1 Identification

· Product identifier

· Trade name: Carvacrol natural

· Product number: 1554

· CAS Number: 499-75-2

· EC number: 207-889-6

· Application of the substance / the mixture Food flavorings

2 Hazard(s) identification

· Classification of the substance or mixture

  ![GHS07](GHS07.png)

  Acute Tox. 4 H302 Harmful if swallowed.

· Label elements

  · 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**

#### Signal word
- **Warning**

#### Hazard-determining components of labeling:
- **carvacrol**

#### Hazard statements
- **H302** Harmful if swallowed.

#### Precautionary statements
- **P264** Wash thoroughly after handling.
- **P270** Do not eat, drink or smoke when using this product.
- **P301+P312** If swallowed: Call a poison center/doctor if you feel unwell.
- **P330** Rinse mouth.
- **P501** Dispose of contents/container in accordance with local/regional/national/international regulations.

#### Classification system:

- **NFPA ratings (scale 0 - 4)**
  - Health = 1
  - Fire = 1
  - Reactivity = 0

- **HMIS-ratings (scale 0 - 4)**
  - Health = 1
  - Fire = 1
  - 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**
  - 499-75-2 carvacrol
- **Identification number(s)**
- **EC number**: 207-889-6
### 4 First-aid measures

- **Description of first aid measures**
- **General information:**
  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:** Generally the product does not irritate the skin.
- **After eye contact:** Rinse opened eye for several minutes under running water.
- **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, powder or alcoholresistant foam.
  - CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
  - Use fire fighting measures that suit the environment.
- **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:**
  - Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
  - Dispose contaminated material as waste according to item 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.
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.
    - Information about storage in one common storage facility: Not required.
    - Further information about storage conditions: None.
    - 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 item 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.
      - Wash hands before breaks and at the end of work.
    - Breathing equipment: Not required.
    - Protection of hands:
      - 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.
### 9 Physical and chemical properties

- **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:** 3 °C (37.4 °F)
  - **Boiling point/Boiling range:** 237 °C (458.6 °F)

- **Flash point:** 106 °C (222.8 °F)

- **Flammability (solid, gaseous):** Not applicable.

- **Decomposition temperature:** Not determined.

- **Auto igniting:** Not determined.

- **Danger of explosion:** Product does not present an explosion hazard.

- **Explosion limits:**
  - **Lower:** Not determined.
  - **Upper:** Not determined.

- **Vapor pressure:** Not determined.

- **Density at 20 °C (68 °F):** 0.978 g/cm³ (8.16141 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/water):** Not determined.

- **Viscosity:**
  - **Dynamic:** Not determined.
  - **Kinematic:** Not determined.
  - **VOC content:** 0.00 %
    - 0.0 g/l / 0.00 lb/gl

- **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:
      ATE (Acute Toxicity Estimate)
      Oral LD50 810 mg/kg (rat)
      CAS: 499-75-2 carvacrol
      Oral LD50 810 mg/kg (rat)
    - 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.
      - 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 (Self-assessment): 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.

14 Transport information
- UN-Number
- DOT, ADR, IMDG, IATA UN3265
- UN proper shipping name
  - DOT Corrosive liquid, acidic, organic, n.o.s. (carvacrol)
  - ADR 3265 Corrosive liquid, acidic, organic, n.o.s. (carvacrol)
  - IMDG, IATA CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (carvacrol)
- Transport hazard class(es)
  - DOT
    - Class 8 Corrosive substances
    - Label 8
  - ADR, IMDG, IATA
    - Class 8 Corrosive substances
    - Label 8
- Packing group
  - DOT, ADR, IMDG, IATA III
Trade name: Carvacrol natural

- Environmental hazards:
  - Marine pollutant: No

- Special precautions for user
  - Warning: Corrosive substances

- Danger code (Kemler):
  - 60

- EMS Number:
  - F-A,S-A

- Stowage Category
  - A

- Stowage Code
  - SW2 Clear of living quarters.

- Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code
  - Not applicable.

- Transport/Additional information:
  - DOT
    - Quantity limitations
      - On passenger aircraft/rail: 60 L
      - On cargo aircraft only: 220 L

  - ADR
    - Excepted quantities (EQ)
      - Code: E1
      - Maximum net quantity per inner packaging: 30 ml
      - Maximum net quantity per outer packaging: 1000 ml

  - IMDG
    - Limited quantities (LQ): 5L
    - Excepted quantities (EQ)
      - Code: E1
      - Maximum net quantity per inner packaging: 30 ml
      - Maximum net quantity per outer packaging: 1000 ml

- UN "Model Regulation":
  - UN 3265 CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (CARVACROL), 8, III

## 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):
    - Substance is listed.
  - TSCA new (21st Century Act) (Substances not listed)
  - Proposition 65
  - Chemicals known to cause cancer:
    - Substance is not listed.
Trade name: Carvacrol natural

- 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 established by ACGIH)
    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

- Signal word Warning

- Hazard-determining components of labeling:
  carvacrol

- Hazard statements
  H302 Harmful if swallowed.

- Precautionary statements
  P264 Wash thoroughly after handling.
  P270 Do not eat, drink or smoke when using this product.
  P301+P312 If swallowed: Call a poison center/doctor if you feel unwell.
  P330 Rinse mouth.
  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
Trade name: Carvacrol natural

- **Contact:** Sidney Arfa
- **Date of preparation / last revision** 04/03/2018 / -
- **Abbreviations and acronyms:**
  - **ADR:** Accord européen sur le transport 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
  - **ACGIH:** American Conference of Governmental Industrial Hygienists
  - **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 Tox. 4:** Acute toxicity – Category 4