1 Identification of the substance/mixture and of the company/undertaking

- · 1.1 Product identifier
- · Trade name: Tru-Alpha Polyaspartic 85 Part A
- · Article number:
- 1.2 Relevant identified uses of the substance or mixture and uses advised against coating that is used to seal concrete floors.
- · Application of the substance / the preparation Coating
- · 1.3 Details of the supplier of the Safety Data Sheet
- · Manufacturer/Supplier:

Coatings Solutions 3150 County Line Rd, STE 4 Lakeland, FL 33811 Phone:(863) 450-2192

- · Further information obtainable from: Product Safety Department
- · 1.4 Emergency telephone number:

Chemtrec

(800)424-9300 CCN1023108

2 Hazards identification

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



Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2 H319 Causes serious eye irritation.

· Classification according to Directive 67/548/EEC or Directive 1999/45/EC



R36/38: Irritating to eyes and skin.

R10: Flammable.

· Information concerning particular hazards for human and environment:

The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

Classification system:

The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

The classification is in accordance with the latest editions of international substances lists, and is supplemented by information from technical literature and by information provided by the company.

(Contd. on page 2)

Trade name: Tru-Alpha Polyaspartic 85 Part A

(Contd. of page 1)

- · 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



GHS02 GHS07

P101

- · Signal word Warning
- · Hazard statements
- · . H315 Causes skin irritation.

H319 Causes serious eye irritation.

Precautionary statements

| P102 | Keep out of reach of children. |
|----------------|---|
| P103 | Read label before use. |
| P210 | Keep away from heat/sparks/open flames/hot surfaces No smoking. |
| P241 | Use explosion-proof electrical/ventilating/lighting/equipment. |
| P280 | Wear protective gloves/protective clothing/eye protection/face protection. |
| P240 | Ground/bond container and receiving equipment. |
| P233 | Keep container tightly closed. |
| P242 | Use only non-sparking tools. |
| P243 | Take precautionary measures against static discharge. |
| P264 | Wash thoroughly after handling. |
| P303+P361+P353 | BIF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse |
| | skin with water/shower. |
| P305+P351+P338 | BIF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if |
| | present and easy to do. Continue rinsing. |
| P321 | Specific treatment (see on this label). |
| P362 | Take off contaminated clothing and wash before reuse. |
| P332+P313 | If skin irritation occurs: Get medical advice/attention. |
| P337+P313 | If eye irritation persists: Get medical advice/attention. |
| P370+P378 | In case of fire: Use for extinction: CO2, powder or water spray. |
| P302+P352 | IF ON SKIN: Wash with plenty of soap and water. |
| P403+P235 | Store in a well-ventilated place. Keep cool. |
| P501 | Dispose of contents/container in accordance with local/regional/national/international |
| | regulations. |

If medical advice is needed, have product container or label at hand.

(Contd. on page 3)

Trade name: Tru-Alpha Polyaspartic 85 Part A

· NFPA ratings (scale 0 - 4)

(Contd. of page 2)



Health = 1

Reactivity = 0

Fire = 0

· HMIS-ratings (scale 0 - 4)



1 Health = 15 Fire = 0

REACTIVITY Reactivity = 0

- * Indicates a long term health hazard from repeated or prolonged exposures.
- HMIS Long Term Health Hazard Substances

None of the ingredients is listed.

- · 2.3 Other hazards
- · Results of PBT and vPvB assessment
- PBT: Not applicable.vPvB: Not applicable.

3 Composition/information on ingredients

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

| | Mixed Aspartic Esters | > 90 |
|-------------------------------------|--|--------|
| | X Xi R38 | |
| | Skin Irrit. 2, H315 | |
| | | 10-30% |
| | | |
| CAS: 623-91-6 | diethyl fumarate | < 10% |
| EINECS: 210-819-7 | ※ Xn R22 | |
| | | |
| CAS: 6864-37-5 EINECS: 229-962-1 | 2,2'-dimethyl-4,4'methylenebis(cyclohexylamine) ■ T R23/24; ■ C R35; X Xn R22; ₩ N R51/53 | < 1,0% |
| Index number: 612-110-00-1 | Acute Tox. 3, H311; Acute Tox. 3, H331 Skin Corr. 1A, H314 | |
| | Aquatic Chronic 2, H411 | |
| | ♠ Acute Tox. 4, H302 | |

· Additional information: For the wording of the listed risk phrases refer to section 16.

