

Elan-tech® PC 21

Version 3.0 SDB_GB

Revision Date 04.11.2014

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 21

Registration number : 01-2119471485-32

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)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Eye irritation, Category 2 H319: Causes serious eye irritation.

Aspiration hazard, Category 1 H304: May be fatal if swallowed and enters airways.

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

Harmful R65: Harmful: may cause lung damage if swallowed.

Irritant R36: Irritating to eyes.

2.2 Label elements


Labelling (REGULATION (EC) No 1272/2008)

Elan-tech® PC 21

Version 3.0 SDB_GB

Revision Date 04.11.2014

Print Date 01.12.2014

Hazard pictograms	:	
Signal word	:	Danger
Hazard statements	:	H304 May be fatal if swallowed and enters airways. H319 Causes serious eye irritation.
Precautionary statements	:	Prevention: P264 Wash skin thoroughly after handling. P280 Wear eye protection/ face protection. Response: P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/ physician. P331 Do NOT induce vomiting. P337 + P313 If eye irritation persists: Get medical advice/ attention. Disposal: P501 Dispose of contents/ container to an approved waste disposal plant.

Hazardous components which must be listed on the label:
Benzene, C10-13-alkyl derivs.

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.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Chemical nature : Polyether/polyester polyol based mixture

Hazardous components

Chemical Name	CAS-No. EC-No. Registration number	Classification (67/548/EEC)	Classification (REGULATION (EC) No 1272/2008)	Concentration (%)
Benzene, C10-13-alkyl derivs.	- 267-051-0 01- 2119489372-31	Xn; R65	Asp. Tox. 1; H304	>= 30 - < 50
Polyether Polyol	25214-63-5 01- 2119471485- 32-0002	Xi; R36	Eye Irrit. 2; H319	>= 30 - < 50

Elan-tech® PC 21

Version 3.0 SDB_GB

Revision Date 04.11.2014

Print Date 01.12.2014

tris(2-chloro-1-methylethyl) phosphate	13674-84-5 237-158-7	Xn; R22	Acute Tox. 4; H302	>= 12,5 - < 20
--	-------------------------	---------	--------------------	----------------

For explanation of abbreviations see section 16.

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.

SECTION 5: Firefighting measures

5.1 Extinguishing media

- Suitable extinguishing media : Foam
Sand
Carbon dioxide (CO₂)
Water mist
- Unsuitable extinguishing : Water spray jet

Elan-tech® PC 21

Version 3.0 SDB_GB

Revision Date 04.11.2014

Print Date 01.12.2014

media

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.

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).
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.

Elan-tech® PC 21

Version 3.0 SDB_GB

Revision Date 04.11.2014

Print Date 01.12.2014

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.

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:

- Benzene, C10-13-alkyl derivs. : End Use: Workers
Exposure routes: Skin contact
Potential health effects: Long-term systemic effects
Value: 9,6 mg/kg
End Use: Workers
Exposure routes: Inhalation
Potential health effects: Long-term systemic effects
Value: 7,0 mg/m³
- Polyether Polyol : End Use: Workers
Exposure routes: Skin contact
Value: 13,9 mg/kg
End Use: Workers
Exposure routes: Inhalation
Value: 98 mg/m³

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

- Benzene, C10-13-alkyl derivs. : Fresh water

Elan-tech® PC 21

Version 3.0 SDB_GB

Revision Date 04.11.2014

Print Date 01.12.2014

Value: 0,000075 mg/l
Marine water

Intermittent releases
Value: 0,00075 mg/l
Sewage treatment plant
Value: 14,2 mg/l

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 rubber category III according to EN 374.
- Skin and body protection : Protective suit
- Respiratory protection : Use respiratory protection unless adequate local exhaust ventilation is provided or exposure assessment demonstrates that exposures are within recommended exposure guidelines.
In the case of vapour formation use a respirator with an approved 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.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

- Appearance : liquid
- Colour : light yellow
- Odour : slight
- Odour Threshold : not determined
- pH : 10,5
- Melting point/freezing point : Not applicable

