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# SAFETY DATA SHEET

## Dibasic Ester

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### 1. IDENTIFICATION OF SUBSTANCE / MIXTURE AND OF SUPPLIER

**Product Identifier:** High Purity Chemicals  
**Synonyms:** Dibasic Ester mixture; DBE  
**Other means of identification:** Not available  
**Recommended use of the chemical and restrictions on use:**  
General use solvent

**Supplier Details:** Solvents & Petroleum Service, Inc.  
1405 Brewerton Rd. Syracuse, NY 13208  
800-315-4467  
mark@solventsandpetroleum.com

**Emergency Contact:** CHEMTREC: 1.800.424.9300 (USA)

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### 2. HAZARDS IDENTIFICATION

**Emergency Overview:**

Causes eye and primary skin irritation. Vapors may irritate eyes, nose, and throat. Product is not expected to present any unusual hazards under fire or spill conditions.

**OSHA Hazards:**

Irritant, Target organ effect

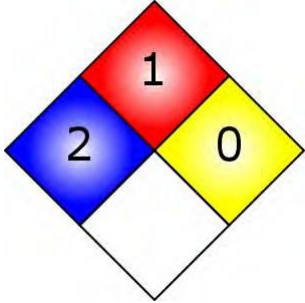
**Target Organs:**

Eyes, Nose

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### NFPA



### GHS label elements, including precautionary statements



### Signal Word:

WARNING!

### Hazard statement(s)

H319

Causes serious eye irritation.

H402

Harmful to aquatic life.

### Precautionary statement(s)

P305 + P351 + P338

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Seek medical attention.

### GHS Classification(s)

Acute aquatic toxicity (Category 3)

Eye irritation (Category 2A)

### Other hazards which do not result in classification:

### Potential Health Effects:

Organ	Description
Eyes	Can cause eye irritation.
Ingestion	Can be harmful if ingested.
Inhalation	Can be harmful if inhaled. Can cause respiratory tract irritation.
Skin	Can be harmful if absorbed through skin. Can cause skin irritation.

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### 3. COMPOSITION AND INFORMATION ON INGREDIENTS

**Chemical identity:** Dibasic Ester  
**Common name / Synonym:** Dibasic Ester mixture; DBE

% Weight	Material	CAS
10-30	Dimethyl Adipate	627-93-0
40-70	Dimethyl Glutarate	1119-40-0
10-30	Dimethyl Succinate	106-65-0

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### 4. FIRST AID MEASURES

#### General advice

Take proper precautions to ensure your own health and safety before attempting rescue and providing first aid. Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

#### Skin

Wash skin with soap and copious amounts of water.

#### Inhalation

Remove person to fresh air. If signs/symptoms continue, get medical attention. Give oxygen or artificial respiration as needed.

#### Eyes

Flush eyes with water as a precaution.

#### Ingestion

DO NOT induce vomiting. If vomiting does occur, have victim lean forward to prevent aspiration. Rinse mouth with water. Seek medical attention. Never give anything by mouth to an unconscious individual.

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### 5. FIRE FIGHTING MEASURES

#### Suitable (and unsuitable) extinguishing media:

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

#### Specific hazards arising from the chemical (e.g., nature of any hazardous combustion products):

Carbon oxides expected to be the primary hazardous combustion product.

#### Special protective equipment and precautions for firefighters:

Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes. Keep unopened containers cool by spraying with water.

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### Flammable Properties

#### Classification

Not flammable or combustible.

#### Flash point

100 °C (212 °F) - closed cup

#### Autoignition temperature

370 °C (698 °F)

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## 6. ACCIDENTAL RELEASE MEASURES

### Personal precautions, protective equipment and emergency procedures:

Do not inhale vapors, mist or gas.

### Environmental precautions:

Stop leak. Contain spill if possible and safe to do so. Prevent product from entering drains.

### Methods and materials for containment and cleaning up:

Absorb with an inert dry material and place in an appropriate waste disposal container. Keep disposal containers closed when finished.

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## 7. HANDLING AND STORAGE

### Precautions for safe handling:

Provide proper exhaust ventilation system in areas where dust forms. Take normal fire prevention measures.

### Conditions for safe storage, including any incompatibilities:

Container must be sealed tightly and kept in a cool, dry, well-ventilated space.

