# **Camlab Limited – Material Safety Data Sheet**

1. Identification	
Product Code	CC/1734-DH
Product Name	HYDROCHLORIC ACID 2.0M (2N) A.R.
CAS Number	7647-01-0
Supplier:	CAMLAB LIMITED
camlab	Norman Way Industrial Estate Over Cambridge England CB4 5WE
Phone Pax	01954 233110 01954 233101
Emergency Telephone	08:00-17:00 01954 233110 24hr 112 (Have this document to hand)

CAS No	EEC No	Conc w/w	Classification & Risk Phrases	Exp (See 8.1)
7647-01-0	231-595-7	7.3%	R34,R37	WEL

### 3. Hazards Identification

Not considered harmful

4. First Aid Meas	ures
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.
Inhalation	Remove from exposure.
Ingestion	Wash out the patients mouth thoroughly with water.

# 5. Fire Fighting Measures

Hazards	Presents no specific fire danger.
Extinguishing Media	Consider what other flammable materials are present and act accordingly.
Unsuitable Media	Nothing specified.

## 6. Accidental Release Measures

Personal Protection	Use approved personal protective equipment. Evacuate area immediately. Do not allow general use of area until it is safe to do so.
Enviromental	Keep non-neutralised 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.

#### 6. Accidental Release Measures (continued)

Minor Spillage

Wash area down with copious amounts of water.

7. Storage & Handling		
Handling Precautions	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 .	

# 8.1 Workplace Exposure Limits

Component	CAS No	Workplace Expo	sure Limits	Maximum Exp	oosure Limits
		Long Term	Short Term	Long Term	Short Term
		ppm mg m–3	ppm mg m–3	ppm mg m–3	ppm mg m–3
Hydrochloric acid	7647-01-0	1.000 2.000	5.000 8.000	-	

### 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 respirator, or use self contained breathing apparatus.
Hands	Wear gloves.
Eyes	Use chemical splash proof glasses or goggles.
Skin	If skin contact or contamination of clothing is likely, protective clothing must be worn.

### 9. Physical & Chemical Properties

Appearance	Clear colourless liquid.		
Odour	Odourless.		
рH	1 @ 20 °C		
Boiling point	Aqueous solution		
Melting point	10.0- °CAqueous solution		
Flash point	Aqueous solution		
Upper Flammable Limit	Not available		
Lower Flammable Limit	Not available		
Auto Ignition	Not available		
Explosive properties	No.		
Oxidising Properties	No.		
Vapour Presure	Not available		
Relative Density	1.0337 °C		
Water Solubility	Completely miscible in water.		

# 10. Stability & Reactivity

Chemical Stability	Stable under normal conditions
Conditions to Avoid	No specific conditions.
Materials to Avoid	Alkalis. Potassium permanganate. Reacts with most metals to produce extremely flammable hydrogen gas.
Hazardous Decomposition Products	Will decompose to emit toxic and irritant fumes of hydrogen chloride.

# 11. Toxicological Information

Eyes	The liquid may be irritating to the eyes.
Skin	Presents no significant hazard by skin contact.
LD50 Skin	Not available

11. Toxicological Information (continued)		
Ingest	Presents no significant hazard by ingestion.	
LD50 Ingest	Not available	
Inhalation	Presents no significant health hazard by inhalation.	
Carcinogenicity	Not considered to be a carcinogen.	
Mutagenicity	Not considered to be a mutagen.	
Reproductive Effects	None identified.	

#### 12. Ecological

No specific environmental hazard.

#### 13. Disposal Considerations

Disposal Methods

Neutralise with lime water or sodium hydroxide prior to disposal. Flush to drain.

Contaminated Packaging Wash out containers with water. Use a licensed waste disposer.

#### 14. Transport Information

Proper Shipping Name UN Number UN Classification Subsidiary Risk Flash Point Packing Group Transport Category Marine pollutant ADR Hazard ID

Non-restricted None None Not available None None No Non-restricted

15. Regulatory Information	
Labelling Classification	None
Label Symbols	None
Risk & safety Phrases	Keep out of reach of children. After contact with skin, wash immediately with plenty of water.
EEC Number	231-595-7

#### 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: 12/01/98. Data reviewed and PDF file generated: 17/03/10. Copyright 2010 Camlab Limited.