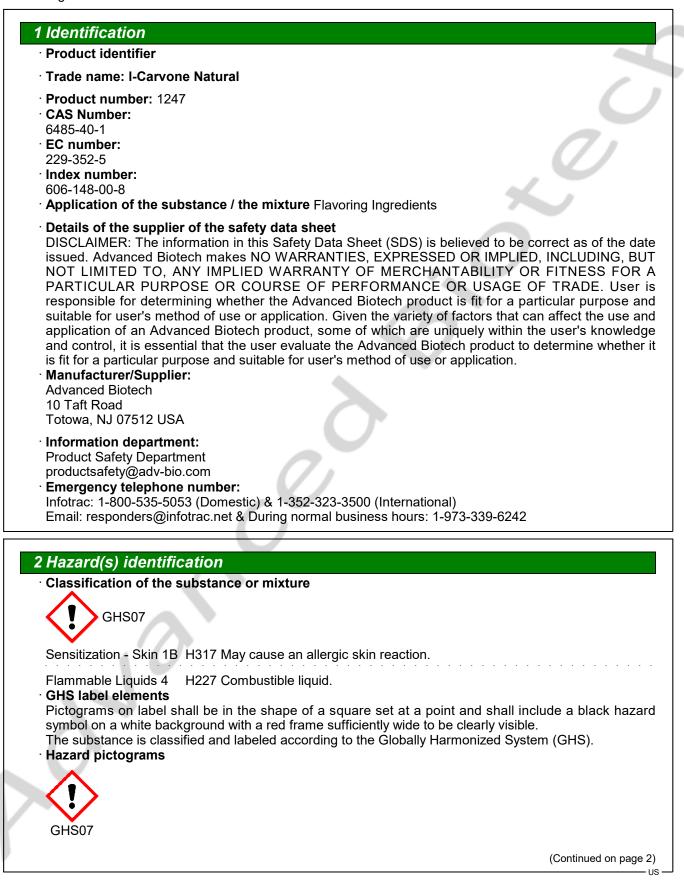


Printing date 01/16/2024

Reviewed on 01/10/2023





Printing date 01/16/2024

Trade name: I-Carvone Natural

<u> </u>		(Continuation of page 1)
Signal v	word Warning	
Hazard-	determining components of labeling:	
Carvone)	
Hazard	statements	
H227 Co	ombustible liquid.	
	ay cause an allergic skin reaction.	
	ionary statements	
P210	Keep away from heat/sparks/open flames/hot surfaces No	smoking.
P261	Avoid breathing dust/fume/gas/mist/vapors/spray	
P280	Wear protective gloves/protective clothing/eye protection/fac	e protection.
P363	Wash contaminated clothing before reuse.	
	235 Store in a well-ventilated place. Keep cool.	
P501	Dispose of contents/container in accordance with local/r	regional/national/international
01	regulations.	
	cation system:	
	atings (scale 0 - 4)	
	Health = 1	
2	Fire = 2	
	0 Reactivity = 0	
HMIS-ra	atings (scale 0 - 4)	
HEALTH	1 Health = 1	
FIRE	2 Fire = 2	
REACTIVI		
Other ha		
Results	of PBT and vPvB assessment	
toounto	ot applicable.	
PBT: No	lot applicable.	
PBT: No		
PBT: No		
PBT: No vPvB: N		
PBT: No vPvB: N	osition/information on ingredients	
PBT: No vPvB: N Compo		
PBT: No vPvB: N Compo Chemic	al characterization: Substances	
PBT: No vPvB: N Compo Chemic CAS No		

· Index number: 606-148-00-8

4 First-aid measures

- · Description of first aid measures
- · After inhalation: Supply fresh air; consult doctor in case of complaints.
- After skin contact: Immediately rinse with water.
- 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.

(Continued on page 3)

US



Printing date 01/16/2024

(Continuation of page 2)

Trade name: I-Carvone Natural

• **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.

- 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:** Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Dispose contaminated material as waste according to section 13. 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

Ensure good ventilation/exhaustion at the workplace. Prevent formation of aerosols.

· Information about protection against explosions and fires:

Keep ignition sources away - Do not smoke.

• Conditions for safe storage, including any incompatibilities • Storage:

• Requirements to be met by storerooms and receptacles: No special requirements.

