

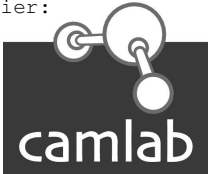
# Camlab Limited – Material Safety Data Sheet

## 1. Identification

Product Code CC/3086-CA

Product Name **DECANEDIOYL DICHLORIDE SOLUTION 5% w/w  
(in cyclohexane)**

CAS Number **Mixture**

Supplier: **CAMLAB LIMITED**  
**Norman Way Industrial Estate  
Over  
Cambridge  
England  
CB4 5WE**

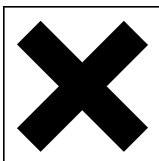
Phone **01954 233110**  
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**24hr 112**  
**(Have this document to hand)**

## 2. Composition

Component	CAS No	EEC No	Conc w/w	Classification & Risk Phrases	Exp (See 8.1)
Cyclohexane	110-82-7	203-806-2	95.0%	F Xi : R11,R38,R50/53,R65,R67	WEL
Sebacoyl chloride	111-19-3	203-843-4	5.0%	F Xi : R22,R24,R34	WEL

## 3. Hazards Identification



Highly flammable. Irritating to eyes, respiratory system and skin.

## 4. First Aid Measures

**Eyes** Irrigate thoroughly with plenty of water for at least 10 minutes, holding the eye open. If discomfort persists OBTAIN MEDICAL ATTENTION.

**Skin** Wash off skin thoroughly with water. Remove contaminated clothing immediately and wash before re-use. OBTAIN MEDICAL ATTENTION.

**Inhalation** Remove from exposure. Keep warm and at rest. If there is difficulty in breathing give oxygen if available. If breathing stops or shows signs of failing, apply artificial resuscitation. If unconscious place in the recovery position. OBTAIN MEDICAL ATTENTION URGENTLY.

**Ingestion** If conscious give plenty of water to drink. Do not induce vomiting. If there is difficulty in breathing give oxygen if available. If breathing stops or shows signs of failing, apply artificial resuscitation. If unconscious place in the recovery position. OBTAIN MEDICAL ATTENTION URGENTLY.

## 5. Fire Fighting Measures

**Hazards** Evacuate area immediately. Keep up wind. Avoid exposure to toxic vapours and fumes. Fire-fighters should wear protective clothing and breathing apparatus. Vapour-air mixtures are explosive.

**Extinguishing Media** Alcohol resistant foam, dry powder, carbon dioxide or vaporising liquid. Use water spray to keep fire exposed containers cool.

**Unsuitable Media** Do not use water jet.

## 6. Accidental Release Measures

Personal Protection	Ensure no sources of ignition. Avoid breathing vapour. Use approved personal protective equipment. Evacuate area immediately. Do not allow general use of area until it is safe to do so. Beware : vapour is heavier than air and will tend to accumulate at low spots.
Environmental	Keep material out of sewers, storm drains, surface waters and soil. Notify the Environmental Agency and local Environmental Health Officer if major spillage occurs.
Major Spillage	Contain and absorb on inert material. Transfer absorbent to salvage container for removal. Wash area down with copious amounts of water.
Minor Spillage	Contain and absorb on inert material. Transfer absorbent to salvage container for removal. Wash area down with copious amounts of water.

## 7. Storage & Handling

Handling Precautions	All transfer systems should be earthed to prevent accumulation of static electricity. Avoid contact with skin and eyes. Do not breath vapours. Do not allow to contaminate clothing.  Ensure Local Exhaust Ventilation maintains vapour concentrations below the recommended limits.
Storage Conditions	Well ventilated, cool, dry storage . Protect from direct sun and store away from sources of ignition. Keep containers closed when not in use. Keep well separated from oxidising agents.

## 8.1 Workplace Exposure Limits

Component	CAS No	Workplace Exposure Limits				Maximum Exposure Limits			
		Long Term		Short Term		Long Term		Short Term	
		ppm	mg m <sup>-3</sup>	ppm	mg m <sup>-3</sup>	ppm	mg m <sup>-3</sup>	ppm	mg m <sup>-3</sup>
Cyclohexane	110-82-7	100.0	350.0	300.0	1050	-	-	-	-
Sebacoyl chloride	111-19-3	-	-	1.000	5.000	-	-	-	-

## 8.2 Personal Protection

Respiratory	Use L.E.V. or natural ventilation to maintain vapour concentrations below exposure limits. If not, use a well maintained chemical cartridge organic vapour respirator, or use self contained breathing apparatus.
Hands	Use solvent resistant gloves.
Eyes	Use chemical splash proof glasses or goggles.
Skin	Avoid contact with skin. If skin contact or contamination of clothing is likely, protective clothing must be worn.

## 9. Physical & Chemical Properties

Appearance	Orange brown solution.
Odour	Characteristic.
pH	Not available
Boiling point	80.7 °C
Melting point	6.5 °C
Flash point	18.0- °C(Closed cup)
Upper Flammable Limit	8.0 %
Lower Flammable Limit	1.3 %
Auto Ignition	260.0 °C
Explosive properties	Severe in confined spaces.
Oxidising Properties	No.
Vapour Pressure	100 mmHg @ 61,C
Relative Density	0.8000
Water Solubility	Decomposes in water.

## 10. Stability & Reactivity

Chemical Stability	Stable under normal conditions
Conditions to Avoid	Hot surfaces, naked flames or other sources of ignition.

## 10. Stability & Reactivity (continued)

Materials to Avoid	Water. Strong oxidising agents.
Hazardous Decomposition Products	Evolves corrosive and irritant fumes of hydrogen chloride in contact with water.

## 11. Toxicological Information

Eyes	Both the vapour and liquid are, irritating to the eyes.
Skin	Repeated or prolonged contact may defat the skin producing irritation and dermatitis.
LD50 Skin	Not available
Ingest	Ingestion will cause similar effects to inhalation.
LD50 Ingest	Not available
Inhalation	Exposure to vapour concentrations above the occupational exposure limits may produce irritation of the eyes and respiratory tract. High concentrations of vapour will cause narcosis, anaesthesia and fatigue.
Carcinogenicity	Not considered to be a carcinogen.
Mutagenicity	Not considered to be a mutagen.
Reproductive Effects	None identified.

## 12. Ecological

Moderately toxic to mammals, fish and bacteria.

## 13. Disposal Considerations

Disposal Methods	Dispose of in a licensed incinerator for organic solvents. Do not dispose of as domestic waste. Never dispose of into water courses or sewerage systems due to high risk of explosion.
Contaminated Packaging	Use a licensed waste disposer. Do not attempt to burn any residual liquids due to risk of explosion.

## 14. Transport Information

Proper Shipping Name	Cyclohexane
UN Number	1145
UN Classification	3 Flammable liquid
Subsidiary Risk	None
Flash Point	18.0- °C(Closed cup)
Packing Group	II
Transport Category	2
Marine pollutant	No
ADR Hazard ID	33



## 15. Regulatory Information

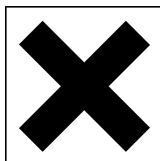
Labelling Classification Highly Flammable, Irritant.

Label Symbols

F



Xi



Risk & safety Phrases Highly flammable. Irritating to eyes, respiratory system and skin. Keep container in a well ventilated place. Keep away from sources of ignition - No Smoking. Take precautionary measures against static discharges.

## 15. Regulatory Information (continued)

EEC Number

Not available

## 16. Other Information

Document Information

This document has been prepared in accordance with directive 88/379/EEC.

The information contained in this document only covers the hazards presented by this material, it DOES NOT constitute a workplace risk assessment.

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