(Contd. on page 4)

Trade name: Tru-Alpha Polyaspartic 85 Part A

(Contd. of page 3)

4 First aid measures

· 4.1 Description of first aid measures

· After inhalation:

Supply fresh air; consult doctor in case of complaints.

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:

Protect unharmed eye.

Remove contact lenses if worn.

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

· After swallowing:

Rinse out mouth and then drink plenty of water.

Do not induce vomiting; call for medical help immediately.

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

Allergic reactions

Dizziness

Gastric or intestinal disorders

- · Hazards Condition may deteriorate with alcohol consumption.
- · 4.3 Indication of any immediate medical attention and special treatment needed

If swallowed, gastric irrigation with added, activated carbon.

Monitor circulation.

If necessary oxygen respiration treatment.

Medical supervision for at least 48 hours.

Treat skin and mucous membrane with antihistamine and corticoid preparations.

5 Firefighting measures

- · 5.1 Extinguishing media
- · Suitable extinguishing agents:

CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

- · For safety reasons unsuitable extinguishing agents: None.
- · 5.2 Special hazards arising from the substance or mixture

In case of fire, the following can be released:

Hydrogen fluoride (HF)

Nitrogen oxides (NOx)

Carbon monoxide (CÓ)

Hydrogen chloride (HCI)

Under certain fire conditions, traces of other toxic gases cannot be excluded.

- · 5.3 Advice for firefighters
- · Protective equipment:

Wear self-contained respiratory protective device.

Wear fully protective suit.

(Contd. on page 5)

Trade name: Tru-Alpha Polyaspartic 85 Part A

(Contd. of page 4)

· Additional information Cool endangered receptacles with water haze or fog.

6 Accidental release measures

· 6.1 Personal precautions, protective equipment and emergency procedures

Use respiratory protective device against the effects of fumes/dust/aerosol.

Ensure adequate ventilation

Keep away from ignition sources.

Protect from heat.

Wear protective equipment. Keep unprotected persons away.

- **6.2 Environmental precautions:** 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).

Send for recovery or disposal in suitable receptacles.

Clean the affected area carefully; suitable cleaners are:

Warm water and cleansing agent

· 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.

7 Handling and storage

· 7.1 Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace.

Prevent formation of aerosols.

Keep away from heat and direct sunlight.

Avoid splashes or spray in enclosed areas.

· Information about fire - and explosion protection:

Keep ignition sources away - Do not smoke.

Emergency cooling must be available in case of nearby fire.

- · 7.2 Conditions for safe storage, including any incompatibilities
- · Storage:
- · Requirements to be met by storerooms and receptacles:

Store in a cool location.

Store only in the original receptacle.

· Information about storage in one common storage facility:

Do not store together with acids.

Store away from oxidizing agents.

Store away from foodstuffs.

Store away from reducing agents.

· Further information about storage conditions:

Store in cool, dry conditions in well sealed receptacles.

Store receptacle in a well ventilated area.

(Contd. on page 6)

Trade name: Tru-Alpha Polyaspartic 85 Part A

(Contd. of page 5)

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

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:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

- · **DNELs** No further relevant information available.
- · PNECs No further relevant information available.
- · 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:

Not necessary if room is well-ventilated.

Use suitable respiratory protective device in case of insufficient ventilation.

Use suitable respiratory protective device when aerosol or mist is formed.

· Protection of hands:



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· 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

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

· For the permanent contact gloves made of the following materials are suitable:

Butyl rubber, BR

Fluorocarbon rubber (Viton)

Chloroprene rubber, CR

· Not suitable are gloves made of the following materials: PVA gloves

(Contd. on page 7)

(Contd. of page 6)

Safety Data Sheet according to 1907/2006/EC (REACH), 1272/2008/EC (CLP), and GHS

Trade name: Tru-Alpha Polyaspartic 85 Part A

· Eye protection:

Contact lenses should not be worn.



Safety glasses

Goggles recommended during refilling

- · Body protection: Impervious protective clothing
- · Limitation and supervision of exposure into the environment No special requirements.
- · Risk management measures

See Section 7 for additional information.

