

Safety Data Sheet

acc. to OSHA HCS

Printing date 12/09/2015

Reviewed on 12/09/2015

1 Identification

- **Product identifier**
- **Trade name:** PLAE Anchor Part B
- **Relevant identified uses of the substance or mixture and uses advised against**
No further relevant information available.
- *Application of the substance / the mixture* Hardening agent/ Curing agent
- **Details of the supplier of the safety data sheet**
- **Distributor:**
PLAE Vertical Incorporated
105 Towne Lake Pkwy
Woodstock, GA 30188
Toll-free 866-599-8274
Web www.plaeusa.com

2 Hazard(s) identification

- **Classification of the substance or mixture**



GHS08 Health hazard

Resp. Sens. 1 H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
 Carc. 2 H351 Suspected of causing cancer.
 STOT RE 2 H373 May cause damage to organs through prolonged or repeated exposure.



GHS07

Acute Tox. 4 H332 Harmful if inhaled.
 Skin Irrit. 2 H315 Causes skin irritation.
 Eye Irrit. 2A H319 Causes serious eye irritation.
 Skin Sens. 1 H317 May cause an allergic skin reaction.
 STOT SE 3 H335 May cause respiratory irritation.

- **Label elements**

- **GHS label elements**

The product is classified and labeled according to the Globally Harmonized System (GHS).

- *Hazard pictograms*



GHS07 GHS08

- *Signal word* Danger

- *Hazard-determining components of labeling:*

diphenylmethanediisocyanate, isomeres and homologues
 diphenylmethane-4,4'-di-isocyanate

- *Hazard statements*

H332 Harmful if inhaled.
 H315 Causes skin irritation.
 H319 Causes serious eye irritation.
 H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
 H317 May cause an allergic skin reaction.

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H351 Suspected of causing cancer.

H335 May cause respiratory irritation.

H373 May cause damage to organs through prolonged or repeated exposure.

- **Precautionary statements**

P260 Do not breathe dust/fume/gas/mist/vapors/spray.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P302+P352 If on skin: Wash with plenty of water.

P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P405 Store locked up.

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

- **Classification system:**

- **NFPA ratings (scale 0 - 4)**



Health = 1

Fire = 1

Reactivity = 0

- **WHMIS-ratings (scale 0 - 4)**



Health = *3

Fire = 1

Reactivity = 0

- **Results of PBT and vPvB assessment**

- *PBT*: Not applicable.

- *vPvB*: Not applicable.

3 Composition/information on ingredients

- **Chemical characterization: Substances**

- **CAS No. Description**

9016-87-9 diphenylmethanediisocyanate, isomeres and homologues

- **Chemical characterization: Mixtures**

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

- **Dangerous components:**

9016-87-9	diphenylmethanediisocyanate, isomeres and homologues	50-100%
101-68-8	diphenylmethane-4,4'-di-isocyanate	25-50%

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

4 First-aid measures

- **Description of first aid measures**

- **General information:**

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

- **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:**

If skin irritation continues, consult a doctor.

Immediately wash with water and soap and rinse thoroughly.

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- **After eye contact:**
Rinse opened eye for several minutes under running water. Then consult a doctor.
Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- **After swallowing:** Do not induce vomiting; immediately call for medical help.
- **Information for doctor:**
 - *Most important symptoms and effects, both acute and delayed*
Breathing difficulty
Coughing
Asthma attacks
 - *Danger* Danger of impaired breathing.
 - *Indication of any immediate medical attention and special treatment needed*
No further relevant information available.

5 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:**
CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
Use fire fighting measures that suit the environment.
- **Special hazards arising from the substance or mixture**
In case of fire, the following can be released:
Carbon monoxide (CO)
Nitrogen oxides (NO_x)
(Traces)
Hydrogen cyanide (HCN)
- **Advice for firefighters**
- **Protective equipment:**
Wear fully protective suit.
Do not inhale explosion gases or combustion gases.
Mount respiratory protective device.
Wear self-contained respiratory protective device.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**
Wear protective equipment. Keep unprotected persons away.
Ensure adequate ventilation
Wear protective clothing.
- **Environmental precautions:**
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.
Do not allow to enter sewers/ surface or ground water.
- **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.
- **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.

