



# SAFETY DATA SHEET

## 500646 CAMPHOR POWDER

Revision Date: 07-28-2022

Page 1 of 11

Version # 04

Print Date: 07-28-2022

### 1. IDENTIFICATION

<b>Product Description:</b>	<b>CAMPHOR POWDER</b>
<b>CAS #</b>	464-49-3
<b>FEMA Number</b>	2230
<b>Other means of identification</b>	
Vigon Item #	500646
<b>Recommended use</b>	Concentrated aromatic and flavor ingredient which may be used in flavor and fragrance compounds according to legal and IFRA or FEMA GRAS/FDA guidelines.
<b>Recommended restrictions</b>	For Manufacturing Use Only

#### Company

Vigon International, LLC  
127 Airport Road  
E. Stroudsburg, PA 18301  
For information call: 570-476-6300  
Web Site: www.vigon.com

#### 24 Hour Emergency Response Information

INFOTRAC (ACCT# 78928);  
1-800-535-5053 WITHIN THE U.S.A.  
1-352-323-3500 OUTSIDE THE U.S.A.

#### **Manufacturer/Importer/Supplier/Distributor information**

##### **Manufacturer**

<b>Company name</b>	Vigon International, LLC	
<b>Address</b>	127 Airport Road E. Stroudsburg, PA 18301 United States	
<b>Telephone</b>	For information call:	570-476-6300
<b>Website</b>	www.vigon.com	
<b>E-mail</b>	regulatory@vigon.com	
<b>Emergency phone number</b>	INFOTRAC	(ACCT# 78928);
	1-800-535-5053	WITHIN THE U.S.A.
	1-352-323-3500	OUTSIDE THE U.S.A.

### 2. HAZARD(S) IDENTIFICATION

<b>Physical hazards</b>	Flammable solids	Category 2
<b>Health hazards</b>	Acute toxicity, oral	Category 4
	Acute toxicity, inhalation	Category 4
	Specific target organ toxicity, single exposure	Category 2
<b>Environmental hazards</b>	Hazardous to the aquatic environment, acute hazard	Category 3
	Hazardous to the aquatic environment, long-term hazard	Category 3

# SAFETY DATA SHEET

## 500646 CAMPHOR POWDER

Revision Date: 07-28-2022

Page 2 of 11

Version # 04

Print Date: 07-28-2022

### Label elements



**Signal word**

Warning

**Hazard statement**

Flammable solid. Harmful if swallowed or if inhaled. May cause damage to organs. Harmful to aquatic life. Harmful to aquatic life with long lasting effects.

**Precautionary statement**

**Prevention**

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ground and bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting equipment. Do not breathe dust. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Avoid release to the environment. Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.

**Response**

IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell. Rinse mouth. IF INHALED: Remove person to fresh air and keep comfortable for breathing. IF exposed or concerned: Call a POISON CENTER/doctor. In case of fire: Use appropriate media to extinguish.

**Storage**

Store locked up.

**Disposal**

Dispose of contents/container in accordance with local/regional/national/international regulations.

**Hazard(s) not otherwise classified (HNOC)**

WARNING! May form combustible dust concentrations in air. Avoid breathing dust.

**Supplemental information**

100% of the substance consists of component(s) of unknown acute dermal toxicity.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

**Substances**

Chemical name	Common name and synonyms	CAS number	%
CAMPHOR	(+)-CAMPHOR (1R)-Bornan-2-one	464-49-3	100

### 4. FIRST-AID MEASURES

**Inhalation**

If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing. For breathing difficulties, oxygen may be necessary. Call a physician if symptoms develop or persist.

**Skin contact**

Take off immediately all contaminated clothing. Get medical attention if irritation develops and persists. Wash skin thoroughly with soap and water for several minutes.

**Eye contact**

Remove contact lenses, if present and easy to do. Get medical attention if irritation develops and persists. Promptly wash eyes with plenty of water while lifting the eye lids.

**Ingestion**

Call a physician or poison control center immediately. If swallowed, rinse mouth with water (only if the person is conscious). Do not induce vomiting. If vomiting occurs, the head should be kept low so that stomach vomit doesn't enter the lungs.

**Most important symptoms/effects, acute and delayed**

Dusts may irritate the respiratory tract, skin and eyes.



