Safety Data Sheet

1. Identification of the substance

1.1. Product identifiers: Product Name: Norcamphor

Synonyms: Bicyclo[2.2.1]heptan-2-one

Catalog number: QE-0074 CAS Number: 497-38-1

1.2. Identified use: Laboratory chemicals, for scientific research and development only.

1.3. Supplier: Combi-Blocks, Inc., 7949 Silverton Ave # 915, San Diego, CA 92126, USA. Tel: 858-

635-8950. Email: sales@combi-blocks.com.

1.4. Emergency Contact: During normal business hours (Monday-Friday 8am-5pm PST), call 1-858-635-8950. Af-

ter business hours, call Infotrac at 1-800-535-5053 (USA) or 1-352-323-3500 (interna-

tional).

2. Hazards identification

2.1. Classification of the substance or mixture:

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Flammable solids (Category 1, 2), H228

2.2. GHS Label elements, including precautionary statements:

Pictograms

Signal word Danger

Hazard statement(s).

H228 Flammable solid

Precautionary statement(s).

P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.

P240 Ground/bond container and receiving equipment.

P241 Use explosion-proof electrical/ventilating/light equipment.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P370+P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.

3. Composition/information on ingredients.

3.1. Substances

COMPONENT	CLASSIFICATION	CONCENTRATION
Norcamphor	H228	≤ 100

See Section 2 for full text of hazard statements.

4. First aid measures

4.1. Description of first aid measures.

General advice: Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of

dangerous area.

If inhaled: Remove victim to fresh air. In severe cases or if symptoms persist, seek medical attention.

In case of skin contact: Immediately wash skin with copious amounts of water for at least 15 minutes while re-

moving contaminated clothing and shoes. If irritation persists, seek medical attention.

In case of eye contact: Immediately flush with plenty of water. After initial flushing, remove any contact lenses

and continue flushing for at least 15 minutes. Keep eye wide open while rinsing. Get

medical attention.

If swallowed: Wash out mouth with copious amounts of water for at least 15 minutes. Seek medical

attention.

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

See Section 2.2 and/or in Section 11.

4.3. Indication of any immediate medical attention and special treatment needed: No data.

5. Fire fighting measures

- 5.1. Extinguishing media: Use dry sand, dry chemical or alcohol-resistant foam for extinction.
- 5.2. Special hazards arising from the substance or mixture: Carbon monoxide.
- 5.3. Advice for firefighters: Wear self-contained breathing apparatus for firefighting if necessary.
- 5.4. Further information: No data available.

6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures: Ensure adequate ventilation. Use personal protective equipment.

6.2. Environmental precautions:

Should not be released into the environment. See Section 12 for additional ecological information.

6.3. Methods and materials for containment and cleaning up: Sweep up or vacuum up spillage and collect in suitable container for disposal.

6.4. Reference to other sections:

Refer to protective measures listed in Sections 8 and 13.

7. Handling and storage

7.1. Precautions for safe handling: Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Keep away

from sources of ignition - No smoking. Take measures to prevent the build up of electro-

static charge. For precautions see section 2.2.

7.2. Conditions for safe storage, including any incompatibilities: Keep container tightly closed in a dry and well-ventilated

place. Containers which are opened must be carefully resealed and kept upright to prevent

leakage.

7.3. Specific end use(s): Laboratory chemicals, for scientific research and development only.

8. Exposure Controls / Personal protection

8.1. Control parameters:

Components with workplace control parameters: Contains no substances with occupational exposure limit values.

8.2. Exposure controls:

Appropriate engineering controls: Ensure that eyewash stations and safety showers are close to the workstation lo-

cation. Ensure adequate ventilation, especially in confined areas. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/light equipment.

Personal protective equipment:

Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's Eye/face protection:

eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin protection: Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal

technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good

laboratory practices. Wash and dry hands

Complete suit protecting against chemicals, Flame retardant antistatic protective clothing., **Body Protection:**

The type of protective equipment must be selected according to the concentration and

amount of the dangerous substance at the specific workplace.

Respiratory protection: No protective equipment is needed under normal use conditions.

Control of environmental exposure: Prevent further leakage or spillage if safe to do so. Do not let product enter

drains.

9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Solid (a) Appearance: Odour: No data (b) (c) Odour Threshold: No data (d) pH: No data (e) Melting point/freezing point: 90 - 100°C Initial boiling point and boiling range: (f) No data Flash point: No data (g) (h) Evaporatoin rate: No data No data (i) Flammability (solid, gas): Upper/lower flammability or explosive limits: (i) No data (k) Vapour pressure: No data Vapour density: No data (1) (m) Relative density: No data No data (n) Water solubility: No data (o) Partition coefficient: n-octanol/water: (p) Auto-ignition: No data No data Decomposition temperature: (q) No data (r) Viscosity: Explosive properties: No data (s) (t) Oxidizing properties: No data

9.2. Other safety information:

Formula $C_7H_{10}O$ Molecular weight 110.2 CAS Number 497-38-1

10. Stability and reactivity

10.1. Reactivity No data

10.2. Chemical stability Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions No data10.4. Conditions to avoid Flame, heat, spark

10.5. Incompatible material Explosives, flammable/toxic gases, flammable liquid, flammable solid, spontaneously com-

bustible substances, substances which are dangerous when wet, oxidizing substances, or-

ganic peroxides, poisons, infectious substances, radioactive materials.

10.6. Hazardous decomposition products:

Hazardous decomposition products formed under fire conditions: Carbon monoxide.

Other decomposition products: No data
In the event of fire: See Section 5.

11. Toxicological information

11.1 Information on toxicological effects

Acute toxicity:

Skin irritation/corrosion:

Eye damage/irritation:

Respiratory or skin sensitization:

Germ cell mutagenicity:

Carcinogenicity:

No data available.

Specific target organ system toxicity - single exposure: No data available. Specific target organ system toxicity - repeated exposure: No data available.

Aspiration hazard: No data available.

Additional information: To the best of our knowledge, the chemical, physical and toxicological proper-

ties of this substance have not been thoroughly investigated.

12. Ecological information

12.1. Toxicity
No data available.
12.2. Persistence and degradability
No data available.
12.3. Bioaccumulative potential
No data available
12.4. Mobility in soil
No data available
12.5. Results of PBT and vPvB assessment
No data available.
12.6. Other adverse effects
No data available.

13. Disposal Considerations

13.1. Waste treatment methods

Product Arrange disposal as special waste, by licensed disposal company, in consultation with

local waste disposal authority, in accordance with national and regional regulations.

Contaminated packaging Dispose of as unused product.

14. Transportation information

DOT (US), IMDG and IATA:

UN Number: UN1325 Class: 4.1 Packing group: II

Proper shipping name: FLAMMABLE SOLIDS, ORGANIC, N.O.S. (Norcamphor)

15. Regulatory information

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302, or have known CAS numbers that exceed the threshold reporting levels established by SARA Title III, Section 313.

16. Other information

This MSDS is correct to the best of our knowledge at the date of publication but does not purport to be all inclusive and shall be used only as a guide. Combi-Blocks shall not be held liable for any injury or damage resulting from handling or from contact with the above product.