

Safety Data Sheet

In accordance with REACH Regulation EC No.1907/2006

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

1.1. Product identifier

Product name:	Carrot Seed Essential Oil
CAS number:	8015-88-1/84929-61-3
EINECS number:	616-965-1/284-545-1
Other names:	Daucus Carota Seed Extract, Carrot Seed Essential Oil
INCI name:	Daucus Carota Seed Oil

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

Industrial use:	Washing and cleaning products.
Professional use:	Washing and cleaning products; polishes and wax blends.
Consumer use:	Washing and cleaning products; polishes and wax blends; air care products; biocides; tobacco products; cosmetics.

1.3. Details of the supplier of the safety data sheet

Company name:	Bath and Body Base Ltd 2A Laurel Way Bishop Auckland Co. Durham DL14 7NF
Tel:	07493 064263
Email:	technical@bathandbodybase.com

1.4. Emergency telephone number

Emergency tel:	07493 064263
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Section 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 [CLP]:	Skin Irrit. 3 – H316 Skin Sens. 1B – H317 Aquatic Chronic 2 – H411
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2.2. Label elements

Label elements labelling according to Regulation (EC) No 1272/2008 [CLP]

Hazard statements:	H316: Causes mild skin irritation. H317: May cause an allergic skin reaction. H411: Harmful to aquatic life with long lasting effects.
Signal words:	DANGER

Hazard pictograms:



GHS07

GHS09

Precautionary statements (prevention):

P261: Avoid breathing dust/fume/gas/mist/vapours/spray.
P264: Wash hands thoroughly after handling.
P272: Contaminated work clothing should not be allowed out of the workplace.
P273: Avoid release to the environment.
P280: Wear protective gloves/clothing/eye-protection/face protection.

Precautionary statements (response):

P302+P352: IF ON SKIN: wash with plenty of water.
P333+P317: IF SKIN irritation or rash occurs: Get medical help.
P362+P364: Take off contaminated clothing and wash it before reuse.
P391: Collect spillage.

Precautionary statements (storage):

P405: Store locked up.

Precautionary statements (disposal):

P501: Dispose of contents/container in accordance with local/regional/national/international regulations. Manufacturer/supplier or the competent authority to specify whether disposal requirements apply to contents, container or both.

2.3. Other hazards

Other hazards:

All essential oils are highly concentrated so have strong aromas and colour that can stain.

Carrot Seed oil contains over 11% Hydrocarbons. Emergency treatment for those who accidentally swallow oils in this category is to seek medical attention immediately and transport sitting in a half-upright position.

Substance is/is not identified as having endocrine disrupting properties according to Regulation (EU) 2017/2100.

Substance meets/does not meet the criteria for vPvB and PBT according to Regulation (EC) No 1907/2006, Annex XIII.

Section 3: Composition/information on ingredients

3.1. Chemical identity of the substance

Chemical identity:

Carrot Seed Ext.

Common name(s), synonym(s):

Daucus Carota I. Fruit Oil, Daucus Carota Fruit Oil, Daucus Carota Seed Extract, Carrot Seed Essential Oil.

3.2. Substances

Mixture/Natural Complex Substance (NCS):

This is a Natural Complex Substance (NCS). The substance has a natural variability in its composition. It is obtained by steam distillation of the seeds of Daucus Carota Sativa.

Chemical Identity of ingredients:

Classification according to COMMISSION REGULATION (EU) 2017/542 of 22 March 2017 amending Regulation (EC) No 1272/2008

Major components of this natural complex substance are:

60 to 78% **Carotol** – CAS 465-28-1, EC 866-557-4: Skin Sens. 1B, H317; Aquatic Chronic 2, H411

1 to 5% **Daucol** – CAS 887-08-1: Not registered

tr to 4% **β -Bisabolene** – CAS 495-61-4, EC 610-461-5: Asp. Tox. 1, H304; Skin Irrit. 2, H315; Skin Sens. 1, H317, Acute Tox. 4, H332; Aquatic Chronic 2, H411

tr to 4% **γ -Muurolene** – CAS 30021-74-0: not registered

tr to 3% **cis- β -Farnesene** – CAS 28973-97-9: not registered

tr to 3% **β -Oplophenone** – CAS 28305-60-4: not registered

tr to 1% **Methyl Eugenol** – CAS 93-15-2, EC 202-223-0: Acute Tox 4, H302; Mut. 2, H341; Carc. 2, H351; Aquatic Acute 2, H401

