

## Safety Data Sheet

Phthalic anhydride

Version: 05.03.2001

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### 1. Chemical Product and Company Identification

Trade name : Phthalic anhydride  
Molecular formula : C<sub>8</sub>H<sub>4</sub>O<sub>3</sub>  
Molecular weight : 148,11 g/mol  
EEC number : 201-607-5

Producer : Lonza SpA  
Stabilimento di Scanzorosciate  
Via Enrico Fermi 51  
IT- 24020 Scanzorosciate, BG  
Telephone: ++39 035 652 111

Emergency telephone number : Telephone: +39 035 652 276 (24h)

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### 2. Composition/Information on Ingredients

Components	CAS-No.	Labelling	Concentration
Phthalic anhydride	85-44-9	Xn; R22-R37/38- R41-R42/43	> 99,50 %
Maleic anhydride	108-31-6	C; R22-R34-R42/43	<= 0,05 %

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### 3. Hazards Identification

Harmful if swallowed.  
Irritating to respiratory system and skin.  
Risk of serious damage to eyes.  
May cause sensitization by inhalation and skin contact.

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### 4. First Aid Measures

Inhalation : Remove from area to fresh air. If not breathing, clear airway and start artificial respiration (mouth-to-mouth, bag-mask respirator). If having trouble breathing, give supplemental oxygen. Get immediate medical attention.

Skin contact : Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes. If skin irritation appears or persists, call a physician.

Eye contact : Call a physician immediately. Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.

Ingestion : If vomiting occurs naturally, have victim lean forward to reduce risk of aspiration. Call a physician.

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### 5. Fire-fighting Measures

- Suitable extinguishing media : foam, carbon dioxide (CO<sub>2</sub>), dry powder, halons, water spray
- Specific hazards during fire fighting : Products of combustion are toxic.
- Special protective equipment for fire-fighters : In the event of fire, wear self-contained breathing apparatus. Use personal protective equipment.
- Additional advice : Water mist may be used to cool closed containers.

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### 6. Accidental Release Measures

- Personal precautions : In the case of respirable dust and/or fumes, use self-contained breathing apparatus and dust impervious protective suit.
- Environmental precautions : Inform competent authorities in case of leakage and contamination of waters, soil or drains.
- Methods for cleaning up : Collect material in a sealed container. Absorb spill with inert material (sand, earth, chemical absorbent). Do not allow to get into drains, water courses etc. Neutralize with soda or sodium bicarbonate. Avoid raising dust.

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### 7. Handling and Storage

#### Handling

- Advice on protection against fire and explosion : Take precautionary measures against static discharge.

#### Storage

- Requirements for storage areas and containers : Remove all sources of ignition. Keep container tightly closed in a dry and well-ventilated place. In preference maintain the product with inert gas (nitrogen) when it's stored to the molten state.
- Other data : Avoid dust formation.

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### 8. Exposure Controls/Personal Protection

#### Components with workplace control parameters

Phthalic anhydride (CAS-No.: 85-44-9)

ACGIH-TLV

Exposure limit(s) : 1,000 ml/m<sup>3</sup>  
Short term exposure limit : 24,000 mg/m<sup>3</sup>

Maleic anhydride (CAS-No.: 108-31-6)

ACGIH-TLV

Exposure limit(s) : 0,1 ml/m<sup>3</sup>  
Category : Carcinogenicity: group A4

#### Personal protective equipment

Hygiene measures : Remove and wash contaminated clothing and gloves, including the inside, before re-use. Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

Respiratory protection : On exposure to the molten product, a full-faced industrial gas mask with canister of type A (brown) should be provided., Wear dust filter mask when handling.

Hand protection : PVC or other plastic material gloves

Eye protection : Wear eye/face protection.

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### 9. Physical and Chemical Properties

#### Appearance

State of aggregation : solid

Form : Scales

Colour : white

Odour : pungent

#### Safety relevant data

Melting point/ range : 131,2 °C

Boiling point/range : 284,6 °C

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Density	:	1,5270 g/cm <sup>3</sup> (4,0 °C)
		1,1970 g/cm <sup>3</sup> (131,0 °C)
Bulk density	:	750,000 kg/m <sup>3</sup>
Vapour pressure	:	1,33 mbar (96,5 °C)
		10,0 mbar (134 °C)
Water solubility	:	6,00 g/l (25,0 °C)
Viscosity, dynamic	:	1,190 mPa.s (134,0 °C)
Flash point	:	open cup : 165,5 °C
		closed cup : 151,0 °C
Upper explosion limit	:	10,4 %(V)
Lower explosion limit	:	1,7 %(V)
Ignition temperature	:	580,0 °C

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### 10. Stability and Reactivity

Hazardous reactions	:	Stable at normal conditions
Conditions to avoid:	:	Dust forms flammable mixture with air. Incompatible with oxidizing agents.
Materials to avoid	:	alkalies , strong acids , oxidizing agents

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### 11. Toxicological Information

Acute oral toxicity (LD50)	:	4.020 mg/kg Species: rat
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### 12. Ecological and Ecotoxicological Information

Toxicity to fish (LC50)	:	313 mg/l Species: Golden orfe Exposure time: 48 h Method: DIN 38412 Part 15
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### 13. Disposal Considerations

Waste from residues : The organic ingredients may be incinerated in a installation approved by the competent authorities.  
Must be incinerated in a suitable incineration plant authorised by the competent authorities.  
Dispose of in compliance with all federal, state and local laws and regulations.

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### 14. Transport Information

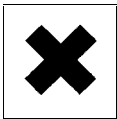

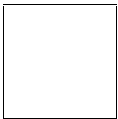
ADR : not regulated  
RID : not regulated  
IATA Cargo : not regulated  
IATA Passenger : not regulated  
IMDG-Code : not regulated

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### 15. Regulatory Information

Hazardous material	:	yes
Additional advice	:	Classification and labelling according to Directive 67/548/EEC.
EU Index No.	:	607-009-00-4
Symbols/indications of danger	:	  
	:	Harmful
R-phrase(s)		R22: Harmful if swallowed. R37/38: Irritating to respiratory system and skin. R41: Risk of serious damage to eyes. R42/43: May cause sensitization by inhalation and skin contact.
S-phrase(s)		S23: Do not breathe vapour. S24/25: Avoid contact with skin and eyes. S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. S37/39: Wear suitable gloves and eye/face protection. S46: If swallowed, seek medical advice immediately and show this container or label.

### 16. Other Information

Inventories	:	EINECS: yes, 201-607-5 Toxic Substances Control Act (TSCA) Inventory: yes
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Vertical lines on the left-hand side indicate changes since last version.

The information contained herein is believed to be correct and corresponds to the latest state of scientific and technical knowledge. However, no warranty is made, either express or implied, regarding its accuracy or the results to be obtained from the use of such information.