

# SAFETY DATA SHEET



Revision date: 23-Jun-2022

Revision Number 6

## 1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

### Product identifier

**Product Name** CAMPHOR  
**Product Code(s)** 00000030876

### Other means of identification

**UN number** 2717  
**CAS No.** 76-22-2  
**Synonyms** Natural Camphor Powder; Camphor Powder Synthetic; AACAM61610

### Recommended use of the chemical and restrictions on use

**Recommended use** Cosmetics applications.  
**Uses advised against** No information available.

### Supplier

Ixom Operations Pty Ltd (Bronson & Jacobs division) - incorporated in Australia  
ABN:51 600 546 512  
70 Marple Avenue  
Villawood NSW 2163  
Australia

Telephone Number: +61 2 8717 2929  
Facsimile: +61 2 9755 9611

### Emergency telephone number

Emergency telephone number **1 800 033 111 (ALL HOURS)**

Please ensure you refer to the limitations of this Safety Data Sheet as set out in the "Other Information" section at the end of this Data Sheet.

## 2. HAZARDS IDENTIFICATION

### GHS Classification

Classified as dangerous goods in accordance with the Australian Code for the Transport of Explosives by Road and Rail.

Classified as a hazardous chemical in accordance with the criteria of Safe Work Australia - Globally Harmonized System (GHS).

<b>Flammable solids</b>	Category 2
<b>Acute toxicity - Oral</b>	Category 4
<b>Acute toxicity - Inhalation (Dusts/Mists)</b>	Category 4

<b>Skin corrosion/irritation</b>	Category 2
<b>Serious eye damage/eye irritation</b>	Category 1
<b>Specific target organ toxicity (single exposure)</b>	Category 2
<b>Chronic aquatic toxicity</b>	Category 2

**SIGNAL WORD**

Danger

**Label elements**

Flame  
Corrosion  
Health hazard  
Exclamation mark  
Environment

**Hazard statements**

H228 - Flammable solid  
H302 - Harmful if swallowed  
H332 - Harmful if inhaled  
H315 - Causes skin irritation  
H318 - Causes serious eye damage  
H371 - May cause damage to organs

The following health/environmental hazard categories fall outside the scope of the Workplace Health and Safety Regulations:  
H411 - Toxic to aquatic life with long lasting effects

**Precautionary Statements - Prevention**

Do not breathe fume, gas, mist, vapours, spray  
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  
Wear protective gloves / protective clothing / eye protection / face protection  
Do not eat, drink or smoke when using this product  
Wash hands thoroughly after handling  
Use only outdoors or in a well-ventilated area  
Avoid release to the environment

**Precautionary Statements - Response**

Specific treatment (see First aid on this SDS)  
If exposed or concerned: Call a POISON CENTER or doctor  
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
Immediately call a POISON CENTER or doctor/physician  
IF ON SKIN: Wash with plenty of soap and water  
If skin irritation occurs: Get medical advice/attention  
Take off contaminated clothing and wash before reuse  
IF INHALED: Remove person to fresh air and keep comfortable for breathing  
Call a POISON CENTER or doctor/physician if you feel unwell  
IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell  
Rinse mouth  
In case of fire: Use extinguishing media as outlined in Section 5 of this Safety Data Sheet to extinguish.  
Collect spillage

**Precautionary Statements - Storage**

Store locked up

**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

**Other hazards which do not result in classification**

**General Hazards** Dust can form an explosive mixture with air

**Poisons Schedule (SUSMP)** 6

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

**Substance**

Chemical name	CAS No.	Weight-%
Camphor	76-22-2	95-100

### 4. FIRST AID MEASURES

**Description of first aid measures**

**General advice** For advice, contact a Poisons Information Centre (e.g. phone Australia 13 11 26; New Zealand 0800 764 766) or a doctor.

**Inhalation** Remove to fresh air and keep at rest in a position comfortable for breathing. If breathing is irregular or stopped, administer artificial respiration. Call a physician immediately.

**Eye contact** Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Do not rub affected area. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention immediately if symptoms occur.

**Skin contact** Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Get medical attention if irritation develops and persists.

**Ingestion** Rinse mouth immediately and drink plenty of water. Do NOT induce vomiting. Get immediate medical advice/attention.

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

**Symptoms** Irritation/Corrosion. May cause redness and tearing of the eyes.

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

**Note to physicians** Can cause corneal burns. Treat symptomatically.

### 5. FIRE FIGHTING MEASURES

**Suitable Extinguishing Media**

**Suitable Extinguishing Media** Coarse water spray. Foam. Dry chemical. Carbon dioxide (CO<sub>2</sub>).

**Unsuitable extinguishing media** Solid water jet/stream may scatter and spread the fire.

**Specific hazards arising from the chemical**

**Specific hazards arising from the chemical** Flammable. On burning will emit toxic fumes, including those of oxides of carbon. May form flammable vapour mixtures with air. Avoid generation of dust.