## SAFETY DATA SHEET

### 500646 CAMPHOR POWDER

Revision Date: 07-28-2022

Page 3 of 11

Version # 04

Print Date: 07-28-2022

**Indication of immediate medical attention and special treatment needed**

Not available.

**General information**

Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance.

### 5. FIRE-FIGHTING MEASURES

**Suitable extinguishing media**

Water spray, fog, CO2, dry chemical, or alcohol resistant foam.

**Unsuitable extinguishing media**

Do not use a solid water stream as it may scatter and spread fire.

**Specific hazards arising from the chemical**

Explosion hazard: Avoid generating dust; fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard. Fire may produce irritating, corrosive and/or toxic gases.

**Special protective equipment and precautions for firefighters**

Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA. Structural firefighters protective clothing will only provide limited protection. Wear self-contained breathing apparatus with a full facepiece operated in the positive pressure demand mode when fighting fires.

**Fire fighting equipment/instructions**

In case of fire and/or explosion do not breathe fumes. Use standard firefighting procedures and consider the hazards of other involved materials. Move containers from fire area if you can do so without risk. Water runoff can cause environmental damage. Ventilate closed spaces before entering them. Keep run-off water out of sewers and water sources. Dike for water control.

**Specific methods**

Use standard firefighting procedures and consider the hazards of other involved materials.

**General fire hazards**

Static charges generated by emptying package in or near flammable vapor may cause flash fire.

### 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions, protective equipment and emergency procedures**

Eliminate all sources of ignition. Avoid contact with skin or inhalation of spillage, dust or vapor. Keep unnecessary personnel away. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them.

**Methods and materials for containment and cleaning up**

Sweep up and place in a clearly labeled container for chemical waste. Wash contaminated area with water. Collect and dispose of spillage as indicated in section 13 of the SDS. Eliminate all ignition sources (no smoking, flares, sparks or flames in immediate area). Use only non-sparking tools. Avoid the generation of dusts during clean-up. This material and its container must be disposed of as hazardous waste.

Never return spills in original containers for re-use.

**Environmental precautions**

Retain and dispose of contaminated wash water. Avoid release to the environment. Contact local authorities in case of spillage to drain/aquatic environment. Prevent further leakage or spillage if safe to do so. Do not contaminate water.



## SAFETY DATA SHEET

### 500646 CAMPHOR POWDER

Revision Date: 07-28-2022

Page 4 of 11

Version # 04

Print Date: 07-28-2022

#### 7. HANDLING AND STORAGE

**Precautions for safe handling** Take precautionary measures against static discharges when there is a risk of dust explosion. Minimize dust generation and accumulation. Routine housekeeping should be instituted to ensure that dusts do not accumulate on surfaces. Dry powders can build static electricity charges when subjected to the friction of transfer and mixing operations. Provide adequate precautions, such as electrical grounding and bonding, or inert atmospheres. Do not handle or store near an open flame, heat or other sources of ignition. Assume that this material is capable of producing a dust explosion if ignited as a dust cloud.

Take precautionary measures against static discharges. Avoid breathing vapor. Avoid breathing dust. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. Wash thoroughly after handling.

**Conditions for safe storage, including any incompatibilities** Keep container closed. Handle containers with care. Open slowly in order to control possible pressure release. Store in a cool, well-ventilated area.

#### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Occupational exposure limits** This substance has no PEL, TLV, or other recommended exposure limit.

**Biological limit values** No biological exposure limits noted for the ingredient(s).

**Appropriate engineering controls** Use explosion-proof ventilation equipment to stay below exposure limits. It is recommended that all dust control equipment such as local exhaust ventilation and material transport systems involved in handling of this product contain explosion relief vents or an explosion suppression system or an oxygen-deficient environment. Ensure that dust-handling systems (such as exhaust ducts, dust collectors, vessels, and processing equipment) are designed in a manner to prevent the escape of dust into the work area (i.e., there is no leakage from the equipment). Use only appropriately classified electrical equipment and powered industrial trucks.