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7 Handling and storage

- **Handling:**
- **Precautions for safe handling**
Ensure good ventilation/exhaustion at the workplace.
Prevent formation of aerosols.
- **Information about protection against explosions and fires:** No special measures required.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
 - *Requirements to be met by storerooms and receptacles:* No special requirements.
 - *Information about storage in one common storage facility:* Not required.
 - *Further information about storage conditions:*
Protect from frost.
Keep receptacle tightly sealed.
- **Specific end use(s)** No further relevant information available.

8 Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see item 7.
- **Control parameters**

Components with limit values that require monitoring at the workplace:

101-68-8 diphenylmethane-4,4'-di-isocyanate

PEL	Ceiling limit value: 0.2 mg/m ³ , 0.02 ppm
REL	Long-term value: 0.05 mg/m ³ , 0.005 ppm Ceiling limit value: 0.2* mg/m ³ , 0.02* ppm *10-min
TLV	Long-term value: 0.051 mg/m ³ , 0.005 ppm

- *Additional information:* The lists that were valid during the creation were used as basis.
- **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.
 - *Breathing equipment:*
Not necessary if room is well-ventilated.
Use suitable respiratory protective device in case of insufficient ventilation.
 - *Protection of hands:* Not required.
 - *Material of gloves*
Butyl rubber, BR
Nitrile rubber, NBR
 - *As protection from splashes gloves made of the following materials are suitable:* Natural rubber, NR
 - *Eye protection:*



Tightly sealed goggles

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· *Body protection:* Protective work clothing

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9 Physical and chemical properties

· Information on basic physical and chemical properties

· General Information

· *Appearance:*

Form: Fluid
Color: Dark brown
Odor: Weak, characteristic
Odour threshold: Not determined.

· **pH-value:** Not determined.

· Change in condition

Boiling point/Boiling range: Undetermined.
Setting temperature / range: 0 °C (32 °F)

· **Flash point:** 201 °C (394 °F)

· **Flammability (solid, gaseous):** Not applicable.

· **Ignition temperature:** 400 °C (752 °F)

· *Decomposition temperature:* Not determined.

· **Auto igniting:** Product is not selfigniting.

· **Danger of explosion:** Product does not present an explosion hazard.

· Explosion limits:

Lower: 0.4 Vol %
Upper: Not determined.

· **Vapor pressure at 20 °C (68 °F):** 11 hPa (8 mm Hg)

· **Density at 20 °C (68 °F):** 1.22 g/cm³ (10.181 lbs/gal)

· *Relative density* Not determined.

· *Vapour density* Not determined.

· *Evaporation rate* Not determined.

· Solubility in / Miscibility with

Water: Not miscible or difficult to mix.

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

· Viscosity:

Dynamic at 20 °C (68 °F): 220 mPas
Kinematic: Not determined.

· Solvent content:

Organic solvents: 0.0 %
VOC Content: 0.00 %

· Other information

No further relevant information available.

10 Stability and reactivity

· Reactivity

· Chemical stability

· *Thermal decomposition / conditions to be avoided:* No decomposition if used according to specifications.

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- **Possibility of hazardous reactions**

Reacts with water.

Exothermic reaction with amines and alcohols; reacts with water forming CO₂; in closed containers, risk of bursting owing to increase of pressure.

- **Conditions to avoid** No further relevant information available.

- **Incompatible materials:** No further relevant information available.

- **Hazardous decomposition products:** No dangerous decomposition products known.

11 Toxicological information

- **Information on toxicological effects**

- **Acute toxicity:**

- *LD/LC50 values that are relevant for classification:*

Oral	LD50	>10000 mg/kg (Ratte)
Dermal	LD50	>10000 mg/kg (rabbit)
Inhalative	LC50	0.493 mg/l (Ratte) (4h)

9016-87-9 diphenylmethanediisocyanate, isomeres and homologues

Oral	LD50	> 2000 mg/kg (Ratte)
Dermal	LD50	> 9400 mg/kg (rab) (OECD- Prüfrichtlinie 402)
Inhalative	LC50/48 h	490 mg/l (Ratte) (als Aerosol, Exposition)

101-68-8 diphenylmethane-4,4'-di-isocyanate

Oral	LD50	> 2000 mg/kg (Ratte) (Richtlinie 84/449/EWG, B.1)
Dermal	LD50	>9400 mg/kg (rab) (OECD- Prüfrichtlinie 402)
Inhalative	LC50/ 4h	0.368 mg/l (Ratte)

- *Primary irritant effect:*

- *on the skin:* Irritant to skin and mucous membranes.

