SAFETY DATA SHEET

SECTION 1: Identification of the substance/mixture and of the company/undertaking

Product identifier
Product name: Abitol(TM) E Hydroabietyl Alcohol

Product No.: EAN 800044. 75004-00, P7500400, P7500402, P75004SP, P75004S2, E7500401

Additional identification
Chemical name: 1-phenanthrenemethanol, tetradecahydro-1,4a-dimethyl-7-(1-methylethyl)-
CAS-No.: 1333-89-7

Relevant identified uses of the substance or mixture and uses advised against
Identified uses: Adhesive
Uses advised against: None known.

Details of the supplier of the safety data sheet
Manufacturer / Supplier
Eastman Chemical Company
200 South Wilcox Drive
Kingsport, TN 37660-5280 US
+14232292000

Visit our website at www.EASTMAN.com or email emnmsds@eastman.com

Emergency telephone number:
For emergency health, safety, and environmental information, call 1-423-229-4511 or 1-423-229-2000.
For emergency transportation information, in the United States: call CHEMTREC at 800-424-9300 or call 423-229-2000.

SECTION 2: Hazards identification

Hazard Classification:

Health Hazards
Skin sensitizer Category 1

OSHA Specified Hazards: not applicable

Warning label items including precautionary statement:

Pictogram:
Signal Words: WARNING!

Hazard Statement(s): H317: May cause an allergic skin reaction.

Precautionary Statement:


Response: P302+P352: IF ON SKIN: Wash with plenty of water. P333+P313: If skin irritation or rash occurs: Get medical advice/attention. P363: Wash contaminated clothing before reuse.

Disposal: P501: Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

Hazard(s) not otherwise classified (HNOC): None known.

SECTION 3: Composition/information on ingredients

Substances / Mixtures

General information:

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Concentration</th>
<th>Additional identification</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>technical hydroabietyl alcohol</td>
<td>100%</td>
<td>CAS-No.: 1333-89-7</td>
<td></td>
</tr>
</tbody>
</table>

* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume. # This substance has workplace exposure limit(s).

SECTION 4: First aid measures

Description of first aid measures

Inhalation: Move to fresh air. Treat symptomatically. Get medical attention if symptoms persist.

Eye contact: Any material that contacts the eye should be washed out immediately with water. If easy to do, remove contact lenses. Get medical attention. In case of irritation from airborne exposure, move to fresh air. Get medical attention if symptoms persist.

Skin contact: Immediately remove contaminated clothing and shoes and wash skin with soap and plenty of water. If skin irritation or an allergic skin reaction develops, get medical attention. Wash contaminated clothing before reuse. Destroy or thoroughly clean contaminated shoes.

Ingestion: Seek medical advice.

Most important symptoms and effects, both acute and delayed: Allergic rash.
Indication of any immediate medical attention and special treatment needed

Hazards: None known.

Treatment: Treat symptomatically.

SECTION 5: Firefighting measures

General Fire Hazards: None known.

Extinguishing media


Unsuitable extinguishing media: None known.

Special hazards arising from the substance or mixture: None known.

Advice for firefighters

Special fire fighting procedures: None known.

Special protective equipment for fire-fighters: Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures: Wear appropriate personal protective equipment.

Environmental Precautions: Avoid release to the environment.

Methods and material for containment and cleaning up:
Absorb spill with vermiculite or other inert material, then place in a container for chemical waste. Large Spillages: Flush spill area with water spray. Prevent runoff from entering drains, sewers, or streams. Dike for later disposal.

Notification Procedures: In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations.

SECTION 7: Handling and storage:

Precautions for safe handling: Avoid contact with eyes, skin, and clothing. Wash thoroughly after handling.

Conditions for safe storage, including any incompatibilities: Keep container closed.

Specific end use(s): Adhesive
SECTION 8: Exposure controls/personal protection

Control Parameters

Occupational Exposure Limits

Country specific exposure limits have not been established or are not applicable unless listed below.