#### Individual protection measures, such as personal protective equipment

**Eye/face protection** Avoid contact with eyes.

#### Skin protection

**Hand protection** Chemical resistant gloves.

**Other** Use of an impervious apron is recommended.

**Respiratory protection** Chemical respirator with organic dust cartridge.

**Thermal hazards** Wear appropriate thermal protective clothing, when necessary.

**General hygiene considerations** When using, do not eat, drink or smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

#### 9. PHYSICAL AND CHEMICAL PROPERTIES

**Appearance** Refer to Spec Sheet

**Physical state** Powder\Crystal.

**Form** Powder. Crystalline powder.

**Color** Refer to Spec Sheet

**Odor** Characteristic.

**Odor threshold** Not available.

## SAFETY DATA SHEET

### 500646 CAMPHOR POWDER

Revision Date: 07-28-2022

Page 5 of 11

Version # 04

Print Date: 07-28-2022

<b>pH</b>	Not available.
<b>Melting point/freezing point</b>	354.2 °F (179 °C)
<b>Initial boiling point and boiling range</b>	404.6 °F (207 °C)
<b>Flash point</b>	149.0 °F (65.0 °C) Closed Cup
<b>Evaporation rate</b>	Not available.
<b>Flammability (solid, gas)</b>	Flammable solid.
<b>Upper/lower flammability or explosive limits</b>	
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
<b>Vapor pressure</b>	0.18 mm Hg at 20 °C
<b>Vapor density</b>	5.3
<b>Relative density</b>	Not available.
<b>Solubility(ies)</b>	
Solubility (water)	Insoluble
<b>Partition coefficient (n-octanol/water)</b>	Not available.
<b>Auto-ignition temperature</b>	Not available.
<b>Decomposition temperature</b>	Not available.
<b>Viscosity</b>	Not available.
<b>Other information</b>	
Density	0.99 g/cm <sup>3</sup> at 20 °C
Explosive properties	Not explosive.
Flammability class	Combustible IIIA estimated
Molecular weight	152.24 g/mol
Oxidizing properties	Not oxidizing.
Specific gravity	0.99 estimated

#### 10. STABILITY AND REACTIVITY

<b>Reactivity</b>	The product is stable and non-reactive under normal conditions of use, storage and transport.
<b>Chemical stability</b>	Material is stable under normal conditions.
<b>Possibility of hazardous reactions</b>	No dangerous reaction known under conditions of normal use.
<b>Conditions to avoid</b>	Keep away from heat, sparks and open flame. Avoid temperatures exceeding the flash point. Contact with incompatible materials. Minimize dust generation and accumulation.
<b>Incompatible materials</b>	Strong oxidizing agents. Alkaline metals. Peroxides.
<b>Hazardous decomposition products</b>	No hazardous decomposition products if stored and handled as indicated.

## SAFETY DATA SHEET

### 500646 CAMPHOR POWDER

Revision Date: 07-28-2022

Page 6 of 11

Version # 04

Print Date: 07-28-2022

#### 11. TOXICOLOGICAL INFORMATION

##### Information on likely routes of exposure

<b>Inhalation</b>	Harmful if inhaled. May cause damage to organs by inhalation.
<b>Skin contact</b>	Dust or powder may irritate the skin.
<b>Eye contact</b>	Dust may irritate the eyes.
<b>Ingestion</b>	Harmful if swallowed.

**Symptoms related to the physical, chemical and toxicological characteristics**      Dusts may irritate the respiratory tract, skin and eyes.

##### Information on toxicological effects

**Acute toxicity**      Harmful if inhaled. Harmful if swallowed.

Product	Species	Test Results
CAMPHOR (CAS 464-49-3)		
<b>Acute</b>		
<i>Inhalation</i>		
LD50	Rat	1.5 mg/l, 4 hours
<i>Oral</i>		
LD50	Rat	1500 mg/kg

**Skin corrosion/irritation**      Prolonged skin contact may cause temporary irritation.

**Serious eye damage/eye irritation**      Direct contact with eyes may cause temporary irritation.

##### Respiratory or skin sensitization

<b>Respiratory sensitization</b>	Not a respiratory sensitizer.
<b>Skin sensitization</b>	This product is not expected to cause skin sensitization.

**Germ cell mutagenicity**      No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

##### Carcinogenicity

###### IARC Monographs. Overall Evaluation of Carcinogenicity

Not listed.

###### OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not listed.

###### US. National Toxicology Program (NTP) Report on Carcinogens

Not listed.

