

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

- **1.1 Product identifier**
- **Trade name *TransCast - Clear Epoxy Casting Resin Part A***
- **Utilization of the substance of the formulation: *Epoxy resin***
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**  
*No further relevant information available.*
- **1.3 Details of the supplier of the safety data sheet**
- **Supplier:**  
**Europol**  
**9 Birchills Trading Estate**  
**Emery Road**  
**Brislington**  
**Bristol BS4 5PF**  
*e-mail: sales@europoluk.com*
- **Further information obtainable from: *environment protection department***
- **1.4 Emergency telephone number:**  
*During normal opening times (8 am - 5 pm )*  
*phone : +44 (0) 117 9715500*

## SECTION 2: Hazards identification

- **2.1 Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**



GHS09 environment

*Aquatic Chronic 2 H411 Toxic to aquatic life with long lasting effects.*



GHS07

*Skin Irrit. 2 H315 Causes skin irritation.*  
*Eye Irrit. 2 H319 Causes serious eye irritation.*  
*Skin Sens. 1 H317 May cause an allergic skin reaction.*

- **2.2 Label elements**
- **Labelling according to Regulation (EC) No 1272/2008**  
*The product is classified and labelled according to the CLP regulation.*
- **Hazard pictograms**



GHS07 GHS09

- **Signal word *Warning***
- **Hazard-determining components of labelling:**  
*reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight  $\leq 700$ ) oxirane, mono[(C12-14-alkyloxy)methyl] derivs*  
*Reaction mass of bis (1,2,2,6,6-pentamethyl-4-piperidyl)sebacate and methyl 1,2,2,6,6-pentamethyl-4-piperidylsebacate*
- **Hazard statements**  
*H315 Causes skin irritation.*  
*H319 Causes serious eye irritation.*  
*H317 May cause an allergic skin reaction.*  
*H411 Toxic to aquatic life with long lasting effects.*

(Contd. on page 2)

**Trade name TransCast Part A**

(Contd. of page 1)

**Precautionary statements**

- P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
- P264 Wash thoroughly after handling.
- P273 Avoid release to the environment.
- P280 Wear protective gloves / 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.
- P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
- P337+P313 If eye irritation persists: Get medical advice/attention.
- P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

**2.3 Other hazards**

**Results of PBT and vPvB assessment**

- **PBT:** Not applicable.
- **vPvB:** Not applicable.

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

**3.2 Chemical characterisation: Mixtures**

- **Description:** Mixture of substances listed below with nonhazardous additions.

**Dangerous components:**

CAS: 25068-38-6 NLP: 500-033-5 Reg.nr.: 01-2119456619-26	reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight $\leq$ 700) ⚠ Aquatic Chronic 2, H411; ⚠ Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317	75-100%
CAS: 68609-97-2 EINECS: 271-846-8 Reg.nr.: 01-2119485289-22	oxirane, mono[(C12-14-alkyloxy)methyl] derivs ⚠ Skin Irrit. 2, H315; Skin Sens. 1, H317	10-25%
Reg.nr.: 01-2119491304-40	Reaction mass of bis (1,2,2,6,6-pentamethyl-4-piperidyl)sebacate and methyl 1,2,2,6,6-pentamethyl-4-piperidylsebacate ⚠ Aquatic Acute 1, H400; Aquatic Chronic 1, H410; ⚠ Skin Sens. 1, H317	0.25%

- **Additional information:** For the wording of the listed hazard phrases refer to section 16.

**SECTION 4: First aid measures**

**4.1 Description of first aid measures**

- **General information:** Immediately remove any clothing soiled by the product.

**After inhalation:**

Supply fresh air and to be sure call for a doctor.

In case of unconsciousness place patient stably in side position for transportation.

**After skin contact:**

Immediately wash with water and soap and rinse thoroughly.

If skin irritation continues, consult a doctor.

- **After eye contact:** Rinse opened eye for several minutes under running water. Then consult a doctor.

**After swallowing:**

Do not induce vomiting; call for medical help immediately.

A person vomiting while laying on their back should be turned onto their side.