Section 4: First aid measures

4.1. Description of first aid measures

General advice:	If health disorder happens, call for medical help immediately. Immediately remove any soiled clothing.
Skin contact:	If skin irritation continues, consult a doctor.
Eye contact:	Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
Swallowed:	After swallowing: Seek immediate medical advice.
Inhalation:	Supply fresh air and to be sure call for a doctor.
Self-protection of First Aider:	Use personal protective equipment as described in Section 8 if substance is present.

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

Most important symptoms and effects:	None specified.
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4.3. Indication of any immediate medical attention and special treatment needed

Immediate/special treatment:	No specific first aid measures noted.
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Section 5: Fire-fighting measures

5.1. Extinguishing media

Suitable extinguishing media:	Carbon dioxide, sand, dry chemical powder or appropriate/alcohol-free foam.
Unsuitable extinguishing media:	Full water jet.

5.2. Special hazards arising from the substance or mixture

Hazardous combustion products:	May produce fumes of carbon monoxide and carbon dioxide, smoke and soot.
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5.3. Advice for fire-fighters

Advice for fire-fighters: Avoid inhalation of smoke and fumes. In case of insufficient ventilation, wear suitable respiratory equipment. Firefighters should wear appropriate protective equipment and self-contained breathing apparatus.

5.4. Emergency action code

Emergency action code: 3[Y] (Foam + BA & Fire Kit)

Section 6: Accidental release measures**6.1. Personal precautions, protective equipment and emergency procedures**

For non-emergency personnel: Use personal protective equipment. Avoid saturated vapour/aerosol/mist formation. Avoid breathing vapour/aerosol/mist. Ensure adequate ventilation and keep unprotected persons away. Keep away from ignition sources.

For emergency responders: As per non-emergency personnel. Wear an appropriate NIOSH/MSHA approved respirator if mist, vapour or aerosol is generated.

6.2. Environmental precautions

Environmental precautions: Do not allow material to be released to the environment (soil/surface or ground water/drains/sewers). Inform respective authorities in case of seepage into water course or sewage system.

6.3. Methods and material for containment and cleaning up

Clean-up procedures: Clean up spillage promptly. Remove ignition sources. Provide adequate ventilation. Avoid excessive inhalation of vapours. Gross spillages should be contained by use of sand or inert powder and disposed of according to the local regulations. Pick up and arrange disposal without creating mist/aerosol/excessive vapours. Keep in upright, suitable, closed containers for disposal.

6.4. Reference to other sections

Reference to other sections: Take hazard and precautionary phrases (Section 2) and Sections 7, 8 and 13 into account.

Section 7: Handling and storage**7.1. Precautions for safe handling**

Protective measures: Avoid formation of mist and aerosols. Provide appropriate exhaust ventilation at places where mist/aerosols/excessive vapours are formed. Measures for preventive fire protection: keep away from ignition sources; take precautionary measures against static discharges; do not smoke.

Advice on general occupational hygiene: Wear appropriate protective clothing. Do not eat, drink or smoke in work areas. Wash hands after use. Remove contaminated clothing and protective equipment before entering eating areas.

7.2. Conditions for safe storage, including any incompatibilities

Storage:	Keep container tightly closed in a cool, dry and well-ventilated place.
Packaging:	Refer to Section 16 for safe packaging information.
Incompatibilities:	Refer to Section 10.

7.3. Specific end use(s)

Recommendations:	None specified (as per REACH dossier).
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Section 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits:	Not available.
Additional exposure limits under the conditions of use:	Not available.
DNEL/DMEL and PNEC-Values:	Not available.

