

# Camlab Limited – Material Safety Data Sheet

## 1. Identification


Product Code CC/0332-DH

Product Name **FORMALDEHYDE SOLUTION 40% w/v pure**

Molecular Formula **HCHO =30.03**

CAS Number 50-00-0

Supplier: **CAMLAB LIMITED**

 **Norman Way Industrial Estate  
Over  
Cambridge  
England  
CB4 5WE**

Phone 01954 233110

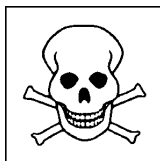
Fax 01954 233101

Emergency Telephone 08:00-17:00 01954 233110  
24hr 112  
(Have this document to hand)

## 2. Composition

Component	CAS No	EEC No	Conc w/w	Classification & Risk Phrases	Exp (See 8.1)
Formaldehyde	50-00-0	200-001-8	36.6%	T : R23/24/25,R34,R40,R43 :Carc.Cat 3	WEL
Methanol	67-56-1	200-659-6	7.3%	T : R11,R23/24/25,R39/23/24/25	WEL

## 3. Hazards Identification



Toxic by inhalation, in contact with skin and if swallowed. Causes burns. Limited evidence of carcinogenic effect. May cause sensitisation by skin contact. Carcinogen category: 3

## 4. First Aid Measures

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

Skin Wash off skin thoroughly with water. Remove contaminated clothing immediately and wash before re-use. Unless contact has been slight 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. Convulsions may occur and cause unconsciousness. 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 Water spray, dry powder or carbon dioxide. 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.
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. Neutralise with a 5% ammonia solution. Transfer absorbent to container for removal and disposal as solid chemical waste. 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

Workplace Exposure Limits	Long Term (8hr TWA):	2.000 ppm	2.500 mg m-3
	Short Term (15min Period):	2.000 ppm	2.500 mg m-3
Maximum Exposure Limits	Long Term (8hr TWA):	2.000 ppm	2.500 mg m-3
	Short Term (15min Period):	2.000 ppm	2.500 mg m-3

## 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 PVC gauntlets.
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	Clear colourless liquid.
Odour	Pungent and intensely irritating.
pH	3 @ 20 °C
Boiling point	96.0 °C
Melting point	Not available
Flash point	69.0 °C(Closed cup)
Upper Flammable Limit	72.0 %
Lower Flammable Limit	7.0 %
Auto Ignition	300.0 °C
Explosive properties	Moderate/severe in confined spaces.
Oxidising Properties	No.
Vapour Pressure	1.3 mm Hg @ 20 C
Relative Density	1.0930
Water Solubility	Completely soluble in water.

## 10. Stability & Reactivity

Chemical Stability	Stable under normal conditions
Conditions to Avoid	Hot surfaces, naked flames or other sources of ignition.
Materials to Avoid	Strong oxidising agents. Hydrochloric acid.
Hazardous Decomposition Products	None unusual. Burning will produce smoke, carbon monoxide and/or carbon dioxide.

## 11. Toxicological Information

Eyes	The liquid is be extremely irritating to eyes and can cause chemical eye burns. At 4ppm there may be lacrimation; at 10-20 ppm there is burning of the eyes and intense lacrimation; at 50-100ppm eye burns can be produced.
Skin	Repeated exposure may cause dermatitis. Skin penetration is possible. May cause skin sensitisation.
LD50 Skin	Rabbit 270 mg/Kg
Ingest	Causes immediate irritation of the mouth, throat and gastro-intestinal tract. Ingestion may prove fatal.
LD50 Ingest	Rat 800mg/kg
Inhalation	Exposure to vapour concentrations above the occupational exposure limits will produce severe irritation of the eyes, nose, throat and respiratory tract. High concentrations of vapour will severe difficulty in breathing, burning of the nose and intense cough.
Carcinogenicity	Carcinogen - category 3. Epidemiological studies of workers exposed to formaldehyde is inconclusive however cancers and tumours in rats and mice meet with the criteria for a potential human carcinogen.
Mutagenicity	May be a mutagen.
Reproductive Effects	Some evidence for foetotoxicity and tetragenecity has been observed in experimental animals
Other Information	The irritant effect provides warning and toxic dosages are unlikely to be absorbed. The odour threshold (ca 0.5ppm) is below the MEL (2ppm).

## 12. Ecological

Low levels are readily bio-degraded in the environment. Higher levels are toxic to marine and plant life.

## 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.
Contaminated Packaging	Use a licensed waste disposer. Do not attempt to burn any residual liquids due to risk of explosion. Clean out with a weak ammonia solution then wash out thoroughly with water.

## 14. Transport Information

Proper Shipping Name	Formaldehyde Solution
UN Number	2209
UN Classification	8 Corrosive
Subsidiary Risk	None
Flash Point	69.0 °C(Closed cup)
Packing Group	III
Transport Category	3
Marine pollutant	No
ADR Hazard ID	80



## 15. Regulatory Information

Labelling  
Classification

Toxic.

Label Symbols

T



Risk & safety Phrases

Toxic by inhalation, in contact with skin and if swallowed. Causes burns. Limited evidence of carcinogenic effect. May cause sensitisation by skin contact. Keep locked up and out of reach of children. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing, gloves and eye/face protection. In case of accident or if you feel unwell, seek medical advice immediately (show the label). Use only in well ventilated areas. Carcinogen category: 3

EEC Number

200-001-8

## 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.

Revision Date: 17/02/06.

Data reviewed and PDF file generated: 19/07/07.

Copyright 2007 Camlab Limited.