Rinse out mouth and then drink plenty of water.

- **4.2 Most important symptoms and effects, both acute and delayed** No further relevant information available.

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

No further relevant information available.

**Trade name TransCast Part A**

(Contd. of page 2)

**SECTION 5: Firefighting measures**

- **5.1 Extinguishing media**
- **Suitable extinguishing agents:**  
CO<sub>2</sub>, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **For safety reasons unsuitable extinguishing agents:** Water with full jet
- **5.2 Special hazards arising from the substance or mixture**  
In case of fire, the following can be released:  
Carbon monoxide (CO)  
carbon dioxide
- **5.3 Advice for firefighters**
- **Protective equipment:**  
Wear self-contained respiratory protective device.  
Wear fully protective suit.

**SECTION 6: Accidental release measures**

- **6.1 Personal precautions, protective equipment and emergency procedures**  
Keep away from ignition sources.  
cover accouterment bear , exposed person remove  
Ensure adequate ventilation
- **6.2 Environmental precautions:**  
Inform respective authorities in case of seepage into water course or sewage system.  
Do not allow to enter sewers/ surface or ground water.
- **6.3 Methods and material for containment and cleaning up:**  
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).  
Dispose contaminated material as waste according to item 13.
- **6.4 Reference to other sections**  
See Section 7 for information on safe handling.  
See Section 8 for information on personal protection equipment.  
See Section 13 for disposal information.

**SECTION 7: Handling and storage**

- **7.1 Precautions for safe handling**  
Ensure good ventilation/exhaustion at the workplace.  
Open and handle receptacle with care.
- **Information about fire - and explosion protection:**  
Protect against electrostatic charges.  
Keep ignition sources away - Do not smoke.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:**  
Keep container tightly closed and dry and storage in a good ventilated room.  
  
Storage temperature: 20 - 25 °C.
- **Information about storage in one common storage facility:**  
Store away from foodstuffs.  
Do not store together with alkalis (caustic solutions).  
Do not store together with oxidising and acidic materials.
- **Further information about storage conditions:**  
Keep container tightly sealed.  
Protect from frost.
- **Storage class: 10**

(Contd. on page 4)

**Trade name TransCast Part A**

(Contd. of page 3)

· 7.3 **Specific end use(s)** No further relevant information available.

### SECTION 8: Exposure controls/personal protection

· **Additional information about design of technical facilities:** No further data; see item 7.

#### · 8.1 Control parameters

· **Ingredients with limit values that require monitoring at the workplace:**

**Phthalsäuredi-3,5,5-trimethylhexylester**

WEL (Great Britain) Long-term value: 5 mg/m<sup>3</sup>

#### · DNELs

**25068-38-6 reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight ≤ 700)**

Oral	DNEL Acute - systemic effects	0.75 mg/kg bw/day (General population)
	DNEL Long-term - systemic effects	0.75 mg/kg bw/day (General population)
Dermal	DNEL Acute - systemic effects	3.571 mg/kg bw/day (General population) 8.33 mg/kg bw/day (workers)
	DNEL Long-term - systemic effects	3.571 mg/kg bw/day (General population) 8.33 mg/kg bw/day (workers)
Inhalative	DNEL Acute - systemic effects	12.25 mg/m <sup>3</sup> (workers)
	DNEL Long-term - systemic effects	12.25 mg/m <sup>3</sup> (workers)

#### · PNECs

**25068-38-6 reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight ≤ 700)**

Oral	PNEC	11 mg/kg (food)
	PNEC	0.996 mg/kg (freshwater- sediment)
		0.0996 mg/kg (seawater - sediment)
		0.196 mg/kg (soil ( Boden))
PNEC	0.006 mg/l (freshwater)	
	0.0006 mg/l (marine water)	
	10 mg/l (sewage plant)	

· **Additional information:** The lists valid during the making were used as basis.

#### · 8.2 Exposure controls

##### · **Personal protective equipment:**

##### · **General protective and hygienic measures:**

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

##### · **Respiratory protection:**

Unless the exposure levels below the established exposure limits remain is no respiratory protection is required. Where exposures exceed the established exposure limits, respiratory protection to the material and the degree of exposure is recommended accordingly.