8.2. Exposure controls



Engineering controls:	Provide adequate ventilation according to the conditions of use to keep airborne concentrations low.
PPE – General:	It is recommended that facilities storing or utilising this material should be equipped with an eyewash facility and a safety shower. Wear appropriate PPE according to Directive 89/686/EEC. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, using the bathroom and/or smoking. When using, do not eat, drink or smoke. Routinely wash work clothing and protective equipment to remove contaminants.
PPE – Eye/face:	Use protection goggles according to EN166.
PPE – Skin:	<p>Hand: Chemical-resistant, impervious gloves complying with an approved standard (EN374) should be worn if handling substance. The quality of the protective gloves resistant to chemicals and the breakthrough time must be chosen as a function of the specific working place concentration and quantity of hazardous substances and length of time of exposure.</p> <p>Other: Wear protective clothing according to that recommended by the risk assessment for the product's use.</p>
PPE – Respiratory:	Respiratory protection may be required if excessive airborne contamination occurs.
Environmental exposure control:	Avoid discharge into the environment. Refer to additional information provided in Sections 6 and 7 regarding safe handling and storage to prevent exposure to individuals and/or to the environment. Refer to official regulations (local/government).

Section 9: Physical and chemical properties**9.1. Information on basic physical and chemical properties**

Physical state:	Clear mobile liquid
Colour:	Light yellow to yellow
Odour:	Characteristic
Relative density (specific gravity):	@ 20°C: 0.920 to 0.960
Refractive index:	@ 20°C: 1.490 to 1.510
Optical rotation:	@ 20°C: +10° to +30°
Solubility:	@ 25°C: UVCB - Solubilities of components from 0.0004 to 41.3mg/L
Boiling point:	@ 101 325 Pa: 223.7°C
Vapour pressure:	@ 25°C: 724 Pa
Freezing point:	@ 101 325 Pa: < -20°C
Flash point:	>110°C - supplier value for this very high (60 - 78%) carotol oil (Pensky Martens Closed Cup method) FP for Carotol = 126.1±16.5°C; REACH dossier value = 72°C (assumed to be for 'standard' Carrot Seed Oil).
Flammability:	The study does not need to be conducted because the substance is a liquid that is known to be stable in contact with air and water at room temperature for prolonged periods of time (days) and it does not contain metals or metalloids; the classification procedure does not need to be applied.
Explosiveness:	The study does not need to be conducted because there are no chemical groups present in the molecule which are associated with explosive properties.
Auto-ignition temperature:	@ 101 325 Pa: 250°C (REACH dossier FOR standard carrot seed oil).
Kinematic viscosity:	No data available (REACH dossier).
Partition coefficient n-octanol/water (log value):	@ 25°C: log Kow = between 2.8 - 7.12 for Carrot seeds oil rich in carotol. Value for carotol = 4.81.
Relative vapour density:	No data available (REACH dossier).

9.2. Other information

Information with regard to physical hazard classes:	Categories not relevant for the safe use of this substance.
Other safety characteristics:	Categories not relevant for the safe use of this substance.

Section 10: Stability and reactivity**10.1. Reactivity**

Reactivity:	No information available.
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10.2. Chemical stability

Chemical stability:	No information available.
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10.3. Possibility of hazardous reactions

Hazardous reactions: No dangerous reactions known.

10.4. Conditions to avoid

Conditions to avoid: Keep away from heat and flame.

10.5. Incompatible materials

Materials to avoid: Oxidising agents, strong acids, strong alkalis.

10.6. Hazardous decomposition product

Haz. decomp. products: No dangerous decomposition products expected by intended use.

Section 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity, oral: GHS criteria not met. LD50 (mice) > 5000mg/kg bw

Acute toxicity, inhalation: No studies available (REACH dossier)

Acute toxicity, dermal: No studies available (REACH dossier)

Eye irritation: GHS criteria not met for components of this very high carotol oil - geraniol not present above 1% (H319 based on GHS criteria as geraniol < 3% for standard carotol-type carrot seed oil).

Skin irritation: GHS criteria not met for components of this very high carotol oil - Category 3 (irritant) (where >1 but ≤10% constituents are classed as H315).

Skin sensitivity: Category 1B (skin sensitising) based on GHS criteria for main component – Carotol (classified H317).

