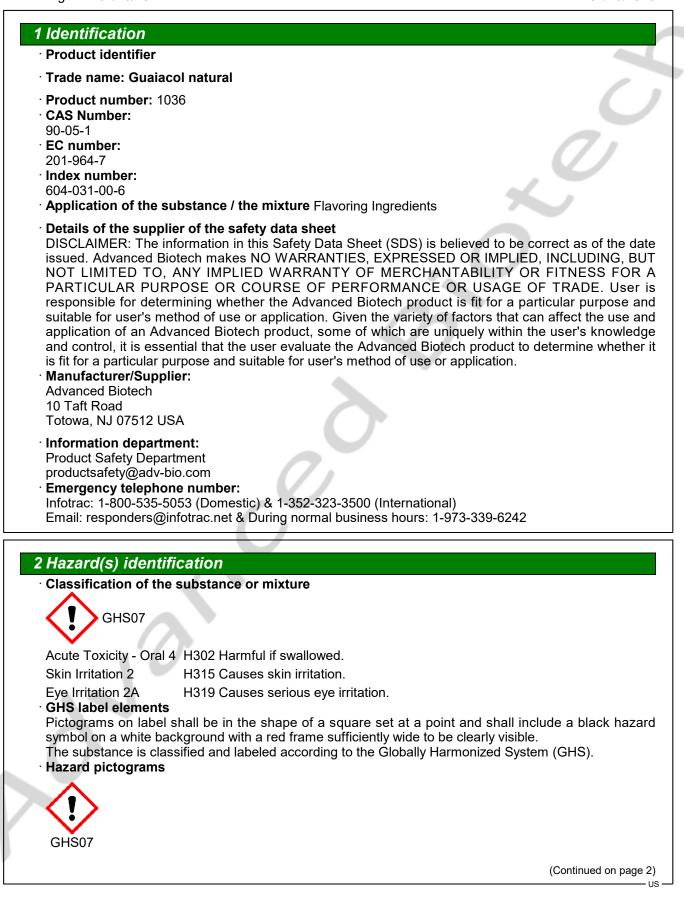


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Trade name: Guaiacol natural (Continuation of page 1) Signal word Warning · Hazard-determining components of labeling: Guaiacol · Hazard statements H302 Harmful if swallowed. H315 Causes skin irritation. H319 Causes serious eye irritation. Precautionary statements P280 Wear eye protection / face protection. P301+P312 If swallowed: Call a poison center/doctor if you feel unwell. Rinse mouth. P330 P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P332+P313 If skin irritation occurs: Get medical advice/attention. P501 Dispose of contents/container in accordance with local/regional/national/international regulations. · Classification system: · NFPA ratings (scale 0 - 4) Health = 2Fire = 2Reactivity = 0 · HMIS-ratings (scale 0 - 4) HEALTH Health = 2 2 Fire = 2FIRE 2 Reactivity = 0 REACTIVITY 0 · Other hazards Results of PBT and vPvB assessment · **PBT:** Not applicable. · vPvB: Not applicable. 3 Composition/information on ingredients

- · Chemical characterization: Substances
- CAS No. Description CAS: 90-05-1 Guaiacol
- · Identification number(s)
- EC number: 201-964-7
- · Index number: 604-031-00-6

4 First-aid measures

- · Description of first aid measures
- General information:
- Immediately remove any clothing soiled by the product.
- Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.
- · After inhalation: Supply fresh air; consult doctor in case of complaints.
- After skin contact: Immediately rinse with water.

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- After eye contact:
- Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- · After swallowing: Immediately call a 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.
- 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 Not required.

- Environmental precautions: Do not allow to enter sewers/ surface or ground water.
- Methods and material for containment and cleaning up: Dispose contaminated material as waste according to section 13.
- 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: No special measures required.
- Conditions for safe storage, including any incompatibilities • Storage:
- **Requirements to be met by storerooms and receptacles:** No special requirements.

