EASTMAN MATERIAL SAFETY DATA SHEET

Revision Date: 07/29/2008 MSDSSG/ANSI/EN/150000015814/Version 4.1

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

| Product Name | Texanol(TM) 2,2,4-Trimethyl-1,3-pentanediol |
|----------------------------------|--|
| | Monoisobutyrate |
| Product Identification Number(s) | 02104-SG, P02104S5, P02104S7, P02104S8, |
| | P02104S4, P02104S1, P02104S2, P02104S3, |
| | P02104SI, P02104S0, P02104S6, P02104SB |
| Manufacturer/Supplier | Eastman Chemical Company |
| | 200 South Wilcox Drive |
| | Kingsport, TN 37660-5280 |
| | US |
| | +14232292000 |
| MSDS Prepared by | Eastman Product Safety and Health |
| Chemical Name | propanoic acid, 2-methyl-, monoester with 2,2,4- |
| | trimethyl-1,3-pentanediol |
| Synonym(s) | 02104-0D 000701 |
| Molecular Formula | C12H24O3 |
| Molecular Weight | 216.32 |
| Product Use | coalescing agent for emulsions |
| OSHA Status | |
| | |

For emergency health, safety, and environmental information: telephone (86) 532 83889090 in China; 60-9-583-9696 in Malaysia; (65) 6831-3233 in Singapore and other Asia Pacific regions; or 00-1-423-229-4511 in the United States.

For emergency transportation information: telephone (86) 532 83889090 in China; (65) 6831-3233 in Singapore and other Asia Pacific regions; or 00-1-423-229-4511 in the United States. Identify the call as a transportation emergency.

2. COMPOSITION INFORMATION ON INGREDIENTS

(Typical composition is given, and it may vary. A certificate of analysis can be provided, if available.)

Weight % 100% <u>**Component**</u> 2,2,4-trimethyl-1,3-pentanediol monoisobutyrate

CAS Registry No. 25265-77-4

3. HAZARDS IDENTIFICATION

LOW HAZARD FOR USUAL INDUSTRIAL OR COMMERCIAL HANDLING BY TRAINED PERSONNEL

HMIS® Hazard Ratings: Health - 1, 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.

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4. FIRST-AID MEASURES

Inhalation: If symptomatic, move to fresh air. Get medical attention if symptoms persist. **Eyes:** Any material that contacts the eye should be washed out immediately with water. If easy to do,

remove contact lenses. Get medical attention if symptoms persist.
 Skin: Wash with soap and water. Get medical attention if symptoms occur.
 Ingestion: Seek medical advice.

5. FIRE FIGHTING MEASURES

Extinguishing Media: water spray, dry chemical, carbon dioxide, foam Special Fire-Fighting Procedures: Wear self-contained breathing apparatus and protective clothing. Hazardous Combustion Products: carbon dioxide, carbon monoxide Unusual Fire and Explosion Hazards: none

6. ACCIDENTAL RELEASE MEASURES

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

7. HANDLING AND STORAGE

Personal Precautionary Measures: No special precautionary health measures should be needed under anticipated conditions of use.

Prevention of Fire and Explosion: Keep from contact with oxidizing materials. **Storage:** Keep container closed.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

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

- **Ventilation:** Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. Supplementary local exhaust ventilation, closed systems, or respiratory and eye protection may be needed in special circumstances; such as poorly ventilated spaces, heating, evaporation of liquids from large surfaces, spraying of mists, mechanical generation of dusts, drying of solids, etc.
- **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.

Eye Protection: It is a good industrial hygiene practice to minimize eye contact. **Skin Protection:** It is a good industrial hygiene practice to minimize skin contact.