No special requirements.

| 9 Physical and chemical prope | erties |
|-------------------------------|--------|
|-------------------------------|--------|

| 9.1 Information on basic physical | and chemical properties | |
|-----------------------------------|---|--|
| General Information | | |
| · Appearance: | | |
| Form: | Liquid | |
| Colour: | Amber coloured | |
| · Odour: | low odor | |
| · Odour threshold: | Not determined. | |
| · pH-value: | Not determined. | |
| · Change in condition | | |
| Melting point/Melting range: | Undetermined. | |
| Boiling point/Boiling range: | Undetermined. | |
| · Flash point: | not flammable) | |
| · Flammability (solid, gaseous): | Not applicable. | |
| · Ignition temperature: | Not determined. | |
| · Decomposition temperature: | Not determined. | |
| · Self-igniting: | Product is not selfigniting. | |
| · Danger of explosion: | Product does not present an explosion hazard. | |
| · Explosion limits: | | |
| Lower: | 1% | |
| Upper: | 7%. | |
| · Vapour pressure: | Not determined. | |
| · Density at 20°C: | 1,02 g/cm³ (9.1 lbs/gal) | |
| · Relative density | Not determined. | |
| · Vapour density | 3.7 | |
| · Evaporation rate | Not determined. | |

Trade name: Tru-Alpha Polyaspartic 85 Part A

(Contd. of page 7)

· Solubility in / Miscibility with

water: Not miscible or difficult to mix.

· Partition coefficient (n-octanol/water): Not determined.

· Viscosity:

Dynamic: Not determined. **Kinematic:** Not determined.

· Solvent content:

VOC (EC) 10 g/l (EPA Method <u>24)</u>

• 9.2 Other information No further relevant information available.

10 Stability and reactivity

- · 10.1 Reactivity
- · 10.2 Chemical stability
- · Thermal decomposition / conditions to be avoided:

No decomposition if used and stored according to specifications.

- 10.3 Possibility of hazardous reactions

Contact with strong acids releases hydrogen fluoride.

Reacts with catalysts, oxidizing agents and strong alkali.

Strong exothermic reaction with acids.

Contact with acids releases toxic gases.

Contact with acids releases irritant gases.

Flammable.

Reacts with strong alkali.

Reacts with peroxides and other radical forming substances.

- 10.4 Conditions to avoid No further relevant information available.
- 10.5 Incompatible materials: No further relevant information available.
- · 10.6 Hazardous decomposition products:

Halogenated hydrocarbons

Poisonous gases/vapours

Fluorinated hydrocarbons

Hydrogen fluoride

Corrosive gases/vapours

Ammonia

Nitrogen oxides (NOx)

Carbon monoxide and carbon dioxide

11 Toxicological information

- · 11.1 Information on toxicological effects
- · Acute toxicity:
- · Primary irritant effect:
- · on the skin: Irritant to skin and mucous membranes.

(Contd. on page 9)

Trade name: Tru-Alpha Polyaspartic 85 Part A

(Contd. of page 8)

- · on the eye: Irritating effect.
- · Sensitization:

Sensitizing effect by skin contact is possible by prolonged exposure.

Sensitizing effect through inhalation is possible by prolonged exposure.

· Additional toxicological information:

The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:

Irritant

Danger through skin adsorption.

At long or repeated contact with skin it may cause dermatitis due to the degreasing effect of the solvent.

12 Ecological information

- · 12.1 Toxicity
- Aquatic toxicity: The product contains materials that are harmful to the environment.
- 12.2 Persistence and degradability The product is partly biodegradale. Significant residuals remain.
- · 12.3 Bioaccumulative potential May be accumulated in organism
- 12.4 Mobility in soil No further relevant information available.
- Additional ecological information:
- · General notes:

At present there are no ecotoxicological assessments.

This statement was deduced from products with a similar structure or composition.

The decarations are valid for the component with the highest toxicological risk.

Due to available data on eliminability/decomposition and bioaccumulation potential prolonged term damage of the environment can not be excluded.

Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water

Do not allow product to reach ground water, water course or sewage system.

- · 12.5 Results of PBT and vPvB assessment
- · PBT: Not applicable.
- · vPvB: Not applicable.
- 12.6 Other adverse effects No further relevant information available.

13 Disposal considerations

- · 13.1 Waste treatment methods
- · Recommendation

Must not be disposed together with household garbage. Do not allow product to reach sewage system. Can be disposed of with household garbage after solidification following consultation with the waste disposal facility operator and the pertinent authorities and adhering to the necessary technical regulations. Can be burned with household garbage after consulting with the waste disposal facility operator and the pertinent authorities and adhering to the necessary technical regulations.