**Reproductive toxicity**      This product is not expected to cause reproductive or developmental effects.

**Specific target organ toxicity - single exposure**      May cause damage to organs.

**Specific target organ toxicity - repeated exposure**      Not classified.

**Aspiration hazard**      Not an aspiration hazard.

# SAFETY DATA SHEET

## 500646 CAMPHOR POWDER

Revision Date: 07-28-2022

Page 7 of 11

Version # 04

Print Date: 07-28-2022

### 12. ECOLOGICAL INFORMATION

**Ecotoxicity** Harmful to aquatic life with long lasting effects.

Product	Species	Test Results
CAMPHOR (CAS 464-49-3)		
<b>Aquatic</b>		
Fish	LC50 Zebra danio (Danio rerio)	36 mg/l, 96 hours
<i>Acute</i>		
Fish	LC50 Fathead minnow (Pimephales promelas)	110 mg/l, 96 hours

**Persistence and degradability** No data is available on the degradability of this substance.

**Bioaccumulative potential** No data available.

**Mobility in soil** No data available.

**Other adverse effects** No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

### 13. DISPOSAL CONSIDERATIONS

**Disposal instructions** Do not discharge into drains, water courses or onto the ground. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.

**Local disposal regulations** Dispose in accordance with all applicable regulations.

**Hazardous waste code** Not established.

**Waste from residues / unused products** Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

**Contaminated packaging** Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

### 14. TRANSPORT INFORMATION

#### ADN

UN number	2717
UN proper shipping name	CAMPHOR
Transport hazard class(es)	4.1
Subsidiary class(es)	-
Packing group	III
Environmental hazards	No
Labels required	4.1

#### ADR

UN number	2717
UN proper shipping name	CAMPHOR
Transport hazard class(es)	4.1
Subsidiary class(es)	-
Packing group	III
Environmental hazards	No

## SAFETY DATA SHEET

### 500646 CAMPHOR POWDER

Revision Date: 07-28-2022

Page 8 of 11

Version # 04

Print Date: 07-28-2022

<b>Labels required</b>	4.1
<b>RID</b>	
<b>UN number</b>	2717
<b>UN proper shipping name</b>	CAMPHOR
<b>Transport hazard class(es)</b>	4.1
<b>Subsidiary class(es)</b>	-
<b>Packing Group</b>	III
<b>Environmental Hazards</b>	No
<b>Labels required</b>	4.1
<b>Special precautions for user</b>	Read safety instructions, SDS and emergency procedures before handling.
<b>DOT</b>	
<b>BULK</b>	
<b>UN number</b>	2717
<b>Proper shipping name</b>	CAMPHOR
<b>Hazard class</b>	4.1
<b>Packing group</b>	III
<b>Environmental hazards</b>	
<b>Marine pollutant</b>	No
<b>Packaging exceptions</b>	None
<b>Packaging bulk</b>	240
<b>Labels required</b>	4.1
<b>DOT</b>	
<b>NON-BULK</b>	
<b>UN number</b>	2717
<b>Proper shipping name</b>	CAMPHOR
<b>Hazard class</b>	4.1
<b>Packing group</b>	III
<b>Environmental hazards</b>	
<b>Marine pollutant</b>	No
<b>Packaging exceptions</b>	None
<b>Packaging non bulk</b>	213
<b>Labels required</b>	4.1
<b>IATA</b>	
<b>UN number</b>	2717
<b>UN proper shipping name</b>	CAMPHOR
<b>Transport hazard class(es)</b>	4.1
<b>Subsidiary class(es)</b>	-
<b>Packing group</b>	III
<b>Environmental hazards</b>	No
<b>Labels required</b>	4.1
<b>IMDG</b>	
<b>UN number</b>	2717
<b>UN proper shipping name</b>	CAMPHOR
<b>Transport hazard class(es)</b>	4.1



## SAFETY DATA SHEET

## 500646 CAMPHOR POWDER

Revision Date: 07-28-2022

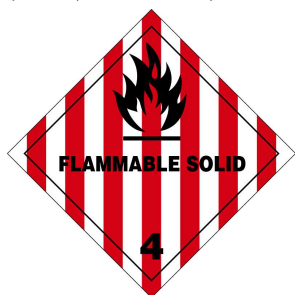
Page 9 of 11

Version # 04

Print Date: 07-28-2022

**Subsidiary class(es)** -  
**Packing group** III  
**Environmental hazards**  
**Marine pollutant** No  
**Labels required** 4.1  
**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** Not applicable.