- *on the eye:* Irritating effect.

- *Sensitization:*

Sensitization possible through inhalation.

Sensitization possible through skin contact.

- **Additional toxicological information:**

The product shows the following dangers according to internally approved calculation methods for preparations:

Harmful

Irritant

- *Carcinogenic categories*

• <i>IARC (International Agency for Research on Cancer)</i>		
9016-87-9	diphenylmethanediisocyanate, isomeres and homologues	3
101-68-8	diphenylmethane-4,4'-di-isocyanate	3

- *NTP (National Toxicology Program)*

None of the ingredients is listed.

- *OSHA-Ca (Occupational Safety & Health Administration)*

None of the ingredients is listed.

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12 Ecological information

- **Toxicity**

- **Aquatic toxicity:**

EC0	> 500 mg/l (Daphnia magna Wasserfloh) (24h)
	1640 mg/l (Scenedesmus subspicatus) (72h)
LC0	> 1000 mg/l (Fisch) (96h)

9016-87-9 diphenylmethanediisocyanate, isomeres and homologues

EC50	>1000 mg/l (Daphnia magna Wasserfloh) (OECD-Prüfrichtlinie 202)
LC0	>1000 mg/l (Fisch) (96h)

101-68-8 diphenylmethane-4,4'-di-isocyanate

EC50	>1000 mg/l (Daphnia magna Wasserfloh) (OECD-Prüfrichtlinie 202)
LC50/ 96h	>1000 mg/l (Danio rerio (Zebraabärbling)) (OECD-Prüfrichtlinie 203)
NOEC	>10 mg/l (Daphnia magna Wasserfloh) (OECD-Prüfrichtlinie 202 (Fortpflanzung))

- **Persistence and degradability** Heavily biodegradable
- **Behavior in environmental systems:**
- **Bioaccumulative potential** Not worth-mentioning accumulating in organisms
- **Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:**
Water hazard class 1 (Self-assessment): slightly hazardous for water
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

13 Disposal considerations

- **Waste treatment methods**
- **Recommendation:**
Liquid product must not be disposed of together with household garbage. Do not allow product to reach sewage system. If product has aged or solidified conventional means of disposal are acceptable.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.

14 Transport information

- **UN-Number**
- **DOT, ADR, ADN, IMDG, IATA** Void
- **UN proper shipping name**
- **DOT, ADR, ADN, IMDG, IATA** Void
- **Transport hazard class(es)**
- **DOT, ADR, ADN, IMDG, IATA**
- **Class** Void
- **Packing group**
- **DOT, ADR, IMDG, IATA** Void

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- **Environmental hazards:**
- **Marine pollutant:** No
- **Special precautions for user** Not applicable.
- **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code** Not applicable.
- **UN "Model Regulation":** -

15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**

- Sara

- *Section 355 (extremely hazardous substances):*

None of the ingredient is listed.

- *Section 313 (Specific toxic chemical listings):*

All ingredients are listed.

- *TSCA (Toxic Substances Control Act):*

All ingredients are listed.

- *Proposition 65*

- *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.

- *Canadian Ingredient disclosure list*

- *Limit 0,1%*

101-68-8 diphenylmethane-4,4'-di-isocyanate

- *Limit 1%*

None of the ingredients is listed.

- *Carcinogeny categories*

- *EPA (Environmental Protection Agency)*

9016-87-9 diphenylmethanediisocyanate, isomeres and homologues

CBD

101-68-8 diphenylmethane-4,4'-di-isocyanate

D, CBD

- *TLV (Threshold Limit Value established by ACGIH)*

None of the ingredients is listed.

- *MAK (German Maximum Workplace Concentration)*

9016-87-9 diphenylmethanediisocyanate, isomeres and homologues

4

101-68-8 diphenylmethane-4,4'-di-isocyanate

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

None of the ingredients is listed.

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• **National regulations:**

• *Technical instructions (air):*

Class	Share in %
I	50-100

• **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.

• **Department issuing SDS:** Technical Department

• **Date of preparation / last revision** 12/09/2015 / 105

• **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

Acute Tox. 4: Acute toxicity, Hazard Category 4

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

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

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

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

Carc. 2: Carcinogenicity, Hazard Category 2

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

STOT RE 2: Specific target organ toxicity - Repeated exposure, Hazard Category 2

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