

**Elan-tech® PC 8590**

Version 2.0 SDB\_GB

Revision Date 05.11.2014

Print Date 01.12.2014

**SECTION 1: Identification of the substance/mixture and of the company/undertaking**

**1.1 Product identifier**

Trade name : Elan-tech® PC 8590

**1.2 Relevant identified uses of the substance or mixture and uses advised against**

Use of the Sub-  
stance/Mixture : Casting Resin

**1.3 Details of the supplier of the safety data sheet**

Company : ELANTAS Italia S.r.l.  
Strada Antolini 1  
43044 Collecchio  
Italy  
Telephone : +3907363081  
Telefax : +390736402746  
E-mail address : msds.elantas.italia@altana.com

**1.4 Emergency telephone number**

+39 0736 3081 (8-17 h)

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**SECTION 2: Hazards identification**

**2.1 Classification of the substance or mixture**

**Classification (REGULATION (EC) No 1272/2008)**

Not a hazardous substance or mixture.

**Classification (67/548/EEC, 1999/45/EC)**

Not a hazardous substance or mixture.

**2.2 Label elements**

**Labelling (REGULATION (EC) No 1272/2008)**

Not a hazardous substance or mixture.

**Additional Labelling:**

EUH210 .Safety data sheet available on request.

**2.3 Other hazards**

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

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**SECTION 3: Composition/information on ingredients**

**3.2 Mixtures**

Chemical nature : Polyether/polyester polyol based mixture

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**Hazardous components**

Chemical Name	CAS-No. EC-No. Registration number	Classification (67/548/EEC)	Classification (REGULATION (EC) No 1272/2008)	Concentration (%)
butane-1,4-diol	110-63-4 203-786-5 /	Xn; R22	Acute Tox. 4; H302	>= 12,5 - < 20

For explanation of abbreviations see section 16.

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**SECTION 4: First aid measures**

**4.1 Description of first aid measures**

- General advice : Keep warm and in a quiet place.  
Show this safety data sheet to the doctor in attendance.  
Take off all contaminated clothing immediately.
- If inhaled : Move to fresh air.  
Keep patient warm and at rest.  
If symptoms persist, call a physician.
- In case of skin contact : Wash off immediately with soap and plenty of water.  
Do NOT use solvents or thinners.  
If on clothes, remove clothes.  
If skin irritation persists, call a physician.
- In case of eye contact : Rinse immediately with plenty of water, also under the eyelids,  
for at least 15 minutes.  
If eye irritation persists, consult a specialist.  
If easy to do, remove contact lens, if worn.
- If swallowed : Keep at rest.  
Do not induce vomiting without medical advice.  
Keep respiratory tract clear.  
If symptoms persist, call a physician.

**4.2 Most important symptoms and effects, both acute and delayed**

- Symptoms : irritant effects  
Lachrymation  
Redness

**4.3 Indication of any immediate medical attention and special treatment needed**

- Treatment : No information available.

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**SECTION 5: Firefighting measures**

**5.1 Extinguishing media**

Suitable extinguishing media : Foam  
Sand  
Carbon dioxide (CO<sub>2</sub>)  
Water mist

Unsuitable extinguishing media : Water spray jet

**5.2 Special hazards arising from the substance or mixture**

Specific hazards during fire-fighting : The pressure in sealed containers can increase under the influence of heat.  
Cool closed containers exposed to fire with water spray.

**5.3 Advice for firefighters**

Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus.  
Use personal protective equipment.

Further information : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.  
Immediately evacuate personnel to safe areas.  
Prevent fire extinguishing water from contaminating surface water or the ground water system.  
Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

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**SECTION 6: Accidental release measures**

**6.1 Personal precautions, protective equipment and emergency procedures**

Personal precautions : Refer to protective measures listed in sections 7 and 8.  
Evacuate personnel to safe areas.  
Use personal protective equipment.  
Ensure adequate ventilation.  
Inform the responsible authorities in case of gas leakage, or of entry into waterways, soil or drains.

**6.2 Environmental precautions**

Environmental precautions : Do not allow uncontrolled discharge of product into the environment.  
Try to prevent the material from entering drains or water courses.  
Local authorities should be advised if significant spillages cannot be contained.

**6.3 Methods and material for containment and cleaning up**

Methods for cleaning up : Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).

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Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).  
Pick up and transfer to properly labelled containers.

