

Material Safety Data Sheet

1. Chemical Product and Company Identification

Gulf Bayport Chemicals L.P.

9700 Bayport Boulevard
Pasadena, Texas 77507
Information: 281-291-2300

Emergency Contact:
Chemtrec 1-800-424-9300

Chemical Name:	MTHPA-EG 6K	Creation Date:	12/17/04
Formula:	C ₉ H ₁₀ O ₃	Revision Date:	01/09/09
Chemical Family:	Alicyclic Anhydride		
Synonyms:	Methyltetrahydrophthalic Anhydride with Benzyltriethylammonium Chloride		

2. Chemical Composition

<u>Component</u>	<u>Weight%</u>	<u>TLV</u>	<u>Cas No.</u>
Methyltetrahydrophthalic Anhydride	95-99	None Est.	11070-44-3
Benzyltriethylammonium Chloride	0.5-5	None est.	56-37-1

3. Hazard Identification

HMIS Hazard Rating	4-Extreme
Health	2
Fire	1
Reactivity	0

Primary Routes of Exposure: Inhalation, Ingestion, Eye Contact, Skin Contact

Inhalation:	Mists or vapors will most likely be irritating to the respiratory tract.
Ingestion:	May cause irritation to the mouth, throat, and stomach.
Skin Contact:	May cause moderate skin irritation. As with other anhydrides, repeated or prolonged contact may result in sensitization
Eye Contact:	Direct contact with mists or liquid is moderately irritating to the eyes.

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4. First Aid Measures

- Eyes:** Flush eyes with large amounts of running water for at least 15 minutes. Hold eyelids apart to ensure rinsing of the entire surface of the eye and lids with water. Get immediate medical attention. If physician not available, flush for additional 15 minutes and then transport victim to medical care.
- Skin:** Wash affected areas with plenty of water, and soap if available, for several minutes. Remove and clean contaminated clothing and shoes. Seek medical attention if irritation develops.
- Ingestion:** If swallowed, immediately give 3-4 glasses of water. DO NOT induce vomiting. If vomiting occurs, give fluids again. Get immediate medical attention. Have physician determine if patient's condition allows induction of vomiting or evacuation of stomach.
- Inhalation:** Remove from area to fresh air. If not breathing, clear airway and start artificial respiration. If victim is having trouble breathing, give supplemental oxygen, if available. Get immediate medical attention

5. Fire Fighting Measures

- Extinguishing Media:** Foam, Dry Chemical, Water, Carbon Dioxide
- Special Fire Fighting Procedures:** Must wear NIOSH/MSHA approved self-contained breathing apparatus and protective clothing. Cool fire-exposed containers with water spray.
- Unusual Fire & Explosion Hazards:** Products of combustion may be toxic.

6. Accidental Release Measures

Caution! Floors may become slippery. Wear appropriate protective gear and NIOSH/MSHA approved respirator where mists or vapors of unknown concentrations may be generated (self-contained breathing apparatus preferred). Dike and contain spill with inert material (sand, earth, etc.). Transfer the liquid and solid separately to containers for recovery or disposal. Wet residue with water and absorb with inert material (sand, earth...) and transfer into appropriate containers for disposal. Keep spill out of sewers and open bodies of water.

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7. Handling and Storage

Handling: Wear personal protective equipment. Use adequate ventilation. Prevent release of mists and vapors into the workplace air. Wash hands thoroughly after handling this material and before eating, drinking or smoking.

Storage: Store in a cool, dry area. Keep containers closed when not in use.

8. Exposure Control and Personal Protection

Ventilation Type: In processes where mists or vapors may be generated, proper ventilation must be provided in accordance with good ventilation practices.

Respiratory Protection: In processes where mists or vapors may be generated, a NIOSH/MSHA jointly approved respirator is advised in the absence of proper environmental controls.

Protective Gloves: Rubber or plastic, when needed, to prevent skin contact.

Eye Protection: Wear chemical goggles where there is a potential for eye contact. Use safety glasses with side shields under normal use conditions.

Other Protective Equipment: Eye wash; safety shower; protective clothing, (long sleeves, coveralls or other, as appropriate), when needed, to prevent skin contact.

9. Physical and Chemical Properties

Appearance: Clear, light yellow liquid
Viscosity (Cp): 56
Molecular Weight: 166.18
Evap. Rate(Butyl Acetate=1): <1
Solubility in Water: slightly soluble with hydrolysis
pH: Acidic
Odor: Slight
Boiling Point: Not known
Vapor Density: 5.5
Vapor Pressure(mm Hg): <0.01

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9. Physical and Chemical Properties (cont.)

Percent Volatile	(by weight) Nil
Melting Point	Not known
Freezing Point	Not Known
Specific Gravity (H ₂ O=1)	1.199@20°C
Flash Point	>200°C

10. Stability and Reactivity Information

Chemical Stability:	Stable
Conditions to Avoid:	Moisture, heat
Incompatible Materials:	Strong bases, oxidizing agents
Decomposition Products:	Thermal decomposition may produce toxic organic vapors/fumes and oxides of carbon.
Hazardous Polymerization:	Will not occur

11. Toxicological Information

The toxicity information provided below is for the closely related materials, Methyltetrahydrophthalic anhydride (mixed isomers) and Tetrahydrophthalic anhydride

Acute

For Methyltetrahydrophthalic Anhydride

- oral LD50 (rat): 4428 mg/kg
- oral LDLo (rat): 2140 mg/kg (RTECS)
- dermal LD50 (rat): >2000 mg/kg
- skin irritation(rabbit):mild irritant(primary irritation index =1.56

For the related material, Tetrahydrophthalic anhydride:

- eye irritation (rabbit): moderate irritant (RTECS)

For N-Benzyl-N,N,N-triethylammonium Chloride:

- oral LD50 (rat): 431 mg/kg
- eye irritation: irritant
- skin irritation: irritant

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11. Toxicological Information (cont.)

Genotoxicity/Mutagenicity

For Tetrahydrophthalic anhydride:

- mutagenicity (Ames assay – Salmonella sp.): Not a mutagen with or without metabolic activation.

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Carcinogen Status: NTP: No IARC: No OSHA: No

12. Ecological Information

Aquatic Toxicity

For Tetrahydrophthalic anhydride:

- LC50 (Leuciscus idus – 48-hour – static): 610 mg/l
- EC50 (Daphnia magna – 24-hour): 117 mg/l
- EC50 (algae – Scenedesmus sp.-72-hour): 65.7 mg/l
- EC10 (bacteria – Pseudomonas sp.- 16-hrs): 89 mg/l

13. Disposal Information

Dispose of in compliance with all Federal, state and local laws and regulations.

14. Transportation Information

US Hazards Material
Regulation DOT 49 CFR:

Not Regulated

15. Regulatory Information

TSCA: All substances are listed on the TSCA inventory

Sara Title III

Section 302/304	Not Listed
Section 311/312	Acute
Section 313 Toxic Chemicals:	Not Listed
CERCLA RQ:	Not Listed
TSCA 12(b) Export Notification:	Not Listed
California Proposition 65:	Not Listed

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16. Other Information

MSDS Summary of Changes

01/09/09	Changed MSDS format	D.Greer
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