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## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

### Control parameters, e.g., occupational exposure limit values or biological limit values:

#### Occupational Exposure Limits

Component	Source	Type	Value	Note
Dibasic Ester	/		No exposure limit	

### Appropriate engineering controls:

General room or local exhaust ventilation is usually required to meet exposure limit(s). Electrical equipment should be grounded and conform to applicable electrical code.

### Individual protection measures, such as personal protective equipment:

#### Respiratory protection:

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose

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combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

### Hand protection:

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

### Eye protection:

Use chemical safety goggles and/or a full face shield where splashing is possible. Use equipment approved by appropriate government standards, such as NIOSH (US) or EN166 (EU) Maintain eye wash fountain and quick-drench facilities in work area.

### Skin and body protection:

Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact.

### Hygiene measures:

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance (physical state, color, etc.)</b>	Liquid.
<b>Odor</b>	Specific data not available
<b>Odor threshold</b>	Specific data not available
<b>pH</b>	Specific data not available
<b>Freezing point</b>	Specific data not available
<b>Initial boiling point and boiling range</b>	225 °C (437 °F)
<b>Flash point</b>	100 °C (212 °F) - closed cup
<b>Evaporation rate</b>	Specific data not available
<b>Flammability (solid, gas)</b>	Not Flammable or Combustible
<b>Upper / Lower flammability or explosive limits</b>	8.0% (V) / 0.9% (V)
<b>Vapor pressure</b>	0.3 hPa (0.2 mmHg) at 20 °C (68 °F)
<b>Vapor Density</b>	Specific data not available
<b>Relative Density</b>	1.092 g/cm <sup>3</sup>
<b>Solubility(ies)</b>	Miscible in alcohols, ketones, and ethers.
<b>Partition coefficient n-octanol/water(ies)</b>	Specific data not available
<b>Auto-ignition temperature</b>	370 °C (698 °F)
<b>Decomposition temperature</b>	Specific data not available

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### 10. STABILITY AND REACTIVITY

<b>Chemical Stability</b>	Stable under recommended storage conditions.
<b>Possibility of hazardous reactions</b>	No data available
<b>Conditions to avoid (e.g., static discharge, shock or vibration)</b>	No data available
<b>Incompatible materials</b>	Acids, bases, oxidizing agents, reducing agents
<b>Hazardous decomposition products</b>	Carbon oxides are expected to be, under fire conditions, the primary hazardous decomposition products.

### 11. TOXICOLOGICAL INFORMATION

- Dimethyl Glutarate 1119-40-0

#### Product Summary:

No data available for the mutagenic, teratogenic, or reproductive effects of the product. No data available to designate product as an aspiration hazard or to cause specific target organ toxicity through single or repeated exposure.

#### Acute Toxicity:

No data available	LD50 Oral	LC50 Inhalation	LD50 Dermal
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#### Irritation:

##### Eyes

Rabbit - no eye irritation

##### Respiratory or Skin Sensitization

No data available

##### Skin

Rabbit - no skin irritation

#### Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

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### Other Hazards

Organ	Description
Eyes	Can be irritating to the eyes.
Ingestion	Can be harmful if ingested.
Inhalation	Can be harmful if inhaled. Can be irritating to the respiratory tract.
Skin	Can be harmful if absorbed through skin. Can be irritating to the skin.

• Dimethyl Succinate 106-65-0

### Product Summary:

No data available for the mutagenic, teratogenic, or reproductive effects of the product. No data available to classify product as an aspiration hazard or to cause specific target organ toxicity through single or repeated exposure.

### Acute Toxicity:

LD50 (Dermal)	Rabbit	> 5,000 mg/kg	
LD50 (Oral)	Rat	> 5,000 mg/kg	

### Irritation:

#### Eyes

Rabbit - moderate eye irritation

#### Respiratory or skin Sensitization

In vivo assay - mouse - Did not cause sensitization on laboratory animals. - OECD Test Guideline 429

#### Skin

Rabbit - no skin irritation

### Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

### Other Hazards

Organ	Description
Eyes	Irritating to the eyes.

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Ingestion	Can be harmful if ingested.
Inhalation	Can be harmful if inhaled. Irritating to the respiratory tract.
Skin	Can be harmful if absorbed through skin. Irritating to the skin.