Mutagenicity/carcinogenicity: GHS criteria not met.

Fertility/reproduction: No studies available (REACH dossier).

STOT-single exposure: Conclusive but not sufficient for classification, data lacking (ECHA C&L).

STOT-repeated exposure: Data lacking (ECHA C&L).

Aspiration hazard: GHS criteria not met for components of this very high carotol oil.

11.2. Information on other hazard classes which relates to endocrine disrupting properties

Other hazards: No information on other hazard classes specified.

Section 12: Ecological information**12.1. Toxicity**

Fish:	No studies available (REACH dossier).
Algae:	72-h ErL50 = 13mg test material (for standard carrot seed oil rich in carotol - REACH dossier) – OECD Guideline 201.
Aquatic invertebrates:	Daphnia sp. 48-h EL50 = 11mg test material/L (for standard carrot seed oil rich in carotol - REACH dossier) – OECD Guideline 202.
Microorganisms:	No studies available (REACH dossier).
Terrestrial arthropods:	No studies available (REACH dossier).

12.2. Persistence and degradability

Persistence and degradability:	Not readily biodegradable. Under test conditions with activated sludge only 47.76% biodegradation observed (ThODNH ₄ , after 28 days of incubation – REACH dossier for standard carotol/geraniol carrot seed oils).
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12.3. Bioaccumulative potential

Bioaccumulative potential:	Value for LogKow ranges between 2.8 -7.12 for Carrot seed oil rich in carotol, the majority of components having LogKow >4.5 which indicates potential for bioaccumulation. LogKow for: Carotol = 4.81, Daucol = 3.13; β -Bisabolene = 7.12; γ -Muurolene = 6.27; cis- β -Farnesene = 6.14; β -Oplopenone = 4.30.
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12.4. Mobility in soil

Mobility:	No studies available (REACH dossier).
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12.5. Results of PBT and vPvB assessment

PBT identification:	No studies available (REACH dossier).
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12.6. Endocrine disrupting properties

Endocrine disrupting properties:	Carrot Seed Oil is not on the ED-list (https://edlists.org/the-ed-lists) of endocrine disruptors meaning that it is not a substance identified as an endocrine disruptor at EU level (List I), a substance under evaluation for endocrine disruption under an EU legislation (List II) nor a substance considered, by the evaluating National Authority, to have endocrine disrupting properties (List III).
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12.7. Other adverse effects

Other adverse effects:	No further information available (REACH dossier).
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Section 13: Disposal considerations**13.1. Waste treatment methods**

Product/package disposal:	If empty container retains product residues, all label precautions must be observed. Return for reuse or dispose according to national or local regulations.
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Waste treatment – relevant information:

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

Sewage disposal – relevant information:

Waste should not be disposed of by release to sewers.

13.2. Special precautions for landfill and incineration
Special precautions for landfill and incineration:

Waste is suitable for incineration.

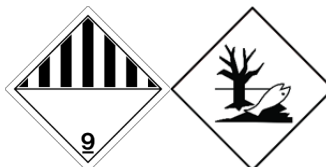
Section 14: Transport information

UN number: 3082

UN proper shipping name: Environmentally hazardous substance, liquid, N.O.S

Transport hazard class(es): 9

Packaging group: III

Transport labels:


Environmental hazards: See Section 2 - IMDG - Marine pollutant

Special precautions for user: Dangerous Goods Note
Tunnel Restriction code: 3 (E)

Maritime transport in bulk according to IMO instruments: UN3082 - Environmentally hazardous substance, liquid, N.O.S.
Class 9, Packing Group III
Marine Pollutant

Section 15: Regulatory information
15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Specific regulations: The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (SI 2009 No 716)

15.2. Chemical Safety Assessment

Chemical safety assessment: No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

Section 16: Other information
16.1. Other information
Packaging:

Type	Suitability
Glass	Yes
Steel	Yes
Aluminium	Yes
F/HDPE	Yes
Stainless steel drum	Yes

Shelf life: 36 months when stored within advised conditions, re-test every 12 months thereafter for a possible further 24 months.

Other information: * Indicates text in the SDS which has changed since the last revision.

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