Can be disposed of with household garbage with prior chemical-physical or biological treatment following consultation with the waste disposal facility operator and the pertinent authorities and adhering to the necessary technical regulations.

(Contd. on page 10)

Trade name: Tru-Alpha Polyaspartic 85 Part A

(Contd. of page 9)

- · Uncleaned packaging:
- · Recommendation:

Packagings that may not be cleansed are to be disposed of in the same manner as the product. Disposal must be made according to official regulations.

· Recommended cleansing agents: Solvent naphtha

| 14 Transport information |
|---|
| · 14.1 UN-Number · DOT · ADR, IMDG, IATA |
| · 14.2 UN proper shipping name not regulated |
| Limited Quantity for packages less than 30 kg (66 lb) and inner packagings less than 5 L (1.3 gal). |
| · DOT |
| · ADR |
| · IMDG, IATA |
| |
| (Contd. on page 11) |

Trade name: Tru-Alpha Polyaspartic 85 Part A

| | (Contd. | of page 10) |
|---|--------------------------|-------------|
| · Label | | |
| · 14.4 Packing group · DOT, ADR, IMDG, IATA | | |
| · 14.5 Environmental hazards: · Marine pollutant: | No | |
| 14.6 Special precautions for user Danger code (Kemler): EMS Number: | N/A | |
| · 14.7 Transport in bulk according to Anno MARPOL73/78 and the IBC Code | ex II of Not applicable. | |
| · Transport/Additional information: | | |
| · ADR · Tunnel restriction code | N/A | |
| · UN "Model Regulation": | | |
| | | |

15 Regulatory information

- · 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
- · United States (USA)
- · SARA
- · Section 355 (extremely hazardous substances):

None of the ingredients is listed.

· Section 313 (Specific toxic chemical listings):

None of the ingredients is listed.

None of the ingredients is listed.

· TSCA (Toxic Substances Control Act):

All ingredients are listed.

- · Proposition 65 (California):
- · Chemicals known to cause cancer:

None of the ingredients is listed.

· Chemicals known to cause reproductive toxicity for females:

None of the ingredients is listed.

· Chemicals known to cause reproductive toxicity for males:

None of the ingredients is listed.

· Chemicals known to cause developmental toxicity:

None of the ingredients is listed.

(Contd. on page 12)

Trade name: Tru-Alpha Polyaspartic 85 Part A

· Carcinogenic Categories

(Contd. of page 11)

· Carcinogenic Categories

· EPA (Environmental Protection Agency)

None of the ingredients is listed.

· IARC (International Agency for Research on Cancer)

None of the ingredients is listed.

· TLV (Threshold Limit Value established by ACGIH)

None of the ingredients is listed.

· NIOSH-Ca (National Institute for Occupational Safety and Health)

None of the ingredients is listed.

· OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

- · Canada
- · Canadian Domestic Substances List (DSL)

All ingredients are listed.

· Canadian Ingredient Disclosure list (limit 0.1%)

None of the ingredients is listed.

· Canadian Ingredient Disclosure list (limit 1%)

None of the ingredients is listed.

· 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

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

- H226 Flammable liquid and vapour.
- H302 Harmful if swallowed.
- H311 Toxic in contact with skin.
- H314 Causes severe skin burns and eye damage.
- H315 Causes skin irritation.
- H319 Causes serious eye irritation.
- H331 Toxic if inhaled.
- H335 May cause respiratory irritation.
- H411 Toxic to aquatic life with long lasting effects.
- R10 Flammable.
- R22 Harmful if swallowed.
- R23/24 Toxic by inhalation and in contact with skin.
- R35 Causes severe burns.
- R36/38 Irritating to eyes and skin.
- R38 Irritating to skin.
- R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

(Contd. on page 13)

Trade name: Tru-Alpha Polyaspartic 85 Part A

(Contd. of page 12)

· Abbreviations and acronyms:

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

DOT: US Department of Transportation IATA: International Air Transport Association

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

ACGIH: American Conference of Governmental Industrial Hygienists

NFPA: National Fire Protection Association (USA) HMIS: Hazardous Materials Identification System (USA)

WHMIS: Workplace Hazardous Materials Information System (Canada)

VOC: Volatile Organic Compounds (USA, EU)