- Dimethyl Adipate 627-93-0

### Product Summary:

Laboratory tests have shown teratogenic effects and reproductive disorders in rats. No data available for the mutagenic effects of the product. No data available to designate product as an aspiration hazard or to cause specific target organ toxicity through single or repeated exposure.

### Acute Toxicity:

Dermal LD50	Rabbit	> 1,000 mg/kg	
LD50 Oral	Rat	> 5,000 mg/kg	

### Irritation:

#### Eyes

No data available.

#### Respiratory or Skin Sensitization

No data available

#### Skin

Rabbit - no skin irritation

### Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

### Other Hazards

Organ	Description
Eyes	Can be irritating to the eyes.
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Skin	Can be harmful if absorbed through skin. Can be irritating to the skin.



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### 12. ECOLOGICAL INFORMATION

- Dimethyl Glutarate 1119-40-0
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**Ecotoxicity (aquatic and terrestrial, where available):**

**Ecotoxicity**

No data available

**Persistence and degradability:**

No data available

**Bioaccumulative potential:**

No data available

**Other adverse effects:**

No data available

- Dimethyl Succinate 106-65-0
- 

**Ecotoxicity (aquatic and terrestrial, where available):**

**Ecotoxicity**

No data available

**Persistence and degradability:**

No data available

**Bioaccumulative potential:**

No data available

**Other adverse effects:**

No data available

- Dimethyl Adipate 627-93-0
- 

**Ecotoxicity (aquatic and terrestrial, where available):**

**Ecotoxicity**

No data available

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## Dibasic Ester

**Persistence and degradability:**

No data available

**Bioaccumulative potential:**

No data available

**Other adverse effects:**

No data available

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### 13. DISPOSAL CONSIDERATIONS

**Description of waste residues and information on their safe handling and methods of disposal, including the disposal of any contaminated packaging:**

Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

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### 14. TRANSPORT INFORMATION

**Description of waste residues and information on their safe handling and methods of disposal:**

<b>UN number</b>	Not a dangerous good.
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**IMDG**

UN-Number: Not a dangerous good.

Marine pollutant: No

**IATA**

UN-Number: Not a dangerous good.

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### 15. REGULATORY INFORMATION

**Safety, health and environmental regulations specific for the product in question:****OSHA Hazards**

Irritant, Target organ effect

All ingredients are on the following inventories or are exempted from listing

Country	Notification
Australia	AICS
Canada	DSL
China	IECS
European Union	EINECS
Japan	ENCS/ISHL

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## Dibasic Ester

Korea	ECL
New Zealand	NZIoC
Philippines	PICCS
United States of America	TSCA

### SARA 302 Components

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

### SARA 313 Components

SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

### SARA 311/312 Hazards

Acute Health Hazard  
Chronic Health Hazard

### CERCLA

No chemicals in this material with known CAS numbers are subject to the reporting requirements of CERCLA

### Massachusetts Right To Know Components

No components are subject to the Massachusetts Right to Know Act.

### Pennsylvania Right To Know Components

Dimethyl Adipate CAS-No. 627-93-0

Dimethyl Glutarate CAS-No. 1119-40-0

Dimethyl Succinate CAS-No. 106-65-0

### New Jersey Right To Know Components

Dimethyl Adipate CAS-No. 627-93-0

Dimethyl Glutarate CAS-No. 1119-40-0

Dimethyl Succinate CAS-No. 106-65-0

### California Prop 65 Components

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

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### **16. OTHER INFORMATION: INCLUDING INFORMATION ON PREPARATION AND REVISION OF THE SDS**

#### **Disclaimer**

The information on this MSDS was obtained from reliable sources. However, the information is provided without any warranty, expressed or implied, regarding its correctness. Some information presented and conclusions drawn herein are from sources other than direct test data on the substance itself. The conditions or methods of handling, storage, use and disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, SOLVENTS & PETROLEUM SERVICE, INC. does not assume responsibility and expressly disclaims liability for loss, damage, or expense arising out of or in any way connected with handling, storage, use, or disposal of this product. If the product is used as a component in another product, this MSDS information may not be applicable. Information is correct to the best of our knowledge at the date of the MSDS publication.