

Material Safety Data Sheet

Mixed Fullerenes C60/C70

Revision Date: 02/04/2009

Date Issued: 01/03/2007

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

Product name	Fullerene C60/C70
Product code	CP-0003-TG
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
Emergency telephone	+49 (0)179-5322578
Email	msds@iolitec.de

2 HAZARDS IDENTIFICATION

Potential health effects

Immediate concerns	WARNING! Irritating to eyes and respiratory system. Avoid contact with skin, eyes and clothing. Wear protective goggles and gloves when handling this material. Wash thoroughly after handling.
Eyes	Causes irritation.
Inhalation	Causes irritation.

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3 COMPOSITION / INFORMATION ON INGREDIENTS

Ingredient name	Fullerene
Empirical Formula	C60/C70 (70:25)
CAS No.	99685-96-8/115383-22-7
Molecular weight	N/A

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.

5 FIRE FIGHTING MEASURES

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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.

7 HANDLING AND STORAGE

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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/m³ (ACGIH)

PEL : 3.5 mg/m³ (OSHA)

9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Brown-black

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Odor/taste	No characteristic odor
PH	N/A
Boiling Point	Sublimes
Melting Point	Sublimes
Flash Point	N/A
Flammability	N/A
Autoignition Temp	600 °C
Oxidizing Properties	N/A
Explosive Properties	N/A
Explosion Limits	N/A
Vapor Pressure	$8 \cdot 10^{-4}$ torr (800 K)
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.

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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
tomucous membranes and upper respiratory
tract.

Skin Causes skin irritation. May be harmful if
absorbed throught 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.

14 TRANSPORT INFORMATION

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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

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

DISCLAIMER

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