**Hazardous combustion products** Oxides of carbon.

**Special protective actions for fire-fighters**

**Special protective equipment for fire-fighters** Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

**Hazchem code** 1Z

## **6. ACCIDENTAL RELEASE MEASURES**

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

**Personal precautions** Avoid contact with skin, eyes, and clothing. Do not breathe fume, gas, mist, vapours, spray. Ensure adequate ventilation. Use personal protective equipment as required. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). All equipment used when handling the product must be grounded. Take precautionary measures against static discharges. Evacuate personnel to safe areas. Do not touch or walk through spilled material. See section 8 for more information.

**Other information** Ventilate the area. Refer to protective measures listed in Sections 7 and 8.

**For emergency responders** Shut off ignition sources. Clear area of all unprotected personnel. Use personal protection recommended in Section 8.

**Environmental precautions**

**Environmental precautions** Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. See Section 12 for additional Ecological Information.

**Methods and material for containment and cleaning up**

**Methods for containment** Stop leak if you can do it without risk. Remove ignition sources. Provide adequate ventilation. Keep out of drains, sewers, ditches and waterways. Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers.

**Methods for cleaning up** Use personal protective equipment as required. Cover with damp absorbent (inert material, sand or soil). Vacuum or sweep material and place in a disposal container. Avoid generation of dust. Use non-sparking tools. Pick up and transfer to properly labelled containers.

## **7. HANDLING AND STORAGE**

**Precautions for safe handling**

**Advice on safe handling** Avoid contact with skin, eyes, and clothing. Do not breathe fume, gas, mist, vapours, spray. Avoid generation of dust. Use personal protection equipment. Keep away from open flames, hot surfaces and sources of ignition. Use grounding and bonding connection when transferring this material to prevent static discharge, fire or explosion. Fine dust dispersed in air, in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard. Take precautionary measures against static discharges. Use according to package label instructions. Handle in accordance with good industrial hygiene and safety practice. Keep out of reach of children.

**General hygiene considerations** Do not eat, drink or smoke when using this product. Regular cleaning of equipment, work area and clothing is recommended. Wash hands and face before breaks and immediately after handling the product. Avoid contact with skin, eyes, and clothing. Wear suitable gloves and eye/face protection.

**Conditions for safe storage, including any incompatibilities**

---

<b>Storage Conditions</b>	Store locked up. Keep containers tightly closed in a cool, well-ventilated place. Keep away from open flames, hot surfaces and sources of ignition. Protect from sunlight. Keep dry - reacts with water, may lead to drum rupture. Store away from incompatible materials described in Section 10. Keep container closed when not in use. Store away from foodstuffs.  This material is a Scheduled Poison and must be stored, maintained and used in accordance with the relevant regulations.
<b>Incompatible materials</b>	Oxidising agents, reducing agents, potassium permanganate, chlorates, naphthalene, dichlorobenzene, and organic solvents.
<b>Poisons Schedule (SUSMP)</b>	6

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control parameters

#### **Exposure Limits**

Camphor, synthetic: 8hr TWA = 12 mg/m<sup>3</sup> (2 ppm), 15 min STEL = 19 mg/m<sup>3</sup> (3 ppm)

As published by Safe Work Australia Workplace Exposure Standards for Airborne Contaminants.

TWA - The time-weighted average airborne concentration of a particular substance when calculated over an eight-hour working day, for a five-day working week.

STEL (Short Term Exposure Limit) - the airborne concentration of a particular substance calculated as a time-weighted average over 15 minutes, which should not be exceeded at any time during a normal eight hour work day. According to current knowledge this concentration should neither impair the health of, nor cause undue discomfort to, nearly all workers.

These Exposure Standards are guides to be used in the control of occupational health hazards. All atmospheric contamination should be kept to as low a level as is workable. The exposure standards should not be used as fine dividing lines between safe and dangerous concentrations of chemicals. They are not a measure of relative toxicity.

### Appropriate engineering controls

#### **Engineering controls**

Ensure adequate ventilation, especially in confined areas. Eyewash stations. Apply technical measures to comply with the occupational exposure limits.

If in the handling and application of this material, safe exposure levels could be exceeded, the use of engineering controls such as local exhaust ventilation must be considered and the results documented. If achieving safe exposure levels does not require engineering controls, then a detailed and documented risk assessment using the relevant Personal Protective Equipment (PPE) (refer to PPE section below) as a basis must be carried out to determine the minimum PPE requirements.

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

The selection of PPE is dependent on a detailed risk assessment. The risk assessment should consider the work situation, the physical form of the chemical, the handling methods, and environmental factors.

OVERALLS, SAFETY SHOES, CHEMICAL GOGGLES, GLOVES, DUST MASK.



