

## **1. Identification of the substance/preparation and of the company/undertaking**

### ***Identification of the product***

Product name: **Mandarin (*Citrus reticulata*)**

### ***Manufacturer/supplier identification***

Company: Calmer Solutions Limited®  
Hadresham  
Woolborough Lane  
Outwood  
Surrey  
RH1 5QR.  
Telephone: +44 (0)1342 844658  
Telefax: +44 (0)1737 306065

Emergency Telephone No: Please contact your local NHS 111

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## **2. Composition/information on main ingredients**

Main ingredients: Essential oil of Mandarin

CAS No USA: 8008-31-9

EINECS No: 284-521-0

FEMA No: 2622

Concentration: 100%

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### 3. Hazards identification



<i>Main hazards:</i>	Flammable
<i>Health effect - eyes:</i>	May be irritating to eyes
<i>Health effect - skin:</i>	May be irritating to skin
<i>Health effect - ingestion:</i>	May cause lung damage if swallowed
<i>Health effect – inhalation:</i>	May cause irritation to the lungs

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### 4. First aid measures

<i>First aid - eyes:</i>	Remove any contact lenses. Flush immediately with clean water for at least 15 minutes. OBTAIN MEDICAL ATTENTION.
<i>First aid - skin:</i>	Remove any contaminated clothing or shoes. Wash affected areas thoroughly with soap and water for at least 15 minutes. OBTAIN MEDICAL ATTENTION.
<i>First aid - ingestion:</i>	Wash out mouth with water and give water to dilute provided person is conscious. OBTAIN MEDICAL ATTENTION.
<i>First aid - inhalation:</i>	Remove from exposure. Provide fresh air. If breathing has stopped administer artificial respiration and oxygen if available. OBTAIN MEDICAL ATTENTION.

**Advice to physicians** - Treat symptomatically

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## **5. Fire fighting measures**

*Suitable extinguishing media:* Use carbon dioxide, foam or dry powder.

*Unsuitable extinguishing media:* Do not use water jet.

*Special hazards of product:* Carbon monoxide and unidentified organic compounds may be formed during combustion.

*Protective equipment for fire fighting:* If fire severe wear self contained breathing apparatus.

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## **6. Accidental release measures**

*Personal protection:* Wear appropriate protective clothing.

*Environmental precautions:* Remove all sources of ignition. Ensure proper ventilation. Contain spill and recover free product. Report spills to appropriate authorities if required.

*Spillage:* Soak up spillage with sand or other proprietary material. Transfer used material to a suitable waste container and dispose in accordance with local and national regulations.

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## **7. Handling and storage**

*Handling:* Maintain good occupational and personal hygiene. Avoid inhalation and contact with skin and eyes.

*Storage:* Store in full, sealed containers protected from heat and sources of ignition.

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## **8. Exposure controls/personal protection**

Maintain adequate ventilation

*Respirator:* Not normally required

*Hand protection:* PVC or rubber gloves

*Body protection:* If danger of splashing wear PVC or rubber apron

*Eye Protection:* Use goggles or face shield

**Engineering control measures:** Engineering methods to prevent or control exposure are preferred. Methods include personnel segregation, mechanical ventilators and control of process conditions.

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## 9. **Physical and chemical properties**

**Form:** Liquid  
**Colour:** Pale amber/Red  
**Odour:** Characteristic

**Boiling temperature:** No data

**Density (kg/m<sup>3</sup>):**

**Optical Rotation:**

**Vapour pressure:** Not applicable

**- Density:** Not applicable

**Solubility in water:** Insoluble

**Flash point:** 51°C

**Explosion limits:** lower: Unknown

upper: Unknown

**Ignition temperature:** Unknown

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## 10. **Stability and reactivity**

**Stability:** Stable

**Incompatibility:** Avoid contact or contamination with strong acids, alkalis or oxidising agents.

**Hazardous Combustion & Decomposition:** Carbon monoxide and unidentified organic compounds may be formed during combustion. This product presents no significant reactivity hazard. It is stable and will not react violently with water. Hazardous polymerisation will not occur.

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## 11. **Toxicological information**

**Acute toxicity:** No data

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## 12. Ecological information

**Mobility:** No data

**Bioaccumulation:** No data

**Exoticity:** No data

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## 13. Disposal considerations

**Product disposal:** Dispose of in accordance with all applicable local and national regulations.

**Container disposal:** Labels should not be removed from containers until they have been cleaned. Contaminated containers should not be treated as household waste. Containers should be cleaned using appropriate methods and then re-used (re-cycled) or disposed of by landfill or incineration as appropriate.

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## 14. Transport information

**Description:** Flammable liquids n.o.s.

**UN-No.:** 1193

**RID:**

**Class:** 3.3

**Packing Group:** III

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## 15. Regulatory information

**Labelling according to EC directives**



<b>R-phrases:</b>	R10	Flammable
<b>(Risk)</b>	R38	Irritating to skin
	R43	May cause sensitisation by skin contact
	R50/53	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment

<b>S-phrases:</b>	S24	Avoid contact with skin
<b>(Safety)</b>	S37	Wear suitable gloves
	S61	Avoid release to the environment. Refer to special instructions/safety data sheet
	S62	If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label

**Einecs Listing:** All components are either Einecs listed or classified as polymers

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## **16. Other information**

The information and recommendations contained in this data sheet are believed to be accurate and represent the best information currently available to us. No warranty, guarantee or representation is made by Calmer Solutions Limited<sup>®</sup> as to the correctness or sufficiency of the information and recommendations in this data sheet, nor can it be assumed that all possible safety measures are contained in this data sheet or that additional measures may not be required under varying conditions and circumstances.

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**Please ensure that this Safety Data Sheet is passed to the appropriate person(s) in your company, who is (are) capable of acting on the information.**