

# Material Safety Data Sheet

## Fullerene C60 Mal-BIS

Revision Date: 2009-09-01

Date Issued: 2009-08-12

### 1 IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY / UNDERTAKING

<b>Product name</b>	Fullerene C60 Mal-BIS
<b>Product code</b>	CP-0039-HP
<b>Supplier</b>	IoLiTec Ionic Liquids Technologies GmbH Ferdinand-Porsche-Straße 5/1 D-79211 Denzlingen Germany
<b>Telephone</b>	+49 (0)7666 - 9129572
<b>Fax</b>	+49 (0)7666 - 9129345
<b>Emergency telephone</b>	+49 (0)179-5322578
<b>Email</b>	msds@iolitec.de

### 2 HAZARDS IDENTIFICATION

#### Special indication of hazards to humans and the environment

Not hazardous according to Directive 67/548/EEC.

### 3 COMPOSITION / INFORMATION ON INGREDIENTS

<b>Ingredient name</b>	Methano[60]fullerene bis dicarboxylic acid
<b>Empirical Formula</b>	C60(C3H2O4)2
<b>CAS No.</b>	none
<b>Molecular weight</b>	924.73 amu

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### 4 FIRST AID MEASURES

<b>General</b>	Contaminated clothing should be removed and washed before being reused.
<b>Inhalation</b>	Move the exposed person to fresh air at once. If breathing becomes difficult, call a physician.
<b>Ingestion</b>	Immediately rinse mouth and provide fresh air. Do not induce vomiting. Get medical attention immediately.
<b>Skin</b>	Wash the skin immediately with soap and copious amount of water.
<b>Eyes</b>	Promptly wash eyes with plenty of water while lifting the eye lids for. Continue to rinse for at least 15 minutes. Get medical attention immediately. Continue to rinse.

### 5 FIRE FIGHTING MEASURES

<b>Extinguishing media</b>	Water, CO2, dry chemical powder or appropriate foam.
<b>Specific risks</b>	Specific Hazard(s): Emits toxic fumes under fire conditions.
<b>Protective measures in fire</b>	Wear self-contained breathing apparatus as combustion may produce hazardous fumes.

### 6 ACCIDENTAL RELEASE MEASURES

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**Personal precautions during spill** Wear protective clothing and avoid inhalation of powder, fume and vapor as well as skin or eye contact.

**Precautions to protect environment** Avoid washing into water courses. Avoid contaminating public drains or water supply.

**Spill cleanup methods** Avoid contact with skin or inhalation of spillage, dust or vapor, Avoid dust formation. Collect and reclaim or dispose in sealed containers in license waste. Extinguish all ignition sources. Avoid sparks, flames, heat and smoking. Ventilate.

## 7 HANDLING AND STORAGE

**Handling precautions** Do not breathe dust. Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated exposure.

**Storage precautions** Keep tightly closed.

**Special requirements** Heat-, light-, and moisture-sensitive.

## 8 EXPOSURE CONTROLS AND PERSONAL PROTECTION

**Protective equipment** Safety goggles. Chemical resistant gloves.  
Protective clothing.

**Process control measures** Provide eyewash station and safety shower.

**Ventilation** Provide adequate general and local exhaust ventilation. Mechanical exhaust required.

**Respirators** Dust mask type N95(US) or P1(EN143) if TLV is exceeded

**Exposure Limits**

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TLV: 3.5 mg/m<sup>3</sup> (ACGIH)

PEL : 3.5 mg/m<sup>3</sup> (OSH)

### 9 PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance</b>	solid
<b>Odor/taste</b>	No characteristic odor
<b>PH</b>	N/A
<b>Boiling Point</b>	N/A
<b>Melting Point</b>	> 300 °C
<b>Flash Point</b>	N/A
<b>Flammability</b>	N/A
<b>Oxidizing Properties</b>	N/A
<b>Explosive Properties</b>	N/A
<b>Explosion Limits</b>	N/A
<b>Vapor Pressure</b>	N/A
<b>SG/Density</b>	N/A
<b>Partition Coefficient</b>	N/A
<b>Viscosity</b>	N/A
<b>Vapor Density</b>	N/A
<b>Saturated Vapor Conc.</b>	N/A
<b>Evaporation Rate</b>	N/A
<b>Bulk Density</b>	N/A
<b>Decomposition Temp.</b>	N/A
<b>Solvent Content</b>	N/A
<b>Water Content</b>	N/A
<b>Surface Tension</b>	N/A
<b>Conductivity</b>	N/A

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**Solubility in water** insoluble

### 10 STABILITY AND REACTIVITY

**Stability** Stable.

**Conditions to avoid** Strong oxidizers (chlorate, strong acids), excessive heat or flame in air

**Hazardous decomposition products** Not known.

### 11 TOXICOLOGICAL INFORMATION

**Ingestion** May be harmful if swallowed.

**Inhalation** May be harmful if inhaled. Material is irritating to mucous membranes and upper respiratory tract.

**Skin** Causes skin irritation. May be harmful if absorbed through the skin.

**Eyes** Causes eye irritation

### 12 ECOLOGICAL INFORMATIONS

No data available.

### 13 DISPOSAL CONSIDERATIONS

**Disposal method** Contact specialist disposal companies. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

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Dispose of in accordance with Local Authority requirements.  
Recover and reclaim or recycle, if practical.

### 14 TRANSPORT INFORMATION

<b>General</b>	Not classified as dangerous for transport purposes.
<b>UN No.</b>	0
<b>Road transport notes</b>	Not classified as dangerous for road transport.
<b>Rail transport notes</b>	Not classified as dangerous for rail transport.
<b>Sea transport notes</b>	Not classified as dangerous for sea transport.
<b>Air transport notes</b>	Not classified as dangerous for air transport.

### 15 REGULATORY INFORMATION

Not hazardous according to Directive 67/548/EEC

Caution: Substance not yet fully tested (EU).

<b>Germany:</b>	WKG 2 self classification
<b>Label for supply</b>	Xi, Irritant
<b>Risk phrases</b>	
R: 36/37	Irritating to eyes and respiratory system
<b>Safety phrases</b>	
S26-36	In case of contact with eyes, promptly wash eyes with plenty of water while lifting the eye lids. Get medical attention immediately. Wear suitable protective clothing.

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### 16 OTHER INFORMATION

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