Exposure controls

Appropriate engineering controls:

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Individual protection measures, such as personal protective equipment


Eye/face protection: It is a good industrial hygiene practice to minimize eye contact.

Skin protection

Hand Protection: Wear chemical-resistant gloves, footwear, and protective clothing appropriate for the risk of exposure. Contact health and safety professional or manufacturer for specific information.

Other: No data available.

Respiratory Protection:

If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. In the United States of America, if respirators are used, a program should be instituted to assure compliance with OSHA Standard 63 FR 1152, January 8, 1998. Respirator type: Air-purifying respirator with an appropriate, government approved (where applicable), air-purifying filter, cartridge or canister. Contact health and safety professional or manufacturer for specific information.

Hygiene measures: Observe good industrial hygiene practices.

Environmental Controls: No data available.

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Appearance

Physical state: liquid
Form: Viscous Liquid
Color: Amber
Odor: piney
Odor Threshold: No data available.
pH: No data available.
Boiling Point: No data available.
Flash Point: > 170 °C method unspecified
Evaporation Rate: Not determined.
Flammability (solid, gas): No data available.
Flammability Limit - Upper (%): No data available.
Flammability Limit - Lower (%): No data available.
Vapor pressure: Not determined.
Vapor density (air=1): No data available.
Specific Gravity: 1.008
Solubility(ies)
  Solubility in Water: Negligible
  Solubility (other): No data available.
Partition coefficient (n-octanol/water): No data available.
Autoignition Temperature: No data available.
Decomposition Temperature: Thermal stability not tested. Low stability hazard expected at normal operating temperatures.
Dynamic viscosity: No data available.
Kinematic viscosity: Not determined.
Explosive properties: No data available.
Oxidizing properties: No data available.

SECTION 10: Stability and reactivity

Reactivity: None known. Materials containing similar structural groups are normally stable.
Chemical Stability: Not fully evaluated.
Possibility of Hazardous Reactions: None known.
Conditions to Avoid: None at ambient temperatures.
Incompatible Materials: Strong oxidizing agents.
Hazardous Decomposition Products: Carbon Dioxide. Carbon Monoxide.

SECTION 11: Toxicological information

Information on likely routes of exposure
Inhalation: None known.
Ingestion: None known.
Skin contact: May cause an allergic skin reaction.
Eye contact: None known.
Information on toxicological effects

Oral

Product: Oral LD-50: (Rat): > 2,000 mg/kg

Dermal

Product: Dermal LD-50: (Rat): > 2,000 mg/kg

Inhalation

Product: No data available.

Repeated dose toxicity

Product: No data available.

Skin Corrosion/Irritation

Product: (Rabbit, 4 h): Slight

Serious Eye Damage/Eye Irritation

Product: (Rabbit, 72 h): Slight

Respiratory or Skin Sensitization

Product: Skin Sensitization: (Mouse): sensitizing

Carcinogenicity


Toxicity to reproduction

Product: No data available.

Developmental toxicity

Product: No data available.

Germ Cell Mutagenicity

In vitro

Product: Mutagenicity - Bacterial: negative
Mutagenicity - Mammalian: negative
Chromosomal aberration: negative

In vivo

Product: No data available.

Specific Target Organ Toxicity - Single Exposure

Product: No data available.

Specific Target Organ Toxicity - Repeated Exposure

Product: No data available.

Aspiration Hazard

Product: No data available.

Other effects: No data available.
SECTION 12: Ecological information

Ecotoxicity:

Acute hazards to the aquatic environment:

Fish
Product: LL50 (Rainbow Trout, 96 h): >= 100 mg/l

Aquatic Invertebrates
Product: EL50 (Water Flea, 48 h): > 100 mg/l

Chronic hazards to the aquatic environment:

Fish
Product: No data available.

Aquatic Invertebrates
Product: No data available.