A respiratory protection unit offers the same eye and face protection.

The cutting, grinding or sanding of parts after curing can result in respirable dust. Wearing appropriate for this dust respirators may be necessary.

In inadequately ventilated places and during spraying respirator

necessary. Recommended to be fresh-air mask or filter combination for short-term work

A2-P2

(Contd. on page 5)

**Trade name TransCast Part A**

(Contd. of page 4)

**Protection of hands:**

When handling chemical products, before chemical resistant, carried impervious gloves complying with an approved standard be if a risk assessment indicates this is necessary.  
Gloves approved to relevant standards as EN 374 (Europe) and F739 (U.S.) tested gloves are used. Suitability and durability of a Glove is dependent on usage, for example frequency and duration of contact, chemical resistance of glove material and dexterity Always seek advice from glove suppliers.  
Preventive skin protection (3-point program) required



Protective gloves

**Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

**Penetration time of glove material**

Suitable materials for protective gloves, EN 374-3:  
Polychloroprene - CR: thickness > = 0.5 mm, breakthrough time > = 480 min.  
NBR - NBR: thickness > = 0,35 mm, Breakthrough time > = 480 min.  
Butyl rubber - IIR: thickness > = 0.5 mm, breakthrough time > = 480 min.  
Fluorine rubber - FKM: thickness > = 0.4 mm; breakthrough time > = 480 min.  
Recommendation: Dispose of contaminated gloves ..

The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

**Not suitable are gloves made of the following materials:**

- Leather gloves
- Strong material gloves

**Eye protection:**



Tightly sealed goggles

**Body protection: Protective work clothing**

**SECTION 9: Physical and chemical properties**

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

**General Information**

**Appearance:**

<b>Form:</b>	Fluid
<b>Colour:</b>	Colourless
<b>Odour:</b>	Characteristic
<b>Odour threshold:</b>	Not determined.

**pH-value:** Not determined.

**Change in condition**

<b>Melting point/freezing point:</b>	Undetermined.
<b>Initial boiling point and boiling range:</b>	200 °C

**Flash point:** 142 °C

**Flammability (solid, gas):** Not applicable.

(Contd. on page 6)

**Trade name TransCast Part A**

(Contd. of page 5)

- **Ignition temperature:**
- **Decomposition temperature:** *Not determined.*
- **Auto-ignition temperature:** *Product is not selfigniting.*
- **Explosive properties:** *Product does not present an explosion hazard.*
- **Explosion limits:**
  - **Lower:** *Not determined.*
  - **Upper:** *Not determined.*
- **Vapour pressure:** *Not determined.*
- **Density at 20 °C:** *1,1 g/cm<sup>3</sup>*
- **Relative density:** *Not determined.*
- **Vapour density:** *Not determined.*
- **Evaporation rate:** *Not determined.*
- **Solubility in / Miscibility with water:** *Insoluble.*
- **Partition coefficient: n-octanol/water:** *Not determined.*
- **Viscosity:**
  - **Dynamic at 20 °C:** *800 mPas*
  - **Kinematic:** *Not determined.*
- **Solvent content:**
  - **Organic solvents:** *0,0 %*
  - **VOC (EC)** *0.5 g/l*
- **9.2 Other information** *No further relevant information available.*

**SECTION 10: Stability and reactivity**

- **10.1 Reactivity** *No further relevant information available.*
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:** *No decomposition if used according to specifications.*
- **10.3 Possibility of hazardous reactions**
  - Exothermic polymerisation.*
  - Reacts with acids, alkalis and oxidising agents.*
- **10.4 Conditions to avoid** *No further relevant information available.*
- **10.5 Incompatible materials:** *Incompatible with oxidizing agents, acids*
- **10.6 Hazardous decomposition products:** *if handled accordingly no products of decomposition.*

**SECTION 11: Toxicological information**

- **11.1 Information on toxicological effects**
- **Acute toxicity** *Based on available data, the classification criteria are not met.*

