

Material Safety Data Sheet

Fullerene C60 Mal

Revision Date: 2009-09-01

Date Issued: 2009-08-12

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

Product name	Fullerene C60 Mal
Product code	CP-0038-HP
Supplier	IoLiTec Ionic Liquids Technologies GmbH Ferdinand-Porsche-Straße 5/1 D-79211 Denzlingen Germany
Telephone	+49 (0)7666 - 9129572
Fax	+49 (0)7666 - 9129345
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Email	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

Ingredient name	3'H-Cyclopropa[1,9][5,6]fullerene-C60-lh-3',3'-dicarboxylic acid
Empirical Formula	C60C3H2O4
CAS No.	none
Molecular weight	822.64 amu

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4 FIRST AID MEASURES

General	Contaminated clothing should be removed and washed before being reused.
Inhalation	Move the exposed person to fresh air at once. If breathing becomes difficult, call a physician.
Ingestion	Immediately rinse mouth and provide fresh air. Do not induce vomiting. Get medical attention immediately.
Skin	Wash the skin immediately with soap and copious amount of water.
Eyes	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

Extinguishing media	Water, CO ₂ , dry chemical powder or appropriate foam.
Specific risks	Specific Hazard(s): Emits toxic fumes under fire conditions.
Protective measures in fire	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 Store under inert gas. Light sensitive.

8 EXPOSURE CONTROLS AND PERSONAL PROTECTION

Protective equipment Safety goggles. Chemical resident 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/m³ (ACGIH)

PEL : 3.5 mg/m³ (OSH)

9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance	solid
Odor/taste	No characteristic odor
PH	N/A
Boiling Point	Sublimes
Melting Point	Sublimes
Flash Point	> 94 °C
Flammability	N/A
Oxidizing Properties	N/A
Explosive Properties	N/A
Explosion Limits	N/A
Vapor Pressure	N/A
SG/Density	N/A
Partition Coefficient	N/A
Viscosity	N/A
Vapor Density	N/A
Saturated Vapor Conc.	N/A
Evaporation Rate	N/A
Bulk Density	N/A
Decomposition Temp.	N/A
Solvent Content	N/A
Water Content	N/A
Surface Tension	N/A
Conductivity	N/A

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Solubility in water insoluble

10 STABILITY AND REACTIVITY

Stability Stable. Avoid exposure to light (may affect product quality)

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

Hazardous decomposition products CO and CO₂ when heated in air above 600°C

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

General	Not classified as dangerous for transport purposes.
UN No.	0
Road transport notes	Not classified as dangerous for road transport.
Rail transport notes	Not classified as dangerous for rail transport.
Sea transport notes	Not classified as dangerous for sea transport.
Air transport notes	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).

Germany:	WKG 3 self classification
Label for supply	Xi, Irritant
Risk phrases	
R: 36/37	Irritating to eyes and respiratory system
Safety phrases	
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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