1 Identification of the substance/mixture and of the company/undertaking

- · 1.1 Product identifier
- · Trade name: Tru-Alpha Polyaspartic 85 Part B
- · Article number:
- · 1.2 Relevant identified uses of the substance or mixture and uses advised against
- · coating to seal concrete floors.
- · Application of the substance / the mixture Coating compound/ Surface coating/ paint
- · 1.3 Details of the supplier of the Safety Data Sheet
- · Manufacturer/Supplier:

Coatings Solutions 3150 County Line Rd, STE 4 Lakeland, FL 33811

Phone: (863) 450-2192

- · Further information obtainable from: Product Safety Department
- · 1.4 Emergency telephone number:

Chemtrec

(800)424-9300 CCN1023108

2 Hazards identification

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

The following Hazard Statements are applicable only to the EU regulations and not the US GHS regulation: H411.



Acute Tox. 4 H332 Harmful if inhaled.

Skin Sens. 1 H317 May cause an allergic skin reaction. STOT SE 3 H335 May cause respiratory irritation.

· Classification according to Directive 67/548/EEC or Directive 1999/45/EC

Xn; Sensitising

R42/43: May cause sensitisation by inhalation and skin contact.

(Contd. on page 2)

Trade name: Tru-Alpha Polyaspartic 85 Part B

(Contd. of page 1)

Xi; Irritant

R36/38: Irritating to eyes and sk

· Information concerning particular hazards for human and environment:

The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

Classification system:

The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

The classification is in accordance with the latest editions of international substances lists, and is supplemented by information from technical literature and by information provided by the company.

· 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



GHS02 GHS07 GHS09

· Signal word Warning

· Hazard-determining components of labelling:

Hexane, 1,6-diisocyanato-, homopolymer

hexamethylene-di-isocyanate

4-chloro- α , α , α -trifluorotoluene

· Hazard statements

H226 Flammable liquid and vapour.

H332 Harmful if inhaled.

H317 May cause an allergic skin reaction.

H335 May cause respiratory irritation.

H411 Toxic to aquatic life with long lasting effects.

· Precautionary statements

P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

P280 Wear protective gloves / eye protection. P261 Avoid breathing mist/vapours/spray.

P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse

skin with water/shower.

P370+P378 In case of fire: Use for extinction: CO2, powder or water spray.

P312 Call a POISON CENTER/doctor if you feel unwell.

P403+P235 Store in a well-ventilated place. Keep cool.

P501 Dispose of contents/container in accordance with local/regional/national/international

regulations.

· Additional information:

Contains isocyanates. May produce an allergic reaction.

(Contd. on page 3)

Trade name: Tru-Alpha Polyaspartic 85 Part B

(Contd. of page 2)

- · Hazard description:
- · WHMIS-symbols:

B3 - Combustible liquid

D2A - Very toxic material causing other toxic effects

· NFPA ratings (scale 0 - 4)



Health = 1

Fire = 0Reactivity = 0

· HMIS-ratings (scale 0 - 4)



Health = 1Fire = 0

· HMIS Long Term Health Hazard Substances

None of the ingredients is listed.

- · 2.3 Other hazards
- · Results of PBT and vPvB assessment
- · **PBT:** Not applicable.
- · **vPvB:** Not applicable.

3 Composition/information on ingredients

- · 3.2 Mixtures

| · Dangerous componer | nts: | |
|----------------------|--|----------------|
| | proprietary low odor petroleum distelaant | > 20% > 30% |
| | | |
| CAS: 28182-81-2 | Hexane, 1,6-diisocyanato-, homopolymer | 70-80% |
| NLP: 500-060-2 | Hexane, 1,6-diisocyanato-, homopolymer X Xn R20; Xi R37; Xi R43 | |
| | Tox. 4, H332; Skin Sens. 1, H317; STOT SE 3, H335 | |
| | (Cont | d. on page |

| | (C | ontd. of page 3) | |
|---|--|------------------|--|
| CAS: 822-06-0 | hexamethylene-di-isocyanate | < 0,5% | |
| EINECS: 212-485-8 | ▼ T R23; Xn R42/43; Xi R36/37/38 | | |
| Index number: 615-011-00-1 | Acute Tox. 3, H331 | | |
| | & Resp. Sens. 1, H334 | | |
| | Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317; | | |
| | STOT SE 3, H335 | | |
| · Additional information: For the wording of the listed risk phrases refer to section 16. | | | |

4 First aid measures

· 4.1 Description of first aid measures

· General information:

Take affected persons out into the fresh air.

