

Printing date 01/16/2024

Reviewed on 01/16/2024

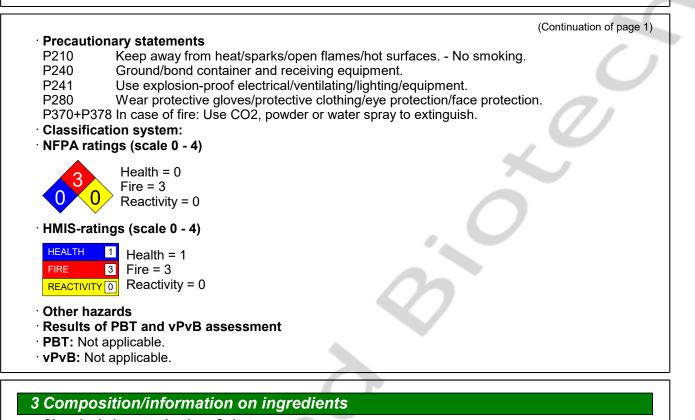




Printing date 01/16/2024

Reviewed on 01/16/2024

Trade name: Camphene natural



- · Chemical characterization: Substances
- · CAS No. Description
- CAS: 79-92-5 Camphene
- · Identification number(s)
- EC number: 201-234-8

4 First-aid measures

- Description of first aid measures
- · After inhalation: Supply fresh air; consult doctor in case of 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: If symptoms persist consult doctor.
- Information for doctor:
- Most important symptoms and effects, both acute and delayed No further relevant information available.
- Indication of any immediate medical attention and special treatment needed No further relevant information available.

5 Fire-fighting measures

- · Extinguishing media
- Suitable extinguishing agents:

CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

• Special hazards arising from the substance or mixture No further relevant information available.

(Continued on page 3)



Printing date 01/16/2024

Reviewed on 01/16/2024

Trade name: Camphene natural

(Continuation of page 2)

- · Advice for firefighters
- Protective equipment: No special measures required.
- · Additional information
- Cool endangered receptacles with water spray.
- Collect contaminated fire fighting water separately. It must not enter the sewage system.

6 Accidental release measures

- Personal precautions, protective equipment and emergency procedures
 Wear protective equipment. Keep unprotected persons away.
- Environmental precautions: Do not allow to enter sewers/ surface or ground water.
- Methods and material for containment and cleaning up: Ensure adequate ventilation.
- · Reference to other sections
- See Section 7 for information on safe handling.
- See Section 8 for information on personal protection equipment.
- See Section 13 for disposal information.
- Protective Action Criteria for Chemicals
- · PAC-1:
- Substance is not listed.
- · PAC-2:
- Substance is not listed.
- PAC-3:
- Substance is not listed.

7 Handling and storage

- · Handling:
- · Precautions for safe handling No special precautions are necessary if used correctly.
- Information about protection against explosions and fires:
- Keep ignition sources away Do not smoke. Protect against electrostatic charges.
- · Conditions for safe storage, including any incompatibilities
- · Storage:
- Requirements to be met by storerooms and receptacles: No special requirements.
- Please refer to the product specification and/or Certificate of Analysis for product storage requirements.
- · Information about storage in one common storage facility: Not required.
- Further information about storage conditions: Keep receptacle tightly sealed.
- Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

• Additional information about design of technical systems: No further data; see section 7.

- · Control parameters
- · Components with limit values that require monitoring at the workplace: Not required.
- Additional information: The lists that were valid during the creation were used as a basis.

(Continued on page 4)

– ÚS



Printing date 01/16/2024

Reviewed on 01/16/2024

(Continuation of page 3)

Trade name: Camphene natural

· Exposure controls

- · Personal protective equipment:
- General protective and hygienic measures: Wash hands before breaks and at the end of work.
- · Breathing equipment: Not required.
- · Protection of hands:



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material should be based on consideration of the penetration times, rates of diffusion and the degradation

· Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

Penetration time of glove material

The exact break through time has to be determined by the manufacturer of the protective gloves and has to be observed.

• Eye protection: Not required.

Information on basic physical and	chemical properties
General Information	Molecular Weight: 136.24 g/mol
Appearance:	
Form:	Solid
Color:	According to product specification
Odor: Odor threshold:	According to product specification Not determined.
pH-value:	Not applicable.
Change in condition	
Melting point/Melting range:	45-46 °C (113-114.8 °F)
Boiling point/Boiling range:	156-160 °C (312.8-320 °F)
Flash point:	Not applicable.
Flammability (solid, gaseous):	Product is not flammable.
Auto igniting:	265 °C (509 °F)
Decomposition temperature:	Not determined.
Ignition temperature:	Not determined.
Danger of explosion:	Product is not explosive. However, formation of explosive ai vapor mixtures are possible.
Explosion limits:	
Lower:	Not determined.
Upper:	Not determined.

US -



Printing date 01/16/2024

Reviewed on 01/16/2024

Trade name: Camphene natural

		(Continuation of page 4
Vapor pressure at 20 °C (68 °F):	3.3 hPa (2.5 mm Hg)	_
Vapor pressure at 50 °C (122 °F):	21.5 hPa (16.1 mm Hg)	
Density at 20 °C (68 °F):	0.84 g/cm³ (7.0098 lbs/gal)	
Relative density	Not determined.	
Vapor density	Not applicable.	
Evaporation rate	Not applicable.	
Solubility in / Miscibility with		
Water at 20 °C (68 °F):	4.2 g/l	
Partition coefficient (n-octanol/wate	er): Not determined.	
Viscosity:		7
Dynamic at 50 °C (122 °F):	1.6 mPas	
Kinematic:	Not applicable.	
VOC content:	0.00 %	
Solids content:	100.0 %	
Other information	No further relevant information availa	able.