 · **LD/LC50 values relevant for classification:**

 25068-38-6 reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight  $\leq 700$ )

Oral	LD50	15,000 mg/kg (Ratte)
------	------	----------------------

Dermal	LD50	23,000 mg/kg
--------	------	--------------

- **Primary irritant effect:**
- **Skin corrosion/irritation**
  - Causes skin irritation.*
- **Serious eye damage/irritation**
  - Causes serious eye irritation.*

(Contd. on page 7)

**Trade name TransCast Part A**

(Contd. of page 6)

- **Respiratory or skin sensitisation**  
May cause an allergic skin reaction.
- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**
- **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
- **Carcinogenicity** Based on available data, the classification criteria are not met.
- **Reproductive toxicity** Based on available data, the classification criteria are not met.
- **STOT-single exposure** Based on available data, the classification criteria are not met.
- **STOT-repeated exposure** Based on available data, the classification criteria are not met.
- **Aspiration hazard** Based on available data, the classification criteria are not met.

### SECTION 12: Ecological information

· **12.1 Toxicity**

· **Aquatic toxicity:**

**25068-38-6 reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight  $\leq 700$ )**

LC50 (96 h) 2 mg/l (Leuciscus)

EC50 (48 h) 1.8 mg/l (Daphnia Magna)

- **12.2 Persistence and degradability** No further relevant information available.
- **Other information:** Elimination by adsorption onto activated sludge
- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.
- **Ecotoxicological effects:**
- **Remark:** Toxic for fish
- **Additional ecological information:**
- **General notes:**  
Also poisonous for fish and plankton in water bodies.  
Toxic for aquatic organisms  
Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water  
Do not allow product to reach ground water, water course or sewage system.  
Danger to drinking water if even small quantities leak into the ground.
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **12.6 Other adverse effects** No further relevant information available.

### SECTION 13: Disposal considerations

- **13.1 Waste treatment methods**
- **Recommendation**  
Dispose in accordance with applicable international, national and local laws, ordinances and statutes. For disposal within the EC, the appropriate waste code according to the European Waste Catalogue (EWC) should be used.  
Must not be disposed together with household garbage. Do not allow product to reach sewage system.
- **European waste catalogue** 20 01 27 paint, inks, adhesives and resins containing dangerous substances
- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.

### SECTION 14: Transport information

- **14.1 UN-Number**
- **ADR, IMDG, IATA**

UN3082

(Contd. on page 8)

**Trade name TransCast Part A**

(Contd. of page 7)

· **14.2 UN proper shipping name**  
· **ADR** 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight  $\leq$  700), oxirane, mono[(C12-14-alkyloxy)methyl] derivs)

· **IMDG** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight  $\leq$  700), oxirane, mono[(C12-14-alkyloxy)methyl] derivs), MARINE POLLUTANT

· **IATA** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight  $\leq$  700), oxirane, mono[(C12-14-alkyloxy)methyl] derivs)

· **14.3 Transport hazard class(es)**  
· **ADR**

· **Class** 9 (M6) Miscellaneous dangerous substances and articles.  
· **Label** 9

· **IMDG, IATA**

· **Class** 9 Miscellaneous dangerous substances and articles.  
· **Label** 9

· **14.4 Packing group**  
· **ADR, IMDG, IATA** III

· **14.5 Environmental hazards:** Product contains environmentally hazardous substances: reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight  $\leq$  700)

· **Marine pollutant:** Yes  
Symbol (fish and tree)

· **Special marking (ADR):** Symbol (fish and tree)  
· **Special marking (IATA):** Symbol (fish and tree)

· **14.6 Special precautions for user** Warning: Miscellaneous dangerous substances and articles.  
· **Danger code (Kemler):** 90  
· **EMS Number:** F-A,S-F  
· **Stowage Category** A

· **14.7 Transport in bulk according to Annex II of Marpol and the IBC Code** Not applicable.