Do not leave affected persons unattended.

Provide oxygen treatment if affected person has difficulty breathing.

· After inhalation:

Supply fresh air.

Seek medical treatment in case of complaints.

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

· After skin contact:

Immediately wash with water and soap and rinse thoroughly.

Do not pull solidified product off the skin.

Immediately remove any clothing soiled by the product.

If skin irritation continues, consult a doctor.

· After eye contact:

Immediately remove contact lenses if possible.

Rinse opened eye for several minutes under running water. If symptoms persist, 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.

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

Dizziness

Coughing

Breathing difficulty

Nausea

Cyanosis

Unconsciousness

· Hazards

Danger of convulsion.

Condition may deteriorate with alcohol consumption.

4.3 Indication of any immediate medical attention and special treatment needed

If swallowed, gastric irrigation with added, activated carbon.

Monitor circulation, possible shock treatment.

Medical supervision for at least 48 hours.

If necessary oxygen respiration treatment.

Later observation for pneumonia and pulmonary oedema.

If blue colouring appears (lips, ear-lobes, finger-nails), give oxygen treatment as quickly as possible.

(Contd. on page 5)

Trade name: Tru-Alpha Polyaspartic 85 Part B

(Contd. of page 4)

Treat skin and mucous membrane with antihistamine and corticoid preparations.

5 Firefighting measures

- · 5.1 Extinguishing media
- · Suitable extinguishing agents: CO2, sand, extinguishing powder. Do not use water.
- · 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:

Hydrogen cyanide (HCN)

Carbon monoxide (CO)

Nitrogen oxides (NOx)

Under certain fire conditions, traces of other toxic gases cannot be excluded.

Danger of receptacles bursting because of high vapour pressure when heated.

- · 5.3 Advice for firefighters
- · Protective equipment:

Do not inhale explosion gases or combustion gases.

Wear self-contained respiratory protective device.

Wear fully protective suit.

· Additional information Cool endangered receptacles with water spray.

6 Accidental release measures

· 6.1 Personal precautions, protective equipment and emergency procedures

Use respiratory protective device against the effects of fumes/dust/aerosol.

Ensure adequate ventilation

Wear protective equipment. Keep unprotected persons away.

· 6.2 Environmental precautions:

Do not allow to enter sewers/ surface or ground water.

Do not allow product to reach sewage system or any water course.

Inform respective authorities in case of seepage into water course or sewage system.

· 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.

Ensure adequate ventilation.

Do not flush with water or aqueous cleansing agents

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.

7 Handling and storage

· 7.1 Precautions for safe handling

Keep receptacles tightly sealed.

Take note of emission threshold.

(Contd. on page 6)

Trade name: Tru-Alpha Polyaspartic 85 Part B

(Contd. of page 5)

Ensure good ventilation/exhaustion at the workplace.

Prevent formation of aerosols.

- · Information about fire and explosion protection: 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:

Store only in the original receptacle.

Provide ventilation for receptacles.

Store in a cool location.

Information about storage in one common storage facility:

Store away from oxidizing agents.

Do not store together with acids.

Store away from foodstuffs.

· Further information about storage conditions:

Store in cool, dry conditions in well sealed receptacles.

Protect from humidity and water.

Store receptacle in a well ventilated area.

Keep container tightly sealed.

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

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 requ | uire monitoring at the workplace |
|---|----------------------------------|
|---|----------------------------------|

822-06-0 hexamethylene-di-isocyanate

REL (USA) Short-term value: C 0,14* mg/m³, C 0,02* ppm

Long-term value: 0,035 mg/m³, 0,005 ppm

*10-min

TLV (USA) 0,034 mg/m³, 0,005 ppm

EL (Canada) Short-term value: C 0,01 ppm

Long-term value: 0,005 ppm

S

EV (Canada) 0,005 ppm

- · Additional information: The lists valid during the making were used as basis.
- · 8.2 Exposure controls
- · Personal protective equipment:
- \cdot 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.

Do not inhale gases / fumes / aerosols.

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· Respiratory protection:

Use suitable respiratory protective device when aerosol or mist is formed. Use suitable respiratory protective device in case of insufficient ventilation.

· Protection of hands:



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation.

· 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

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

· Eye protection:

Contact lenses should not be worn.