<b>Eye/face protection</b>	Tight sealing safety goggles.
<b>Skin and body protection</b>	Wear suitable protective clothing. Boots. Overalls.
<b>Hand protection</b>	Impervious gloves.
<b>Respiratory protection</b>	If determined by a risk assessment an inhalation risk exists, wear a dust mask/respirator meeting the requirements of AS/NZS 1715 and AS/NZS 1716.
<b>Environmental exposure controls</b>	No information available.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Information on basic physical and chemical properties

<b>Physical state</b>	Powder
<b>Appearance</b>	Crystalline
<b>Color</b>	White / Off-white
<b>Odor</b>	Characteristic , Pungent , Aromatic
<b>Odor threshold</b>	No information available.

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
<b>pH</b>	No data available	None known
<b>pH (as aqueous solution)</b>	No data available	None known
<b>Melting point / freezing point</b>	174 - 179 °C	None known
<b>Boiling point / boiling range</b>	204°C	None known
<b>Flash point</b>	64 °C	None known
<b>Evaporation rate</b>	No data available	None known
<b>Flammability (solid, gas)</b>	No data available	None known
<b>Flammability Limit in Air</b>		None known
<b>Upper flammability or explosive limits</b>	3.5	
<b>Lower flammability or explosive limits</b>	0.6	
<b>Vapor pressure</b>	0.18 mmHg @20 °C	None known
<b>Vapor density</b>	5.24	None known
<b>Relative density</b>	0.992 @ 25°C	None known
<b>Water solubility</b>	No data available	
<b>Solubility(ies)</b>	Sparingly soluble in water.	None known
<b>Partition coefficient</b>	3.56 (n-octanol/water)	None known
<b>Autoignition temperature</b>	466 °C	None known
<b>Decomposition temperature</b>	No data available	None known
<b>Kinematic viscosity</b>	No data available	None known
<b>Dynamic viscosity</b>	No data available	None known

### Other information

## 10. STABILITY AND REACTIVITY

### Reactivity

**Reactivity** No information available.

**Chemical stability**

**Stability** Stable under normal conditions.

**Explosion data**

**Sensitivity to mechanical impact** None.

**Sensitivity to static discharge** Fine dust dispersed in air, in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard.

**Possibility of hazardous reactions**

**Possibility of hazardous reactions** Contact with chromic anhydride may form explosive mixtures. Heating can cause expansion or decomposition of the material, which can lead to the containers exploding.

**Conditions to avoid**

**Conditions to avoid** Avoid exposure to heat, sources of ignition, and open flame. Avoid contact with combustible substances. Dust formation. Static discharge (electrostatic discharge). Direct sunlight. Do not contaminate food or feed stuffs.

**Incompatible materials**

**Incompatible materials** Oxidising agents, reducing agents, potassium permanganate, chlorates, naphthalene, dichlorobenzene, and organic solvents.

**Hazardous decomposition products**

**Hazardous decomposition products** Oxides of carbon.

## 11. TOXICOLOGICAL INFORMATION

**Acute toxicity**

**Information on likely routes of exposure**

**Product Information** No adverse health effects expected if the chemical is handled in accordance with this Safety Data Sheet and the chemical label. Symptoms or effects that may arise if the chemical is mishandled and overexposure occurs are:

**Inhalation** Harmful if inhaled. Breathing in dust may result in respiratory irritation.

**Eye contact** Causes serious eye damage. Dust contact with the eyes can lead to mechanical irritation. Corrosive to the eyes and may cause severe damage including blindness.

**Skin contact** Causes skin irritation.

**Ingestion** Harmful if swallowed. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea.

**Symptoms** Irritation/Corrosion. May cause redness and tearing of the eyes.

**Numerical measures of toxicity - Product Information**

**Component Information**

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Camphor	LD50: 1310 mg/kg (mice)(1)	-	LC50: 500 mg/m <sup>3</sup> (rat) (1)

See section 16 for terms and abbreviations

#### **Delayed and immediate effects as well as chronic effects from short and long-term exposure**

<b>Skin corrosion/irritation</b>	Causes skin irritation.
<b>Serious eye damage/eye irritation</b>	Causes serious eye damage.
<b>Respiratory or skin sensitization</b>	No information available.
<b>Germ cell mutagenicity</b>	No information available.
<b>Carcinogenicity</b>	No information available.
<b>Reproductive toxicity</b>	No information available.
<b>STOT - single exposure</b>	May cause damage to organs.
<b>STOT - repeated exposure</b>	No information available.
<b>Aspiration hazard</b>	No information available.