· **Transport/Additional information:**

· **ADR**  
· **Limited quantities (LQ)** 5L

(Contd. on page 9)



**Trade name TransCast Part A**

(Contd. of page 8)

· <b>Excepted quantities (EQ)</b>	Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
· <b>Transport category</b>	3
· <b>IMDG</b>	5L
· <b>Limited quantities (LQ)</b>	Code: E1
· <b>Excepted quantities (EQ)</b>	Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
· <b>UN "Model Regulation":</b>	UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (REACTION PRODUCT: BISPHENOL-A-(EPICHLORHYDRIN); EPOXY RESIN (NUMBER AVERAGE MOLECULAR WEIGHT $\leq$ 700), OXIRANE, MONO[(C12-14-ALKYLOXY)METHYL] DERIVS), 9, III

**SECTION 15: Regulatory information**

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Labelling according to Regulation (EC) No 1272/2008**  
The product is classified and labelled according to the CLP regulation.
- **Hazard pictograms**



GHS07 GHS09

- **Signal word** Warning
- **Hazard-determining components of labelling:**  
reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight  $\leq$  700) oxirane, mono[(C12-14-alkyloxy)methyl] derivs  
Reaction mass of bis (1,2,2,6,6-pentamethyl-4-piperidyl)sebacate and methyl 1,2,2,6,6-pentamethyl-4-piperidylsebacate
- **Hazard statements**  
H315 Causes skin irritation.  
H319 Causes serious eye irritation.  
H317 May cause an allergic skin reaction.  
H411 Toxic to aquatic life with long lasting effects.
- **Precautionary statements**  
P261 Avoid breathing dust/fume/gas/mist/vapours/spray.  
P264 Wash thoroughly after handling.  
P273 Avoid release to the environment.  
P280 Wear protective gloves / 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.  
P333+P313 If skin irritation or rash occurs: Get medical advice/attention.  
P337+P313 If eye irritation persists: Get medical advice/attention.  
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.
- **Directive 2012/18/EU**
- **Named dangerous substances - ANNEX I** None of the ingredients is listed.
- **Seveso category** E2 Hazardous to the Aquatic Environment
- **Qualifying quantity (tonnes) for the application of lower-tier requirements** 200 t
- **Qualifying quantity (tonnes) for the application of upper-tier requirements** 500 t

(Contd. on page 10)

**Trade name TransCast Part A**

(Contd. of page 9)

- **REGULATION (EC) No 1907/2006 ANNEX XVII** Conditions of restriction: 3, 52a
- **National regulations:**
- **Waterhazard class:** Water hazard class 2 (Self-assessment): hazardous for water.
- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

**SECTION 16: Other information**

*This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.*

**· Relevant phrases**

- H315 Causes skin irritation.*
- H317 May cause an allergic skin reaction.*
- H319 Causes serious eye irritation.*
- H400 Very toxic to aquatic life.*
- H410 Very toxic to aquatic life with long lasting effects.*
- H411 Toxic to aquatic life with long lasting effects.*

· **Department issuing SDS:** environment protection department

**· Abbreviations and acronyms:**

- RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)*
- ICAO: International Civil Aviation Organisation*
- ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)*
- IMDG: International Maritime Code for Dangerous Goods*
- IATA: International Air Transport Association*
- GHS: Globally Harmonised System of Classification and Labelling of Chemicals*
- EINECS: European Inventory of Existing Commercial Chemical Substances*
- ELINCS: European List of Notified Chemical Substances*
- CAS: Chemical Abstracts Service (division of the American Chemical Society)*
- VOC: Volatile Organic Compounds (USA, EU)*
- DNEL: Derived No-Effect Level (REACH)*
- PNEC: Predicted No-Effect Concentration (REACH)*
- LC50: Lethal concentration, 50 percent*
- LD50: Lethal dose, 50 percent*
- PBT: Persistent, Bioaccumulative and Toxic*
- vPvB: very Persistent and very Bioaccumulative*
- Skin Irrit. 2: Skin corrosion/irritation – Category 2*
- Eye Irrit. 2: Serious eye damage/eye irritation – Category 2*
- Skin Sens. 1: Skin sensitisation – Category 1*
- Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1*
- Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard – Category 1*
- Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2*

· **\* Data compared to the previous version altered.**