10 Stability and reactivity

· Reactivity No further relevant information available.

- · Chemical stability
- Thermal decomposition / conditions to be avoided:
- No decomposition if used according to specifications.
- · Possibility of hazardous reactions No dangerous reactions known.
- Conditions to avoid No further relevant information available.
- · Incompatible materials: No further relevant information available.
- · Hazardous decomposition products: No dangerous decomposition products known.

11 Toxicological information

- · Information on toxicological effects
- · Acute toxicity:

· LD/LC50 values that are relevant for classification:

CAS: 79-92-5 Camphene

Oral LD50 5,000 mg/kg (rat)

Dermal LD50 2,500 mg/kg (rab)

- Primary irritant effect:
- on the skin: No irritant effect.
- on the eye: No irritating effect.
- Sensitization: No sensitizing effects known.
- · Additional toxicological information:
- · Carcinogenic categories

· IARC (International Agency for Research on Cancer)

Substance is not listed.

(Continued on page 6)

US



Printing date 01/16/2024

Reviewed on 01/16/2024

Trade name: Camphene natural

(Continuation of page 5)

· NTP (National Toxicology Program)

Substance is not listed.

· OSHA-Ca (Occupational Safety & Health Administration)

Substance is not listed.

12 Ecological information

· Toxicity

- Aquatic toxicity: No further relevant information available.
- Persistence and degradability No further relevant information available.
- · Behavior in environmental systems:
- · Bioaccumulative potential No further relevant information available.
- · Mobility in soil No further relevant information available.
- · Additional ecological information:

· General notes:

Water hazard class 1 (Assessment by list): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

- Results of PBT and vPvB assessment
- **PBT:** Not applicable.
- · vPvB: Not applicable.
- Other adverse effects No further relevant information available.

13 Disposal considerations

- · Waste treatment methods
- · Recommendation:

>

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

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

· UN-Number	
· DOT, IMDG, IATA	UN1325
· UN proper shipping name	
DOT	Flammable solids, organic, n.o.s. (Camphene)
· IMDG, IATA	FLAMMABLE SOLID, ORGANIC, N.O.S. (Camphene



Printing date 01/16/2024

Reviewed on 01/16/2024

Trade name: Camphene natural

	(Continuation of page 6
Transport hazard class(es)	
DOT	
	(7)
Class	4.1 Flammable solids, self-reactive substances and
	solid desensitised explosives
Label	4.1
IMDG, IATA	
Class	4.1 Flammable solids, self-reactive substances and solid desensitised explosives
Label	4.1
Packing group	~
DOT, IMDG, IATA	I
Environmental hazards:	
Marine pollutant: Special marking (ADR):	No Symbol (fish and tree)
Special precautions for user	Warning: Flammable solids, self-reactive substances and solid desensitised explosives
Hazard identification number (Kemler code): 44
EMS Number: Stowage Category	F-A,S-H B
Transport in bulk according to Annex II of	5
MARPOL73/78 and the IBC Code	Not applicable.
Transport/Additional information:	
DOT	
Quantity limitations	On passenger aircraft/rail: 15 kg
	On cargo aircraft only: 50 kg
IMDG Limited quantities (LQ)	1 kg
Excepted quantities (EQ)	Code: E2
	Maximum net quantity per inner packaging: 30 g Maximum net quantity per outer packaging: 500 g
UN "Model Regulation":	UN 1325 FLAMMABLE SOLID, ORGANIC, N.O.S.
	(CAMPHENE), 4.1, II, ENVIRONMENTALLY HAZARDOUS

(Continued on page 8)



Printing date 01/16/2024

Reviewed on 01/16/2024

Trade name: Camphene natural

(Continuation of page 7)

15 Regulatory information · Safety, health and environmental regulations/legislation specific for the substance or mixture · Sara · Section 355 (extremely hazardous substances): Substance is not listed. Section 313 (Specific toxic chemical listings): Substance is not listed. · TSCA (Toxic Substances Control Act): ACTIVE · Hazardous Air Pollutants Substance is not listed. · Proposition 65 · Chemicals known to cause cancer: Substance is not listed. Chemicals known to cause reproductive toxicity for females: Substance is not listed. · Chemicals known to cause reproductive toxicity for males: Substance is not listed. Chemicals known to cause developmental toxicity: Substance is not listed. · Carcinogenic categories · EPA (Environmental Protection Agency) Substance is not listed. TLV (Threshold Limit Value) Substance is not listed. · NIOSH-Ca (National Institute for Occupational Safety and Health) Substance is not listed. GHS label elements Pictograms on label shall be in the shape of a square set at a point and shall include a black hazard symbol on a white background with a red frame sufficiently wide to be clearly visible. The substance is classified and labeled according to the Globally Harmonized System (GHS). · Hazard pictograms GHS02 Signal word Warning Hazard statements H228 Flammable solid. · Precautionary statements Keep away from heat/sparks/open flames/hot surfaces. - No smoking. P210 P240 Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting/equipment. P241 (Continued on page 9)

US -



Printing date 01/16/2024

Reviewed on 01/16/2024

Trade name: Camphene natural

(Continuation of page 8)

P280 Wear protective gloves/protective clothing/eye protection/face protection. P370+P378 In case of fire: Use CO2, powder or water spray to extinguish.

Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

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.

- · Department issuing SDS: Product Safety Department
- · Contact:

Product Safety Department

- productsafety@adv-bio.com
- Date of preparation / last revision 01/16/2024
- · Abbreviations and acronyms:

ADR: Accord relatif au transport international 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

EINECS: European Inventory of Existing Commercial Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society) NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

VOC: Volatile Organic Compounds (USA, EU)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety & Health

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit REL: Recommended Exposure Limit

Flammable Solids 2: Flammable solids - Category 2