ADN; ADR; DOT BULK; DOT NON-BULK; IATA; IMDG; RID

**15. REGULATORY INFORMATION**

**US federal regulations** This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

**Toxic Substances Control Act (TSCA)****TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)**

Not regulated.

**CERCLA Hazardous Substance List (40 CFR 302.4)**

Not listed.

**SARA 304 Emergency release notification**

Not regulated.

**OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)**

Not listed.

**Superfund Amendments and Reauthorization Act of 1986 (SARA)****SARA 302 Extremely hazardous substance**

Not listed.

**SARA 311/312 Hazardous chemical** Yes

**Classified hazard categories**

Flammable (gases, aerosols, liquids, or solids)  
Combustible dust  
Acute toxicity (any route of exposure)  
Specific target organ toxicity (single or repeated exposure)

**SARA 313 (TRI reporting)**

Not regulated.



# SAFETY DATA SHEET

## 500646 CAMPHOR POWDER

Revision Date: 07-28-2022

Page 10 of 11

Version # 04

Print Date: 07-28-2022

### Other federal regulations

#### Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

#### Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

**Safe Drinking Water Act (SDWA)** Not regulated.

#### FEMA Priority Substances Respiratory Health and Safety in the Flavor Manufacturing Workplace

CAMPHOR (CAS 464-49-3)

Other Flavoring Substances with OSHA PEL's

## 16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

**Issue date** 11-01-2018

**Revision date** 07-28-2022

**Version #** 04

**Further information** Refer to NFPA 654, Standard for the Prevention of Fire and Dust Explosions from the Manufacturing, Processing, and Handling of Combustible Particulate Solids, for safe handling.

**HMIS® ratings**  
Health: 1\*  
Flammability: 3  
Physical hazard: 0

**List of abbreviations**  
ACGIH: American Conference of Governmental Industrial Hygienists.  
ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.  
CAS: Chemical Abstract Service.  
IARC: International Agency for Research on Cancer.  
IATA: International Air Transport Association.  
IBC Code: International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk.  
IMDG: International Maritime Dangerous Goods.  
MARPOL: International Convention for the Prevention of Pollution from Ships.  
RID: Regulations concerning the International Carriage of Dangerous Goods by Rail.  
STEL: Short term exposure limit.  
TWA: Time Weighted Average.



## SAFETY DATA SHEET

### 500646 CAMPHOR POWDER

Revision Date: 07-28-2022

Page 11 of 11

Version # 04

Print Date: 07-28-2022

#### Disclaimer

Vigon International, LLC cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information in the sheet was written based on the best knowledge and experience currently available. The above information relates only to this product and not to its use in combination with any other material or any particular process and is designed only as guidance for the safe handling, use, processing, storage, transportation, and disposal and should not be considered as a guarantee or quality specification. This product has not been evaluated for safe use in e-cigarettes or any vaping application where the product(s) is/are intentionally vaporized and inhaled. Vigon International, Inc. has performed no testing on these products in e-cig/vaping applications. It is the sole responsibility of the individual(s) purchasing this product to assess its' safety in the final application. The above information relates only to this product and not to its use in combination with any other material or any particular process and is designed only as guidance for the safe handling, use, processing, storage, transportation, disposal, and should not be considered as a guarantee or quality specification. The above information is based on data provided by and collected from recognized sources such as distributors, manufacturers, and technical groups and is considered to be accurate to the best of Vigon's knowledge as of the date of this document. It is the responsibility of the user to review all safety information about this product and determine its safety and suitability in their own processes and operations. Appropriate warnings and safe handling procedures should be provided to all handlers and users, taking into account the intended use and the specific conditions and factors relating to such use in accordance with all applicable laws and regulations.

#### Revision information

HAZARD(S) IDENTIFICATION: Disposal

HAZARD(S) IDENTIFICATION: Prevention

HAZARD(S) IDENTIFICATION: Response

FIRE-FIGHTING MEASURES: Specific methods

HANDLING AND STORAGE: Precautions for safe handling

EXPOSURE CONTROLS/PERSONAL PROTECTION: Eye/face protection

Physical & Chemical Properties: Multiple Properties

Toxicological Information: Toxicological Data

ECOLOGICAL INFORMATION: Ecotoxicity

Regulatory Information: United States

OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION: Reference  
s GHS: Classification