Elan-tech® PC 21

Version 3.0 SDB_GB

Revision Date 04.11.2014

Print Date 01.12.2014

Boiling point/boiling range	: 300 °C
Flash point	: 160 °C
Evaporation rate	: not determined
Upper explosion limit	: Not applicable
Lower explosion limit	: Not applicable
Vapour pressure	: < 1 hPa (20 °C)
Relative vapour density	: not determined
Density	: 1,02 g/cm ³ (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	: 325 °C
Thermal decomposition	: Method: No data available
Viscosity Viscosity, dynamic	: 90 mPa.s (25 °C)
Viscosity, kinematic	: not determined
Explosive properties	: Not applicable
Oxidizing properties	: Not applicable

9.2 Other information

Surface tension	: not determined
Sublimation point	: Not applicable

SECTION 10: Stability and reactivity

10.1 Reactivity

Stable under recommended storage conditions.

Elan-tech® PC 21

Version 3.0 SDB_GB

Revision Date 04.11.2014

Print Date 01.12.2014

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.

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:

Benzene, C10-13-alkyl derivs.:

Acute oral toxicity : LD50 (Rat, male and female): > 5.000 mg/kg
Method: Tested according to Annex V of Directive 67/548/EEC.
GLP: yes

Acute dermal toxicity : LD50 (Rat): > 2.000 mg/kg
Method: OECD Test Guideline 402
GLP: yes

Skin corrosion/irritation

Product:

Remarks: No data available

Components:

Benzene, C10-13-alkyl derivs.:

Species: Rabbit
Result: Mild skin irritation

Elan-tech® PC 21

Version 3.0 SDB_GB

Revision Date 04.11.2014

Print Date 01.12.2014

GLP: yes

Serious eye damage/eye irritation

Product:

Remarks: No data available

Components:

Benzene, C10-13-alkyl derivs.:

Species: Rabbit

Result: No eye irritation

GLP: yes

Respiratory or skin sensitisation

Product:

Remarks: No data available

Components:

Benzene, C10-13-alkyl derivs.:

Exposure routes: Dermal

Species: Guinea pig

Method: OECD Test Guideline 406

Result: Does not cause skin sensitisation.

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

Components:

Benzene, C10-13-alkyl derivs.:

The substance or mixture is known to cause human aspiration toxicity hazards or has to be regarded as if it causes a human aspiration toxicity hazard.

Elan-tech® PC 21

Version 3.0 SDB_GB

Revision Date 04.11.2014

Print Date 01.12.2014

Further information

Product:

Remarks: No data available

SECTION 12: Ecological information

12.1 Toxicity

Product:

Toxicity to fish : Remarks: No data available

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

12.2 Persistence and degradability

Product:

Biodegradability : Remarks: No data available

Components:

Benzene, C10-13-alkyl derivs.:

Biodegradability : Test Type: aerobic
Result: Readily biodegradable.
Method: OECD Test Guideline 301F
GLP: yes

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.

Elan-tech® PC 21

Version 3.0 SDB_GB

Revision Date 04.11.2014

Print Date 01.12.2014

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.
Do not mix waste streams during collection.
- Contaminated packaging : Empty containers should be taken to local recyclers for disposal.

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.

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

Elan-tech® PC 21

Version 3.0 SDB_GB

Revision Date 04.11.2014

Print Date 01.12.2014

15.2 Chemical Safety Assessment

Not applicable

SECTION 16: Other information

Full text of R-Phrases

R22 : Harmful if swallowed.
R36 : Irritating to eyes.
R65 : Harmful: may cause lung damage if swallowed.

Full text of H-Statements

H302 : Harmful if swallowed.
H304 : May be fatal if swallowed and enters airways.
H319 : Causes serious eye irritation.

Full text of other abbreviations

Acute Tox. : Acute toxicity
Asp. Tox. : Aspiration hazard
Eye Irrit. : Eye irritation

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.