	9
14.4 Packing group	III
14.5 Environmental hazards	Yes
14.6 Special precautions for user	
Special Provisions	None

ADR

14.1 UN number	3082
14.2 UN proper shipping name	Environmentally hazardous substance, liquid, n.o.s. [Carfentrazone-ethyl]
14.3 Transport hazard class(es)	9
14.4 Packing group	III
14.5 Environmental hazards	Yes
14.6 Special precautions for user	
Special Provisions	None

IATA

14.1 UN number	3082
14.2 UN proper shipping name	Environmentally hazardous substance, liquid, n.o.s. [Carfentrazone-ethyl]
14.3 Transport hazard class(es)	9
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
Solvent Naphtha (Petroleum), Heavy Aromatic 64742-94-5	RG 84	-
2-methylpropan-1-ol iso-butanol 78-83-1	RG 84	-

Germany

Water hazard class (WGK) Obviously hazardous to water (WGK 2)

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)

E1 - Hazardous to the Aquatic Environment in Category Acute 1 or Chronic 1

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

International Inventories

TSCA	Contact supplier for inventory compliance status
DSL/NDSL	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/NDSL - 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
 H302 - Harmful if swallowed
 H304 - May be fatal if swallowed and enters airways
 H315 - Causes skin irritation
 H318 - Causes serious eye damage
 H319 - Causes serious eye irritation
 H335 - May cause respiratory irritation
 H336 - May cause drowsiness or dizziness
 H351 - Suspected of causing cancer
 H400 - Very toxic to aquatic life
 H410 - Very toxic to aquatic life with long lasting effects
 H411 - Toxic to aquatic life with long lasting effects
 H412 - Harmful 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

H304 - Classification based on calculation method
 H315 - Classification based on Plant Protection authority opinion in Israel
 H319 - Classification based on test data
 H332 - Classification based on Plant Protection authority opinion in Israel
 H335 - Classification based on Plant Protection authority opinion in Israel
 H336 - 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 26-Apr-2022

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