

MATERIAL SAFETY DATA SHEET

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Section I : PRODUCT IDENTIFICATION

Product Trade Name : ALDEHYDE C-18/GAMMA NONALACTONE/NONALACTONE/GAMMA / COCONUT
ALDEHYDE

US DOT Hazard Class : N/A KEEP AWAY FROM CHILDREN

PH of Product : N/A

UN Number : N/A

Health : 1 Fire : 1 Reactivity : 0

Corporation Identification

=== Responsible Party ===

Company Name: PEKING UNIVERSITY ZOTEQ CO.,LTD.

Country: CHINA

Info Phone Num: 86-21-36162014/24/34

Emergency Phone Num:86-21--36161061

=== Contractor Identification ===

Company Name:PEKING UNIVERSITY ZOTEQ CO.,LTD.

ADDRESS: Block 3, No.699, Zhenchen Road,

CITY:SHANGHAI

ZIP:200444

Country: CHINA

Phone:86-21-36162014/24/34

Section II : HAZARDOUS INGREDIENTS

EXPOSURE LIMIT INFORMATION :

HAZARDOUS INGREDIENT(S) : ALDEHYDE C-18

CAS NO. : 104-61-0

FEMA NO. : 2781

AMT. (%) :

OSHA TWA : 0 N/A

OSHA STEL : 0 N/A

ACGIH TWA : 0 N/A

ACGIH STEL : 0 N/A

Section III : PHYSICAL DATA

PRODUCT NAME : ALDEHYDE C-18

APPEARANCE : Colorless to pale yellow liquid

ODOR: COCONUT-LIKE, FRUITY

SOLUBILITY IN WATER : INSOLUBLE

SPECIFIC GRAVITY : 0.960-0.970 g/ml at 20°C

VAPOR PRESSURE : N/A

MELTING POINT : N/A

REFRACTIVE INDEX: 1.442-1.452 at 20°C

BOILING POINT : 243°C

VOLATILE BY VOLUME : 100.00

EVAPORATION RATE : N/A

ACID VALUE: Max. 2mg KOH/g

Section IV : FIRE AND EXPLOSION HAZARD

FLASH POINT (C): 142.00 CENTIGRADE

UPPER FLAMMABLE LIMIT (% BY VOLUME) : N/A

LOWER FLAMMABLE LIMIT (% BY VOLUME) : N/A

EXTINGUISHING MEDIA : Carbon Dioxide; Dry Chemical; Universal-Type Foam. clothing should be worn when fighting fires involving essential oils or chemicals.

SPECIAL FIRE FIGHTING PROCEDURES : Self-contained breathing apparatus and protective clothing should be worn when fighting fires involving essential oils or chemicals.

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UNUSUAL FIRE AND EXPLOSION HAZARD : None known to Zoteq. Keep away from heat and open flames.

Section V : HEALTH HAZARD DATA

PRIMARY ROUTES OF EXPOSURE : SKIN CONTACT : Yes INHALATION : No
EYE CONTACT : Yes SKIN ABSORPTION : No INGESTION : Yes

CARCINOGENICITY : OSHA : No IARC : No NTP : No ACGIH : No

EFFECTS OF OVEREXPOSURE : None Known.

EYE CONTACT EFFECTS : May be irritating to eyes.

SKIN CONTACT EFFECTS : May be irritating to skin.

INHALATION EFFECTS : May be irritating if inhaled.

INGESTION EFFECTS : May be harmful if swallowed.

NOTE :

EMERGENCY AND FIRST AID PROCEDURES :

EYE CONTACT : Flush immediately with clean water for at least 15 minutes. Contact a physician immediately.

SKIN CONTACT : Remove any contaminated clothing or shoes. Wash affected areas thoroughly with soap and water for at least 15 minutes. Contact a physician as necessary.

INHALATION : Remove from the exposure to fresh air. If breathing has stopped, administer artificial respiration and oxygen if available. Contact a physician as necessary.

INGESTION : Wash out mouth with water and give water to dilute provided person is conscious. Contact a physician or local poison control center immediately.

Section VI : REACTIVITY DATA

CHEMICALLY STABLE : Yes

CONDITIONS TO AVOID : This product presents no significant reactivity hazard. It is stable and will not react violently with water. Hazardous polymerization will not occur.

INCOMPATIBILITY WITH OTHER MATERIALS : Avoid contact or contamination with strong acids, alkalis, or oxidizing agents.

HAZARDOUS COMBUSTION OR DECOMPOSITION PRODUCTS : Carbon monoxide and unidentified organic compounds may be formed during combustion.

Section VII : SPILL OR LEAK PROCEDURES

SPILL, LEAK AND WASTE DISPOSAL PROCEDURES : Eliminate all ignition sources. Ventilate area. Contain spill and recover free product. Absorb remainder on vermiculite or other suitable absorbent material. Use of self-contained breathing apparatus is recommended for any major chemical spills. Report spills to appropriate authorities if required.

WASTE DISPOSAL METHODS : Place material and absorbent into sealed containers and dispose of in accordance with current applicable laws and regulation.

NOTE : Empty containers can have residues, gases and mists and are subject to proper waste disposal.

Section VIII : SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION : None generally required. Use NIOSH approved respirator in confined area or if material is rated toxic.

VENTILATION PROTECTION : Local exhaust meeting ACGIH criteria.

PROTECTIVE CLOTHING : Chemical resistant clothing is recommended.

PROTECTIVE GLOVES : Use chemical resistant gloves is recommended.

EYE PROTECTION : Use goggles or face shield is recommended.

OTHER PROTECTIVE EQUIPMENT : Avoid inhalation and contact with skin and eyes. Good personal hygiene practices should be used. Wash after any contact, before breaks and meals, and at the end of the work period. Contaminated clothing and shoes should be cleaned before re-use.

Section IX : SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE : Place material and absorbent into sealed containers and dispose of in accordance with current applicable laws and regulation.

OTHER PRECAUTIONS : Good manufacturing practices dictate that an eyewash fountain and/or safety shower should be available in the work area.

Section X : EMERGENCY PLANNING & COMMUNITY RIGHT-TO-KNOW (SARA III)

311 / 312 CATEGORIZATION (40CFR 370)

FIRE : No SUDDEN RELEASE OF PRESSURE : No REACTIVITY : No
IMMEDIATE (ACUTE) : No DELAYED (CHRONIC) : No

312 INFORMATION (40CFR 372)

This proprietary mixture contains the following toxic chemical(s) above de minimin concentrations subject to the requirements of Section 313 of Title III of the Superfund Amendment and Reauthorization Act of 1986: See Section II.

Section XI : DISCLAIMER

The information contained on the Material Data Sheet has been compiled from data considered accurate. This data is believed to be reliable, however, it must be pointed out that values for certain properties are known to vary from source to source. Zoteq disclaims any warranty expressed or implied as well as any liability for any injury or loss arising from the use of this information or the materials described. This data is not to be construed as absolutely complete since additional data may be desirable when particular conditions or circumstances exist. It is the responsibility of the user to determine the best precautions necessary for the safe handling and use of this product for his application. This data relates only to the specific material designated and not to be used in combination with any other material. Many federal and state regulations pertain directly or indirectly to the product's end use and disposal of containers and unused material. It is the purchaser's responsibility to familiarize themselves with all applicable regulations.