

# MATERIAL SAFETY DATA SHEET

## Introductory Details

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Date of preparation : 28<sup>th</sup> April 2003  
Date revised : 30 May 2008

## SECTION 1 : CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

### 1.1 Product Details

Product Name : Encare  
Trade Name : Encare  
Chemical Name : Deuterium Hydrogen Sulphate  
Chemical Formula : D<sub>2</sub>SO<sub>4</sub>  
Molar Mass : 32.06  
Chemical Family : -  
Manufacturer's Code : -  
Use : Environment care product

### 1.2 Company Identification

**Manufacturer** : Available upon request

#### **Importer/Distributor**

Name and Address : Agricultural Chemicals (M) Sdn. Bhd.  
962, Lorong Perusahaan 8, Taman Perindustrian Perai,  
13600 Perai, Penang, Malaysia.  
Telephone Number : 604-390 7988  
Emergency Telephone Number : 604-390 7988

### 1.3 Contact Point

Designation : Ms. Cheong Wai Ching, Product Support Manager/  
En. Ahmad Labib bin Yusof, Administrative Assistant  
Tel. No. : 604-390 7988

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## SECTION 2 : COMPOSITION/INFORMATION ON INGREDIENT

Chemical Name	CAS No.	Proportion	Exposure Limit	Toxicity Data
Deuterium Hydrogen Sulphate	7704-93-9	< 7% w/w	Refer Section 9	Refer Section 11

## SECTION 3 : PHYSICAL AND CHEMICAL PROPERTIES

Appearance	: Medium green
Odour	: Odourless
Solubility	: Soluble
Boiling Point	: 220EF
Melting Point (°C)	: 31 - 49EF
Vapour Pressure (mmHg at 25°C)	: < 0.3 mmHg
Percentage Volatiles	: No data available
Evaporation Rate	: < 1 (Butyl Acetate = 1)
Vapour Density	: Approx. 3.4 (air = 1)
Specific Gravity	: 1.2 – 1.3
Flash Point	: Not applicable
Autoignition Temperature	: No data available
Flammable Limit (%)	: No data available
pH	: < 1

## SECTION 4 : HAZARD IDENTIFICATION

Irritating to eyes, respiratory system and skin.

## SECTION 5 : FIRST AID MEASURES

Ingestion	: Do not give emetic or baking soda. Give milk of magnesia
Eye Contact	: Immediately flush with plenty of water. Get immediate medical attention.
Skin Contact	: Remove contaminated clothing and wash thoroughly with soap and water
Inhalation	: Remove to fresh air.
Notes to Physician	: No specific recommendation. Treatment is symptomatic.

## SECTION 6 : FIRE FIGHTING MEASURES

Extinguishing Media	: Foam, water fog and CO <sub>2</sub>
Fire Fighting Instruction	: Fire fighters should wear full-faced self-contained breathing apparatus and

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Special Hazards : protective clothing  
: No data available

## SECTION 7 : ACCIDENTAL RELEASE MEASURE

Leak and/or Spill :

Neutralize with soda ash. Wash with copious supply of water. Encare is non-toxic, completely soluble in water. Prior to dilution, it will dissolve cotton, paper and paints.

## SECTION 8 : HANDLING AND STORAGE

Handling : Use prudent laboratory or industrial hygiene procedures while handling

Storage : Keep in original containers, tightly closed, in a cool, dry and well-ventilated place. Do not store with animal feeds or foodstuff. Keep out of reach of children or farm animals.

## SECTION 9 : EXPOSURE CONTROL AND PERSONAL PROTECTION

Exposure Limit :

OSHA PEL : 1mg/m<sup>3</sup> (8hr – TWA)

Others : 1mg/m<sup>3</sup> (8hr – TWA)

Engineering Measures : General ventilation

Personal Protection : Use prudent laboratory or industrial hygiene procedures while handling.

Respiratory Protection : None required

Skin Protection : Gloves

Eye Protection : Goggles

## SECTION 10 : STABILITY AND REACTIVITY

Conditions to Avoid : Not to add water if not use.

Incompatibles : Avoid material with pH of 8.0 or above. Mixture will effervesce.

Decomposition Products : None

Hazardous Polymerization : Will not occur

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## **SECTION 11 : TOXICOLOGICAL INFORMATION**

Toxicity Data : Encare is a non-toxic product. Ingestion may cause indigestion.  
Carcinogenicity : Not applicable  
Reproductive Effect : No data available  
Effects of Overexposure : Direct contact may cause reddening of tissue or rashes to sensitive persons.  
Skin Irritation : Irritant  
Eye Irritation : Irritant.  
Chronic Effects : No known chronic hazards.  
Target Organs : No data available  
Medical Conditions Generally Aggravated by Exposure : Sunburn, cuts, scrapes

## **SECTION 12 : ECOLOGICAL INFORMATION**

Mobility & Bioaccumulation : No data available  
Biodegradability : No data available  
Aquatic Toxicity : No data available

## **SECTION 13 : DISPOSAL INFORMATION**

Dispose of according to local regulation.

## **SECTION 14 : TRANSPORT INFORMATION**

Follow the precaution indicated in the storage and handling section. Follow all regulations in your country.

## **SECTION 15 : REGULATORY INFORMATION**

CPL Regulations :

Class : Irritant  
Risk Phrase : R36/38 Irritating to eyes and skin.

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Safety Phrase : S2            Keep out of reach of children.  
                  S24/25        Avoid contact with skin and eyes  
                  S26            In case of contact with eyes, rinse immediately with plenty of water and  
   seek medical attention.

## **SECTION 16 : OTHER INFORMATION**

Reference :

- a.        MSDS – Open All, date : 11/01/06  
          Deutrel Industries
- b.        Guidelines for The Classification of Hazardous Chemicals - DOSH 1997
- c.        Guidelines for The Formulation of A Chemical Safety Data Sheet - DOSH 1997
- d.        Guidelines for Labelling of Hazardous Chemicals - DOSH 1997

To the best of our knowledge, the information contained herein is accurate. However, we cannot assume any liability whatsoever for the accuracy or completeness of the information contained herein.