(Continued on page 4)

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Printing date 01/16/2024

Reviewed on 01/10/2023

Trade name: I-Carvone Natural

- (Continuation of page 3)
- 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.
- Exposure controls
- · Personal protective equipment:
- · General protective and hygienic measures: Wash hands before breaks and at the end of work.
- · Breathing equipment:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

• 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: Goggles recommended during refilling.

· Information on basic physical		
General Information	Molecular Weight: 150.22 g/mol	
· Appearance:		
Form:	Liquid	
Color:	According to product specification	
· Odor:	According to product specification	
· Odor threshold:	Not determined.	
· pH-value:	Not determined.	
· Change in condition		
Melting point/Melting range:	Undetermined.	



Printing date 01/16/2024

Reviewed on 01/10/2023

Trade name: I-Carvone Natural

	(Continuation of page 4	
Boiling point/Boiling range:	227-230 °C (440.6-446 °F)	
Flash point:	92 °C (197.6 °F)	
Flammability (solid, gaseous):	Not applicable.	
Decomposition temperature:	Not determined.	
Ignition temperature:	Not determined.	
Danger of explosion:	Not determined.	
Explosion limits:		
Lower:	Not determined.	
Upper:	Not determined.	
Vapor pressure:	Not determined.	
· Density at 20 °C (68 °F): 0.962 g/cm³ (8.02789 lbs/gal)		
Relative density Not determined.		
Vapor density Not determined.		
Evaporation rate	Not determined.	
Solubility in / Miscibility with		
Water:	Not miscible or difficult to mix.	
Partition coefficient (n-octanol/wa	iter): Not determined.	
Viscosity:		
Dynamic:	Not determined.	
Kinematic:	Not determined.	
VOC content:	0.00 %	
	0.0 g/l / 0.00 lb/gal	
Other information	No further relevant information available.	

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: 6485-40-1 Carvone

Oral LD50 2,500 mg/kg (ATE)

(Continued on page 6)



Printing date 01/16/2024

Trade name: I-Carvone Natural

			(Continuation	of page §
	1,640 mg/kg (rat)			
Derma	LD50 3,800 mg/kg (ATE	Ξ)		
Prima	y irritant effect:			
on the	skin: No irritant effect.			
on the	eye: No irritating effect.			
Sensit	zation: No sensitizing effe	ects known.		
Additi	onal toxicological inform	nation:		
	ogenic categories			
IARC	International Agency for	Research on Cancer)		
Substa	nce is not listed.			
NTP (I	lational Toxicology Prog	jram)		
Substa	nce is not listed.			
OSHA	Ca (Occupational Safety	/ & Health Administration	on)	
	nce 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.

(Continued on page 7)



Printing date 01/16/2024

Reviewed on 01/10/2023

Trade name: I-Carvone Natural

(Continuation of page 6)

UN-Number DOT, ADN, IMDG, IATA	Not Regulated
UN proper shipping name DOT, ADN, IMDG, IATA	Not Regulated
Transport hazard class(es)	
DOT, ADN, IMDG, IATA Class	Not Regulated
Packing group DOT, IMDG, IATA	Not Regulated
Environmental hazards:	Not applicable.
Special precautions for user	Not applicable.
Transport in bulk according to Annex MARPOL73/78 and the IBC Code	II of Not applicable.
Transport/Additional information:	Not dangerous according to the above specifications.
UN "Model Regulation":	Not Regulated

15 Regulatory information

 $^{\cdot}$ Safety, health and environmental regulations/legislation specific for the substance or mixture $^{\cdot}$ 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.

(Continued on page 8)

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Printing date 01/16/2024

Trade name: I-Carvone Natural

(Continuation of p	age 7)
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· 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**
- GHS07

Check

- · Signal word Warning
- Hazard-determining components of labeling: Carvone
- · Hazard statements

H227 Combustible liquid.

H317 May cause an allergic skin reaction.

Precautionary statements

- P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.
- P261 Avoid breathing dust/fume/gas/mist/vapors/spray
- P280 Wear protective gloves/protective clothing/eye protection/face protection.
- P363 Wash contaminated clothing before reuse.
- P403+P235 Store in a well-ventilated place. Keep cool.
- P501 Dispose of contents/container in accordance with local/regional/national/international regulations.
- · 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

(Continued on page 9)



Printing date 01/16/2024

Reviewed on 01/10/2023

(Continuation of page 8)

Trade name: I-Carvone Natural

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 D50: 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 Liquids 4: Flammable liquids – Category 4 Sensitization - Skin 1B: Skin sensitisation – Category 1B