### 6.4 Reference to other sections

For personal protection see section 8.

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## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

- Advice on safe handling : Provide sufficient air exchange and/or exhaust in work rooms. Avoid inhalation, ingestion and contact with skin and eyes. Wear personal protective equipment.
- Advice on protection against fire and explosion : Keep away from open flames, hot surfaces and sources of ignition.
- Hygiene measures : Provide adequate ventilation. Wash hands and face before breaks and immediately after handling the product.

### 7.2 Conditions for safe storage, including any incompatibilities

- Requirements for storage areas and containers : Keep containers tightly closed in a dry, cool and well-ventilated place. Keep in properly labelled containers. To maintain product quality, do not store in heat or direct sunlight.
- Advice on common storage : Keep product and empty container away from heat and sources of ignition. Keep away from food and drink.
- Other data : Stable at normal ambient temperature and pressure.

### 7.3 Specific end use(s)

- Specific use(s) : Consult the technical guidelines for the use of this substance/mixture.

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## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

Contains no substances with occupational exposure limit values.

#### Derived No Effect Level (DNEL) according to Regulation (EC) No. 1907/2006:

- butane-1,4-diol : End Use: Workers  
Exposure routes: Skin contact  
Value: 19 mg/kg  
End Use: Workers  
Exposure routes: Inhalation  
Value: 136 mg/m<sup>3</sup>  
End Use: Consumers

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Exposure routes: Inhalation  
Value: 340 mg/m<sup>3</sup>  
End Use: Consumers  
Exposure routes: Skin contact  
Value: 8 mg/kg

**Predicted No Effect Concentration (PNEC) according to Regulation (EC) No. 1907/2006:**

butane-1,4-diol : Fresh water  
Value: 0,813 mg/l  
Marine water  
Value: 0,0813 mg/l  
Intermittent releases  
Value: 8,13 mg/l  
Sewage treatment plant  
Value: 1554 mg/l  
Fresh water sediment  
Value: 3,61 mg/kg  
Marine sediment  
Value: 0,361 mg/kg  
Soil  
Value: 0,244 mg/kg

**8.2 Exposure controls**

**Engineering measures**

Effective exhaust ventilation system  
effective ventilation in all processing areas

**Personal protective equipment**

Eye protection : Do not wear contact lenses.  
Safety glasses with side-shields conforming to EN166  
Ensure that eyewash stations and safety showers are close to  
the workstation location.

Hand protection  
Material : Chemical resistant gloves made of butyl rubber or nitrile rub-  
ber category III according to EN 374.

Skin and body protection : Protective suit

Respiratory protection : Use respiratory protection unless adequate local exhaust ven-  
tilation is provided or exposure assessment demonstrates that  
exposures are within recommended exposure guidelines.  
In the case of vapour formation use a respirator with an ap-  
proved filter.  
Respirator with a vapour filter (EN 141)  
Apply technical measures to comply with the occupational  
exposure limits.  
This should be achieved by a good general extraction and -if  
practically feasible- by the use of a local exhaust ventilation.

Protective measures : Avoid contact with skin.  
Wear suitable protective equipment.

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**SECTION 9: Physical and chemical properties**

**9.1 Information on basic physical and chemical properties**

Appearance	: liquid
Colour	: milky
Odour	: slight
Odour Threshold	: not determined
pH	: not determined
Melting point/freezing point	: Not applicable
Boiling point/boiling range	: > 200 °C
Flash point	: 150 °C
Evaporation rate	: not determined
Upper explosion limit	: Not applicable
Lower explosion limit	: Not applicable
Vapour pressure	: Not applicable
Relative vapour density	: not determined
Density	: 1,04 g/cm <sup>3</sup> (25 °C)
Bulk density	: not determined
Solubility(ies)	
Solubility in other solvents	: not determined
Partition coefficient: n-octanol/water	: No data available
Auto-ignition temperature	: Not applicable
Thermal decomposition	: Method: No data available
Viscosity	
Viscosity, dynamic	: 800 - 1.200 mPa.s (25 °C)
Viscosity, kinematic	: not determined
Explosive properties	: Not applicable

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Oxidizing properties : Not applicable

**9.2 Other information**

Surface tension : not determined

Sublimation point : Not applicable

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**SECTION 10: Stability and reactivity**

**10.1 Reactivity**

Stable under recommended storage conditions.