## **12. ECOLOGICAL INFORMATION**

### **Ecotoxicity**

**Ecotoxicity** Avoid contaminating waterways. Toxic to aquatic life with long lasting effects.

### **Persistence and degradability**

**Persistence and degradability** No information available.

### **Bioaccumulative potential**

**Bioaccumulation** No information available.

### **Mobility**

**Mobility in soil** No information available.

### **Other adverse effects**

## **13. DISPOSAL CONSIDERATIONS**

### **Waste treatment methods**

**Waste from residues/unused products** Should not be released into the environment. Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

**Contaminated packaging** Empty containers pose a potential fire and explosion hazard. Do not cut, puncture or weld containers. Dispose of in accordance with federal, state and local regulations.



## 14. TRANSPORT INFORMATION

### ADG

Classified as Dangerous Goods by the criteria of the Australian Code for the Transport of Explosives by Road and Rail; DANGEROUS GOODS.

UN number	2717
Proper shipping name	CAMPHOR
Hazard class	4.1
Packing group	III
Hazchem code	1Z

### IATA

Classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air; DANGEROUS GOODS.

UN number	2717
UN proper shipping name	CAMPHOR
Transport hazard class(es)	4.1
Packing group	III

### IMDG

Classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea; DANGEROUS GOODS.

UN number	2717
UN proper shipping name	CAMPHOR
Transport hazard class(es)	4.1
Packing group	III
IMDG EMS Fire	F-A
IMDG EMS Spill	S-I
Marine pollutant	Yes

## 15. REGULATORY INFORMATION

### Safety, health and environmental regulations/legislation specific for the substance or mixture

#### National regulations

##### Australia

Classified as dangerous goods in accordance with the Australian Code for the Transport of Explosives by Road and Rail.

Classified as a hazardous chemical in accordance with the criteria of Safe Work Australia - Globally Harmonized System (GHS).

See section 8 for national exposure control parameters

Poisons Schedule (SUSMP) 6

#### International Inventories

**AIIC** This material is listed on the Australian Inventory of Industrial Chemicals.  
**NZIoC** This material is listed on the New Zealand Inventory of Chemicals.

#### Legend:

**AIIC** - Australian Inventory of Industrial Chemicals

**International Regulations****The Montreal Protocol on Substances that Deplete the Ozone Layer** Not applicable**The Stockholm Convention on Persistent Organic Pollutants** Not applicable**The Rotterdam Convention** Not applicable**16. OTHER INFORMATION**

(1) 'Registry of Toxic Effects of Chemical Substances'. Ed. D. Sweet, US Dept. of Health &amp; Human Services: Cincinnati, 2018

**Reason(s) For Issue:** Change in Hazardous Chemical Classification  
Change in Engineering Control Measures**Issuing Date:** 23-Jun-2022

This Safety Data Sheet has been prepared by Ixom Operations Pty Ltd (Toxicology and SDS Services).

**Revision Note:**

The symbol (\*) in the margin of this SDS indicates that this line has been revised.

**Key or legend to abbreviations and acronyms used in the safety data sheet****Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
Ceiling	Maximum limit value	*	Skin designation
C	Carcinogen		

**Key literature references and sources for data used to compile the SDS**

EPA (Environmental Protection Agency)  
 Acute Exposure Guideline Level(s) (AEGL(s))  
 U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act  
 U.S. Environmental Protection Agency High Production Volume Chemicals  
 Food Research Journal  
 Hazardous Substance Database  
 International Uniform Chemical Information Database (IUCLID)  
 Japan GHS Classification  
 Australian Industrial Chemicals Introduction Scheme (AICIS)  
 NIOSH (National Institute for Occupational Safety and Health)  
 National Library of Medicine's ChemID Plus (NLM CIP)  
 National Library of Medicine's PubMed database (NLM PUBMED)  
 National Toxicology Program (NTP)  
 New Zealand's Chemical Classification and Information Database (CCID)  
 Organization for Economic Co-operation and Development Environment, Health, and Safety Publications  
 Organization for Economic Co-operation and Development High Production Volume Chemicals Program  
 Organization for Economic Co-operation and Development Screening Information Data Set  
 RTECS (Registry of Toxic Effects of Chemical Substances)  
 World Health Organization

**Disclaimer**

**This SDS summarises to our best knowledge at the date of issue, the chemical health and safety hazards of the material and general guidance on how to safely handle the material in the workplace. Since Ixom Operations Pty Ltd cannot anticipate or control the conditions under which the product may be used, each user must, prior to usage, assess and control the risks arising from its use of the material.**

**If clarification or further information is needed, the user should contact their Bronson & Jacobs representative or Ixom Operations Pty Ltd at the contact details on page 1.**

Ixom Operations Pty Ltd's responsibility for the material as sold is subject to the terms and conditions of sale, a copy of which is available upon request.

Bronson and Jacobs incorporating the businesses of Woods and Woods and Keith Harris and Australian Botanical Products.

**End of Safety Data Sheet**