Safety glasses

Goggles recommended during refilling

9 Physical and chemical properties

- 9.1 Information on basic physical and chemical properties
- · General Information
- · Appearance:

Form: Liquid Colour: Clear

Odour: Characteristic
 Odour threshold: Not determined.
 pH-value: Not determined.

· Change in condition

Melting point/Melting range:
Boiling point/Boiling range:
Undetermined.

Flash point:

Flammability (solid, gaseous):

Not Determined.

Undetermined.

Not applicable.

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(Contd. of page 7)

Auto/Self-ignition temperature: Not determined.
 Decomposition temperature: Not determined.

· **Self-igniting:** Product is not self-igniting.

· Danger of explosion: combustible.

· Explosion limits:

Lower: Not determined.

Upper: Not determined.

· Vapour pressure: Not determined.

• **Density at 20 °C:** 1,008 g/cm³ (8.40 lbs/gal)

Relative density
Vapour density
Evaporation rate
Not determined.
Not determined.

· Solubility in / Miscibility with

water: Not miscible or difficult to mix.

· Partition coefficient (n-octanol/water): Not determined.

· Viscosity:

Dynamic: 250 cps. **Kinematic:** Not determined.

· Solvent content:

Organic solvents: <200 g/L (VOCs - EPA Method 24)
• 9.2 Other information No further relevant information available.

10 Stability and reactivity

- · 10.1 Reactivity
- · 10.2 Chemical stability
- · Thermal decomposition / conditions to be avoided:

No decomposition if used and stored according to specifications.

To avoid thermal decomposition do not overheat.

- 10.3 Possibility of hazardous reactions

Contact with acids releases toxic gases.

Flammable.

Reacts with alcohols, amines, aqueous acids and alkalis.

Corrodes copper and brass.

Reacts with catalysts.

Reacts with water.

Reacts with humid air.

Reacts with oxidizing agents.

· 10.4 Conditions to avoid

Keep ignition sources away - Do not smoke.

Store away from oxidizing agents.

(Contd. on page 9)

Trade name: Tru-Alpha Polyaspartic 85 Part B

(Contd. of page 8)

- 10.5 Incompatible materials: Contact with acids liberates toxic gas.
- · 10.6 Hazardous decomposition products:

Carbon monoxide and carbon dioxide

Nitrogen oxides

Hydrogen cyanide (prussic acid)

Poisonous gases/vapours

Irritant gases/vapours

11 Toxicological information

- · 11.1 Information on toxicological effects
- · Acute toxicity:
- · Primary irritant effect:
- · on the skin: Irritant to skin and mucous membranes.
- · on the eye: Irritating effect.
- · Sensitization:

Sensitization possible through skin contact.

Sensitizing effect through inhalation is possible by prolonged exposure.

· Additional toxicological information:

The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:

Harmful

Irritant

Danger through skin adsorption.

12 Ecological information

- · 12.1 Toxicity
- · Aquatic toxicity: The product contains materials that are harmful to the environment.
- 12.2 Persistence and degradability Not easily biodegradable
- · 12.3 Bioaccumulative potential

Due to the distribution coefficient n-octanol/water an accumulation in organisms is not expected.

- · 12.4 Mobility in soil No further relevant information available.
- · Additional ecological information:
- · General notes:

This statement was deduced from the properties of the single components.

The product contains materials that are harmful to the environment.

Due to available data on eliminability/decomposition and bioaccumulation potential prolonged term damage of the environment can not be excluded.

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.

(Contd. on page 10)

Trade name: Tru-Alpha Polyaspartic 85 Part B

(Contd. of page 9)

• 12.6 Other adverse effects No further relevant information available.

13 Disposal considerations

- · 13.1 Waste treatment methods
- · Recommendation

Can be disposed of with household garbage after solidification following consultation with the waste disposal facility operator and the pertinent authorities and adhering to the necessary technical regulations. Hand over to hazardous waste disposers.

Can be burned with household garbage after consulting with the waste disposal facility operator and the pertinent authorities and adhering to the necessary technical regulations.

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

- · Uncleaned packaging:
- · Recommendation:

Disposal must be made according to official regulations.

Packagings that may not be cleansed are to be disposed of in the same manner as the product.