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- (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:
- Keep away from foodstuffs, beverages and feed.
- Immediately remove all soiled and contaminated clothing.
- Wash hands before breaks and at the end of work.
- Avoid contact with the eyes.
- Avoid contact with the eyes and skin.
- 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
- The exact break through time has to be determined by the manufacturer of the protective gloves and has to be observed.
- Eye protection:



Tightly sealed goggles

9 Physical and chemical properties

- Information on basic physical and chemical properties
- General Information
- Molecular Weight: 124.14 g/mol
- Appearance: Form:

Solid or liquid

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Trade name: Guaiacol natural

	(Continuation of page 4)
Color: · Odor: · Odor threshold:	According to product specification According to product specification Not determined.
· pH-value:	Not applicable.
 Change in condition Melting point/Melting range: Boiling point/Boiling range: 	27-29 °C (80.6-84.2 °F) 205 °C (401 °F)
· Flash point:	Not applicable.
· Flammability (solid, gaseous):	Product is not flammable.
· Decomposition temperature:	Not determined.
· Ignition temperature:	Not determined.
· Danger of explosion:	Product does not present an explosion hazard.
 Explosion limits: Lower: Upper: 	Not determined. Not determined.
· Vapor pressure at 20 °C (68 °F):	0.1 hPa
 Density at 20 °C (68 °F): Relative density Vapor density Evaporation rate 	1.13 g/cm³ (9.42985 lbs/gal) Not determined. Not applicable. Not applicable.
 Solubility in / Miscibility with Water: 	Insoluble.
· Partition coefficient (n-octanol/water):	Not determined.
 Viscosity: Dynamic: Kinematic: VOC content: 	Not applicable. Not applicable. 0.00 %
Solids content:	100.0 %
· 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.

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	ation on toxicological effects toxicity:
	50 values that are relevant for classification:
-	cute Toxicity Estimate)
Oral	LD50 500 mg/kg (ATE)
CAS: 9	0-05-1 Guaiacol
Oral	LD50 500 mg/kg (ATE) 725 mg/kg (rat)
	LD50 4,600 mg/kg (ATE) 4,600 mg/kg (rabbit)
on the on the Sensiti	y irritant effect: skin: No irritant effect. eye: Irritating effect. zation: No sensitizing effects known. onal toxicological information:
Carcino	ogenic categories
	nternational Agency for Research on Cancer)
IARC (I	
•	nce is not listed.
Substar	nce is not listed. ational Toxicology Program)

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.

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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, 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: Marine pollutant:	No
Special precautions for user	Not applicable.
Transport in bulk according to Annex I MARPOL73/78 and the IBC Code	l 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.

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	(Continuation of page 7)
Proposition 6	
	own to cause cancer:
Substance is r	ot listed.
	own to cause reproductive toxicity for females:
Substance is r	ot listed.
Chemicals kn	own to cause reproductive toxicity for males:
Substance is r	ot listed.
Chemicals kn	own to cause developmental toxicity:
Substance is r	
Carcinogenic	categories
-	mental Protection Agency)
Substance is r	
	Id Limit Value)
Substance is r	
	ational Institute for Occupational Safety and Health)
NIUSH-Ca (Na	ational institute for Occupational Safety and Realth)
GHS label ele Pictograms or symbol on a w The substance	not listed. ments habel shall be in the shape of a square set at a point and shall include a black hazard hite background with a red frame sufficiently wide to be clearly visible. the is classified and labeled according to the Globally Harmonized System (GHS).
symbol on a w The substance Hazard pictog GHS07	not listed. ments a label shall be in the shape of a square set at a point and shall include a black hazard hite background with a red frame sufficiently wide to be clearly visible. e is classified and labeled according to the Globally Harmonized System (GHS). grams
GHS label ele Pictograms or symbol on a w The substance Hazard pictog GHS07 Signal word V	Not listed. ments a label shall be in the shape of a square set at a point and shall include a black hazard hite background with a red frame sufficiently wide to be clearly visible. a is classified and labeled according to the Globally Harmonized System (GHS). grams Varning
GHS label ele Pictograms or symbol on a w The substance Hazard pictog GHS07 Signal word W Hazard-detern Guaiacol Hazard stater H302 Harmful H315 Causes H319 Causes Precautionary P280 P301+P312 P330	Varning nining components of labeling: nining components of labeling: nents if swallowed. skin irritation. serious eye irritation.

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Trade name: Guaiacol natural

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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** Acute Toxicity - Oral 4: Acute toxicity - Category 4 Skin Irritation 2: Skin corrosion/irritation - Category 2 Eye Irritation 2A: Serious eye damage/eye irritation - Category 2A