Toxicity to Aquatic Plants
Product: EL50 (Algae (Pseudokirchneriella subcapitata), 72 h): > 100 mg/l

Persistence and Degradability

Biodegradation
Product: 21 % (28 d, Ready Biodegradability: CO2 Evolution Test)

BOD/COD Ratio
Product: No data available.

Bioaccumulative Potential

Bioconcentration Factor (BCF)
Product: No data available.

Partition Coefficient n-octanol / water (log Kow)
Product: No data available.

Mobility in Soil:
No data available.

Other Adverse Effects:
No data available.

SECTION 13: Disposal considerations

Waste treatment methods

General information: No data available.

Disposal methods: Dispose of waste and residues in accordance with local authority requirements. Incinerate. Since emptied containers retain product residue, follow label warnings even after container is emptied.
SECTION 14: Transport information

Important Note: Shipping descriptions may vary based on mode of transport, quantities, package size, and/or origin and destination. Consult your company's Hazardous Materials/Dangerous Goods expert for information specific to your situation.

DOT

Class 9, Packing Group III when liquid is offered for transport or is transported, in bulk packaging, at or above 100°C and below its flash point; otherwise, not regulated.

Possible Shipping Description(s):

UN 3257 Elevated temperature liquid, n.o.s. (molten resin) 9 III

IMDG - International Maritime Dangerous Goods Code

Class 9, Packing Group III when liquid is offered for transport or is transported at or above 100°C and below its flash point; otherwise, not regulated.

Possible Shipping Description(s):

UN 3257 ELEVATED TEMPERATURE LIQUID, N.O.S. (molten resin) 9 III

IATA

Class Solid forms of this product are not regulated. Forbidden on aircraft if transported molten in bulk at temperatures equal to or exceeding 100 C (212 F).

SECTION 15: Regulatory information

Safety, health and environmental regulations/legislation specific for the substance or mixture.: 

This product has been classified in accordance with hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations.

WHMIS (Canada) Status: controlled
WHMIS (Canada) Hazard Classification: D/2/B

SARA 311-312 Hazard Classification(s):
immediate (acute) health hazard

US EPCRA (SARA Title III) Section 313 - Toxic Chemical List
NONE

OSHA: hazardous
TSCA (US Toxic Substances Control Act): This product is listed on the TSCA inventory. Any impurities present in this product are exempt from listing.

DSL (Canadian Domestic Substances List) and CEPA (Canadian Environmental Protection Act): This product is listed on the DSL. Any impurities present in this product are exempt from listing.

AICS / NICNAS (Australian Inventory of Chemical Substances and National Industrial Chemicals Notification and Assessment Scheme): This product is listed on AICS or otherwise complies with NICNAS.

MITI (Japanese Handbook of Existing and New Chemical Substances): This product is listed in the Handbook or has been approved in Japan by new substance notification.

ECL (Korean Toxic Substances Control Act): This product is not listed on the Korean inventory. In Korea, its use is restricted to research and development purposes only. 2004-3-2729

Philippines Inventory (PICCS): This product is listed on the Philippine Inventory or otherwise complies with PICCS.

Inventory of Existing Chemical Substances in China: All components of this product are listed on the Inventory of Existing Chemical Substances in China (IECSG).

SECTION 16: Other information

HMIS® Hazard Ratings: Health - 2, Flammability - 1, Chemical Reactivity - 0

HMIS® rating involves data interpretations that may vary from company to company. They are intended only for rapid, general identification of the magnitude of the specific hazard. To deal adequately with the safe handling of this material, all the information contained in this MSDS must be considered.

Revision Information: Not relevant.

Key literature references and sources for data: No data available.

Training information: No data available.

Issue Date: 05/18/2015

SDS No.: 

Disclaimer: This information is provided without warranty. The information is believed to be correct. This information should be used to make an independent determination of the methods to safeguard workers and the environment.