

Material Safety Data Sheet

Fullerenes C60

Revision Date: 09/12/2010

Date Issued: 01/03/2007

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

Product name	Fullerene C60
Product code	CP-0001-UP+
Supplier	IoLiTec Ionic Liquids Technologies GmbH Salzstraße 184 D-74076 Heilbronn Germany
Telephone	+49 (0)7131-89839-0
Fax	+49 (0)7131-89839-109
Emergency telephone	+49 (0)179-5322578
Email	msds@iolitec.de

2 HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification (67/548/EEC or 1999/45/EC)

Irritating to eyes and respiratory system.

Classification (REGULATION (EC) No 1272/2008)

Serious eye damage/Eye irritation, Category 2, H319

Specific Target Organ Toxicity - Single exposure: Respiratory tract irritation,
Category 3, H335

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2.2 Label elements

Labelling (67/548/EEC or 1999/45/EC)

Hazard description:

Label for supply



Xi Irritant

Risk phrases

R36/37: Irritating to eyes and respiratory system.

Safety phrases

S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S36: Wear suitable protective clothing.

Labelling (REGULATION (EC) No 1272/2008, GHS)

Hazard statements



Warning

H-phrases

H319: Causes serious eye irritation.

H335: May cause respiratory irritation.

Precautionary statements

P-phrases

P261: Avoid breathing dust/fume/gas/mist/vapours/spray .

P280: Wear protectic gloves/protective clothing/eye protection/face protection .

P305 + P351 + P338: IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing.

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3 COMPOSITION / INFORMATION ON INGREDIENTS

Ingredient name	Fullerene
Empirical Formula	C60
CAS No.	99685-96-8
Molecular weight	720.64 amu

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 respiratory problems, artificial respiration/oxygen.
Ingestion	Immediately rinse mouth and provide fresh air. Do not induce vomiting. Get medical attention immediately.
Skin	Wash the skin immediately with soap and water.
Eyes	Promptly wash eyes with plenty of water while lifting the eye lids. Continue to rinse for at least 15 minutes. Get medical attention immediately. Continue to rinse.

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5 FIRE FIGHTING MEASURES

Extinguishing media	Water, CO ₂ , drychemical powder or appropriate foam.
Special fire fighting procedures	No special procedures required.
Unusual fire & explosion hazards	CO and CO ₂ are products of combustion. Thermal decomposition or combustion may produce dense smoke.
Protective measures in fire	Wear self-contained breathing apparatus as combustion may produce hazardous fumes.

6 ACCIDENTAL RELEASE MEASURES

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.

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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.

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 if TLV is exceeded
Exposure Limits	
TLV: 3.5 mg/m ³ (ACGIH)	
PEL : 3.5 mg/m ³ (OSHA)	

9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Brown-black
Odor/taste	No characteristic odor
PH	N/A
Boiling Point	Sublimes
Melting Point	Sublimes
Flash Point	> 94 °C

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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
Solubility in water	insoluble

10 STABILITY AND REACTIVITY

Stability	No particular stability concerns.
Conditions to avoid	Strong oxidizers (chlorate, strong acids), excessive heat or flame in air
Hazardous decomposition products	CO and CO ₂ when heated in air above 600 °C

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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

Not given.

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

General	Not classified as dangerous for transport purposes.
UN No.	0
Road transport notes	Not classified as dangerous for road transport.

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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

In accordance with local and national regulations.

16 OTHER INFORMATION

DISCLAIMER

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