· Recommended cleansing agents: Solvent naphtha

· 14.1 UN-Number

• **DOT** Not regulated for non-bulk shipments per 49 CF

· ADR, IMDG, IATA UN2234

· 14.2 UN proper shipping name

• **DOT** Not regulated for non-bulk shipments per 49 CF

· ADR

· IMDG, IATA

• 14.3 Transport hazard class(es)

Not Regulated not flammable

· DOT

· Class

(Contd. on page 11)

Trade name: Tru-Alpha Polyaspartic 85 Part B

(Contd. of page 10)

· 14.4 Packing group

· **DOT** Not Regulated

· ADR, IMDG, IATA

· 14.5 Environmental hazards:

· Marine pollutant: No

· 14.6 Special precautions for user

• Danger code (Kemler): combustible liquids. 30

• **EMS Number**: F-E,S-E

14.7 Transport in bulk according to Annex II of

MARPOL73/78 and the IBC Code Not applicable.

· Transport/Additional information:

· ADR

Limited quantities (LQ)
 Transport category
 Tunnel restriction code

5L
3
D/E

· UN "Model Regulation":

15 Regulatory information

- · 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
- · United States (USA)
- ·SARA
- · Section 355 (extremely hazardous substances):

None of the ingredients is listed.

· Section 313 (Specific toxic chemical listings):

822-06-0 hexamethylene-di-isocyanate

· TSCA (Toxic Substances Control Act):

All ingredients are listed.

- · Proposition 65 (California):
- · Chemicals known to cause cancer:

None of the ingredients is listed.

· Chemicals known to cause reproductive toxicity for females:

None of the ingredients is listed.

· Chemicals known to cause reproductive toxicity for males:

None of the ingredients is listed.

· Chemicals known to cause developmental toxicity:

None of the ingredients is listed.

- · Carcinogenic Categories
- · EPA (Environmental Protection Agency)

None of the ingredients is listed.

(Contd. on page 12)

Trade name: Tru-Alpha Polyaspartic 85 Part B

(Contd. of page 11)

· IARC (International Agency for Research on Cancer)

None of the ingredients is listed.

· TLV (Threshold Limit Value established by ACGIH)

None of the ingredients is listed.

· NIOSH-Ca (National Institute for Occupational Safety and Health)

None of the ingredients is listed.

- · Canada
- · Canadian Domestic Substances List (DSL)

All ingredients are listed.

· Canadian Ingredient Disclosure list (limit 0.1%)

822-06-0 hexamethylene-di-isocyanate

· Canadian Ingredient Disclosure list (limit 1%)

None of the ingredients is listed.

- · National regulations:
- · Other regulations, limitations and prohibitive regulations
- · Substances of very high concern (SVHC) according to REACH, Article 57

None of the ingredients is listed.

· 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

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

| H226 | Flammab | le liquid | and ' | vapour. |
|------|---------|-----------|-------|---------|
|------|---------|-----------|-------|---------|

- H315 Causes skin irritation.
- H317 May cause an allergic skin reaction.
- H319 Causes serious eye irritation.
- H331 Toxic if inhaled.
- H332 Harmful if inhaled.
- H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
- H335 May cause respiratory irritation.
- H411 Toxic to aquatic life with long lasting effects.
- R10 Flammable.
- R20 Harmful by inhalation.
- R23 Toxic by inhalation.
- R36/37/38 Irritating to eyes, respiratory system and skin.
- R37 Irritating to respiratory system.
- R42/43 May cause sensitisation by inhalation and skin contact.
- R43 May cause sensitisation by skin contact.
- R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

(Contd. on page 13)

Trade name: Tru-Alpha Polyaspartic 85 Part B

(Contd. of page 12)

· Abbreviations and acronyms:

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

DOT: US Department of Transportation IATA: International Air Transport Association

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

ACGIH: American Conference of Governmental Industrial Hygienists

NFPA: National Fire Protection Association (USA) HMIS: Hazardous Materials Identification System (USA)

WHMIS: Workplace Hazardous Materials Information System (Canada)

Flam. Liq. 3: Flammable liquids, Hazard Category 3 Acute Tox. 3: Acute toxicity, Hazard Category 3 Acute Tox. 4: Acute toxicity, Hazard Category 4

Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2

Eye Irrit. 2: Serious eye damage/eye irritation, Hazard Category 2

Resp. Sens. 1: Sensitisation - Respirat., Hazard Category 1 Skin Sens. 1: Sensitisation - Skin, Hazard Category 1

STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3

Aquatic Chronic 2: Hazardous to the aquatic environment - Chronic Hazard, Category 2