**10.2 Chemical stability**

No decomposition if stored and applied as directed.

**10.3 Possibility of hazardous reactions**

Hazardous reactions : Reacts with the following substances:  
Isocyanates  
Keep away from oxidizing agents, and acidic or alkaline products.

**10.4 Conditions to avoid**

Conditions to avoid : No decomposition if used as directed.

**10.5 Incompatible materials**

Materials to avoid : Incompatible with oxidizing agents.

**10.6 Hazardous decomposition products**

Hazardous decomposition products : No decomposition if stored and applied as directed.

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**SECTION 11: Toxicological information**

**11.1 Information on toxicological effects**

**Acute toxicity**

**Product:**

Acute oral toxicity : Acute toxicity estimate : > 2.000 mg/kg  
Method: Calculation method

**Components:**

**butane-1,4-diol:**

Acute oral toxicity : LD50 (Rat, male and female): 1.500 mg/kg

Acute inhalation toxicity : LC50 (Rat, male and female): > 5,1 mg/l  
Exposure time: 4 h  
Test atmosphere: dust/mist

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Method: OECD Test Guideline 403  
GLP: yes

Acute dermal toxicity : LD50 (Rat, male and female): > 2.000 mg/kg

**Skin corrosion/irritation**

**Product:**

Remarks: No data available

**Serious eye damage/eye irritation**

**Product:**

Remarks: No data available

**Respiratory or skin sensitisation**

**Product:**

Remarks: No data available

**Germ cell mutagenicity**

**Carcinogenicity**

**Reproductive toxicity**

**STOT - single exposure**

**Product:**

Remarks: Not applicable

**STOT - repeated exposure**

**Repeated dose toxicity**

**Product:**

Remarks: No data available

**Aspiration toxicity**

**Further information**

**Product:**

Remarks: No data available

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**SECTION 12: Ecological information**

**12.1 Toxicity**

**Product:**

Toxicity to fish : Remarks: No data available



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Toxicity to daphnia and other aquatic invertebrates : Remarks: No data available

**Components:**

**butane-1,4-diol:**

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 813 mg/l  
Exposure time: 48 h  
Test Type: static test  
Method: OECD Test Guideline 202  
GLP: yes

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : EC50: > 85 mg/l  
Exposure time: 21 d  
Species: Daphnia magna (Water flea)  
Method: OECD Test Guideline 211  
GLP: yes

**12.2 Persistence and degradability**

**Product:**

Biodegradability : Remarks: No data available

**12.3 Bioaccumulative potential**

**Product:**

Bioaccumulation : Remarks: No data available

**12.4 Mobility in soil**

No data available

**12.5 Results of PBT and vPvB assessment**

**Product:**

Assessment : This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher..

**12.6 Other adverse effects**

**Product:**

Additional ecological information : Remarks: An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

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**SECTION 13: Disposal considerations**

**13.1 Waste treatment methods**

Product : In accordance with local and national regulations.  
Container hazardous when empty.  
Do not dispose of with domestic refuse.

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Do not mix waste streams during collection.

Contaminated packaging : Empty containers should be taken to local recyclers for disposal.

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### SECTION 14: Transport information

#### 14.1 UN number

Not regulated as a dangerous good

#### 14.2 UN proper shipping name

Not regulated as a dangerous good

#### 14.3 Transport hazard class(es)

Not regulated as a dangerous good

#### 14.4 Packing group

Not regulated as a dangerous good

#### 14.5 Environmental hazards

Not regulated as a dangerous good

#### 14.6 Special precautions for user

Not applicable

#### 14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

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### SECTION 15: Regulatory information

#### 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, preparations and articles (Annex XVII) : Not applicable

REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59). : This product does not contain substances of very high concern (Regulation (EC) No 1907/2006 (REACH), Article 57).

REACH - List of substances subject to authorisation (Annex XIV) : Not applicable

Seveso II - Directive 2003/105/EC amending Council Directive 96/82/EC on the control of major-accident hazards involving dangerous substances  
Not applicable

#### 15.2 Chemical Safety Assessment

Not applicable

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**SECTION 16: Other information**

**Full text of R-Phrases**

R22 : Harmful if swallowed.

**Full text of H-Statements**

H302 : Harmful if swallowed.

**Full text of other abbreviations**

Acute Tox. : Acute toxicity

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.