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Recommended Decontamination Facilities: eye bath, washing facilities

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical Form: liquid Color: colorless Odor: mild Specific Gravity: 0.95 (20 °C) Vapor Pressure: 20 °C; 0.013 mbar Vapor Density: 7.5 Freezing Point: -50 °C Boiling Point: 254 - 260.5 °C Evaporation Rate: 0.002 (n-butyl acetate = 1) Viscosity: 13.5 mPa.s (20 °C), Solubility in Water: 858 mg/l Octanol/Water Partition Coefficient: P: 2,951; log P: 3.47 Flash Point: 120 °C (Cleveland open cup) Autoignition Temperature: 393 °C (ASTM D2155) Thermal Decomposition Temperature: 255 °C (DTA) (highest temperature tested; no exotherm observed)

10. STABILITY AND REACTIVITY

Stability:

Incompatibility: Hazardous Polymerization: Stable; however, material can decompose at elevated temperatures. Material reacts with strong oxidizing agents. Will not occur.

11.TOXICOLOGICAL INFORMATION

Acute toxicity data, if available, are listed below. Additional toxicity data may be available on request.

Oral LD-50:(rat) Oral LD-50:(male mouse) Inhalation LC-50: (rat) Dermal LD-50: (guinea pig) Dermal LD-50: (rabbit) Skin Irritation (guinea pig) Eye Irritation (rabbit, unwashed eyes) Eye Irritation (rabbit, washed eyes) Skin Sensitization: (guinea pig) 6,517 mg/kg 1,600 - 3,200 mg/kg 6 h: >3.55 mg/l (highest concentration tested) > 19,000 mg/kg (highest dose tested) > 15,200 mg/kg (highest dose tested) slight slight to moderate slight none

12. ECOLOGICAL INFORMATION

Acute toxicity data, if available, are listed below. Additional toxicity data may be available on request.

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This material is readily biodegraded and is not likely to bioconcentrate. It is expected to have a low potential to affect aquatic organisms,

Oxygen Demand Data:

BOD-5 and BOD-20 were not determined because the aqueous solubility of the test article was below that which is required for these tests.

COD (Chemical Oxygen Demand):: 2.2 g/g ThBOD: 2.4 g/g

Acute Aquatic Effects Data:

96 h LC-50 (fathead minnow): 33 mg/l NOEC: 16 mg/l
96 h LC-50 (sideswimmer): > 95 mg/l (highest concentration tested)
48 h EC-50 (daphnid): 147.8 mg/l NOEC: 28.4 mg/l
96 h LC-50 (pill bug): > 95 mg/l (highest concentration tested)
96 h LC-50 (flatworm): 38 mg/l NOEC: 9.5 mg/l
96 h LC-50 (aquatic earthworm): 30.4 mg/l NOEC: 9.5 mg/l
96 h LC-50 (ramshorn snail): > 95 mg/l (highest concentration tested)
72 h EC-50 (Selenastrum capricornutum): 18.4 mg/l

13. DISPOSAL CONSIDERATIONS

Discharge, treatment, or disposal may be subject to national, state, or local laws. Incinerate.

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.

ADR/RID:

Class not regulated

Sea - IMDG (International Maritime Dangerous Goods)

Class not regulated

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Air - ICAO (International Civil Aviation Organization)

Class not regulated

15. REGULATORY INFORMATION

SARA 313: none, unless listed below

Carcinogenicity Classification (components present at 0.1% or more): none, unless listed below

- **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.
- EINECS (European Inventory of Existing Commercial Chemical Substances): This product is listed on EINECS or otherwise complies with EINECS requirements.
- 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 listed on the Korean inventory or otherwise complies with the Korean Toxic Substances Control Act.
- 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 (IECSC).

16.OTHER INFORMATION

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

The information contained herein is based on current knowledge and experience; no responsibility is accepted that the information is sufficient or correct in all cases. Users should consider these data only as a supplement to other information. Users should make independent determinations of suitability and completeness of information from all sources to assure proper use and disposal of these materials, the safety and health of employees and customers, and the protection of the environment.

Highlighted areas indicate new or changed information.

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