#### 1. Identification

Product Code 1111562

Product Name ACETONITRILE HPLC

Molecular Formula CH<sub>3</sub>CN =41.05

CAS Number **75-05-8** 

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) |
|--------------|---------|-----------|----------|-------------------------------|---------------|
| Acetonitrile | 75-05-8 | 200-835-2 | > 98.0%  | F Xn : R11,R20/21/22,R36      | WEL           |

#### 3. Hazards Identification





Highly flammable. Harmful by inhalation, in contact with skin and if swallowed. Irritating to eyes.

# 4. First Aid Measures

Eyes Irrigate thoroughly with plenty of water for at least 10 minutes, holding the

eye open. OBTAIN MEDICAL ATTENTION URGENTLY.

Skin Wash off skin thoroughly with water. Remove contaminated clothing immediately and wash

before re-use. OBTAIN MEDICAL ATTENTION URGENTLY.

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. Vapours may flow along surfaces to distant ignition sources and flash back.

Extinguishing Water spray, alcohol resistant foam, dry powder or carbon dioxide. Use water spray to keep Media fire exposed containers cool.

Unsuitable Do not use water jet.

Media

#### 6. Accidental Release Measures

Personal Ensure no sources of ignition. Avoid breathing vapour. Use approved personal protective Protection equipment. Evacuate area immediately. Beware: vapour is heavier than air and will tend to

accumulate at low spots. 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. Transfer absorbent to 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-3                | ppm mg m-3  | ppm mg m-3              | ppm mg m-3 |
| Acetonitrile | 75-05-8 | 40.00 68.00               | 60.00 102.0 |                         |            |

#### 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 Clear colourless liquid.

Odour Ethereal.
pH Not available
Boiling point 81.6 °C
Melting point 45.7- °C

Flash point 2.0 °C(Closed cup)

Upper Flammable Limit 17.0 % Lower Flammable Limit 3.0 % Auto Ignition  $524.0 \ ^{\circ}\text{C}$ 

Explosive properties Moderate/severe in confined spaces.

Oxidising Properties No

97 mbar @ 20 C

Vapour Presure 97 mb Relative Density 0.7820

Water Solubility Completely miscible 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 Strong oxidising agents. Fuming nitric, concentrated sulphuric and perchloric acids, iron

perchlorate and N-fluoro compounds.

Hazardous Will evolve very toxic fumes of cyanide if involved in a fire or heated to decomposition.

Decomposition Products

## 11. Toxicological Information

Eyes Contact with the liquid will cause moderate to severe irritation and may result in corneal

injury. High concentrations of vapour may be irritating to the eyes.

Skin Can be absorbed through the skin and may cause irritation and dermatitis. Skin absorbtion

may be an important exposure route producing toxic effects similar to inhalation.

LD50 Skin Rabbit 1250 mg/Kg

Ingest Toxic if swallowed. Ingestion causes similar effects to vapour inhalation.

LD50 Ingest Oral Rat 3800mg/Kg

Inhalation Exposure to vapour concentrations above the occupational exposure limits may produce

irritation of the eyes, nose, throat and respiratory tract. High concentrations of vapour may effects the central nervous system resulting in Large amounts may cause sensitive individuals to cough. Usually there is a latent period of several hours before the onset of

symptoms.

Carcinogenicity Not considered to be a carcinogen.

Mutagenicity Not considered to be a mutagen.

Reproductive Effects Not teratogenic but high doses have caused maternal and foetal toxicity.

#### 12. Ecological

Non-hazardous to aquatic species (TLm96>1000mg/l) BOD 5 day = 37% ThOD. Unlikely to bio-accumulate.

#### 13. Disposal Considerations

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 Acetonitrile

UN Number 1648

UN Classification 3 Flammable liquid

Subsidiary Risk None

Flash Point 2.0 °C(Closed cup)

Packing Group II
Transport Category 2
Marine pollutant No
ADR Hazard ID 33



## 15. Regulatory Information

Labelling Highly Flammable, Harmful.

Classification

Label Symbols



Xn



# 15. Regulatory Information (continued)

Risk & safety Phrases

Highly flammable. Harmful by inhalation, in contact with skin and if swallowed. Irritating to eyes. Keep locked up and out of reach of children. Keep away from sources of ignition - No Smoking. Wear suitable protective clothing and gloves.

EEC Number 200-835-2

## 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: 8/06/05.

Data reviewed and PDF file generated: 17/03/10.

Copyright 2010 Camlab Limited.