

1 Identification

- **Product identifier**
- **Trade name:** *AFC- 8100 PART A*
- **Article number:** AF8100CPTA
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
AquaBond LLC
- **6444 E Spring St #275**
- **Long Beach, CA 90815**
- **USA**
- **EMERGENCY PHONE: For product emergency involving spill, leak, fire, exposure, or accident call CHEMTREC at**
- **(800) 424-9300. For all other inquires call AquaBond LLC at (714) 961-1420**

2 Hazard(s) identification

- **Classification of the substance or mixture**



GHS06 Skull and crossbones

Acute Tox. 2 H330 Fatal if inhaled.



GHS08 Health hazard

Resp. Sens. 1 H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.



GHS05 Corrosion

Skin Corr. 1C H314 Causes severe skin burns and eye damage.

Eye Dam. 1 H318 Causes serious eye damage.



GHS07

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**



GHS05



GHS06



GHS07



GHS08

- **Signal word** Danger

- **Hazard-determining components of labeling:**

3-isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate

(Contd. on page 2)

Trade name: *AFC-8100 PART A*

(Contd. of page 1)

· **Hazard statements**

- H330 Fatal if inhaled.
- H314 Causes severe skin burns and eye damage.
- H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
- H317 May cause an allergic skin reaction.
- H335 May cause respiratory irritation.

· **Precautionary statements**

- P260 Do not breathe dusts or mists.
- P284 [In case of inadequate ventilation] wear respiratory protection.
- P280 Wear protective gloves.
- P280 Wear eye protection / face protection.
- P264 Wash thoroughly after handling.
- P271 Use only outdoors or in a well-ventilated area.
- P272 Contaminated work clothing must not be allowed out of the workplace.
- P303+P361+P353 If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
- P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P310 Immediately call a POISON CENTER/doctor.
- P320 Specific treatment is urgent (see on this label).
- P342+P311 If experiencing respiratory symptoms: Call a POISON CENTER/doctor.
- P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
- P363 Wash contaminated clothing before reuse.
- P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
- P301+P330+P331 If swallowed: Rinse mouth. Do NOT induce vomiting.
- P405 Store locked up.
- P403+P233 Store in a well-ventilated place. Keep container tightly closed.
- P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

· **Classification system:**

· **NFPA ratings (scale 0 - 4)**



· **HMIS-ratings (scale 0 - 4)**



· **Other hazards**

· **Results of PBT and vPvB assessment**

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

3 Composition/information on ingredients

· **Chemical characterization: Mixtures**

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

(Contd. on page 3)

Printing date 10/15/2015

Reviewed on 10/15/2015

Trade name: *AFC-8100 PART A*

(Contd. of page 2)

· **Dangerous components:**

4098-71-9	3-isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate	25-50%
-----------	---	--------

4 First-aid measures

· **Description of first aid measures**

· **General information:**

Immediately remove any clothing soiled by the product.

Remove breathing apparatus only after contaminated clothing have been completely removed.

In case of irregular breathing or respiratory arrest provide artificial respiration.

· **After inhalation:**

Supply fresh air or oxygen; call for 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.

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

· **After swallowing:** If symptoms persist consult doctor.

· **Information for doctor:**

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

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

No further relevant information available.

5 Fire-fighting measures

· **Extinguishing media**

· **Suitable extinguishing agents:** Use fire fighting measures that suit the environment.

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

During heating or in case of fire poisonous gases are produced.

· **Advice for firefighters**

· **Protective equipment:** Mouth respiratory protective device.

6 Accidental release measures

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

Mount respiratory protective device.

Wear protective equipment. Keep unprotected persons away.

· **Environmental precautions:** 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).

Use neutralizing agent.

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.

US

(Contd. on page 4)

Printing date 10/15/2015

Reviewed on 10/15/2015

Trade name: AFC-8100 PART A

(Contd. of page 3)

7 Handling and storage

- **Handling:**
- **Precautions for safe handling**
Ensure good ventilation/exhaustion at the workplace.
Open and handle receptacle with care.
Prevent formation of aerosols.
- **Information about protection against explosions and fires:** Keep respiratory protective device available.
- **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:** 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:**

4098-71-9 3-isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate

REL	Short-term value: 0.18 mg/m ³ , 0.02 ppm Long-term value: 0.045 mg/m ³ , 0.005 ppm Skin
TLV	Long-term value: 0.045 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.
Store protective clothing separately.
Avoid contact with the eyes.
Avoid contact with the eyes and skin.
- **Breathing equipment:**
In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.
- **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

(Contd. on page 5)

Printing date 10/15/2015

Reviewed on 10/15/2015

Trade name: *AFC-8100 PART A*

(Contd. of page 4)

- **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:**



Tightly sealed goggles

9 Physical and chemical properties

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

- **General Information**

- **Appearance:**

Form: Fluid
Color: According to product specification

- **Odor:** Characteristic

- **Odour threshold:** Not determined.

- **pH-value:** Not determined.

- **Change in condition**

Melting point/Melting range: Undetermined.
Boiling point/Boiling range: 216 °C (421 °F)

- **Flash point:** 161 °C (322 °F)

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

- **Decomposition temperature:** Not determined.

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

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

- **Explosion limits:**

Lower: Not determined.
Upper: Not determined.

- **Vapor pressure:** Not determined.

- **Density:** Not determined.

- **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: Not determined.
Kinematic: Not determined.

(Contd. on page 6)

Trade name: *AFC-8100 PART A*

(Contd. of page 5)

· Solvent content:	
Organic solvents:	0.0 %
· Solids content:	
	0.1 %
· Other information	
	No further relevant information available.

10 Stability and reactivity

- **Reactivity** No further relevant information available.
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known.
- **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:**
- **Primary irritant effect:**
- **on the skin:** No irritant effect.
- **on the eye:** Strong irritant with the danger of severe eye injury.
- **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:
- Toxic
- Harmful
- Irritant
- Very toxic

- **Carcinogenic categories**

- **IARC (International Agency for Research on Cancer)**

None of the ingredients is listed.

- **NTP (National Toxicology Program)**

None of the ingredients is listed.

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

None of the ingredients is listed.

12 Ecological information

- **Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.
- **Behavior in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.

(Contd. on page 7)

Printing date 10/15/2015

Reviewed on 10/15/2015

Trade name: AFC-8100 PART A




(Contd. of page 6)

- **Additional ecological information:**
- **General notes:**
 Water hazard class 2 (Self-assessment): hazardous for water
 Do not allow product to reach ground water, water course or sewage system.
 Must not reach bodies of water or drainage ditch undiluted or unneutralized.
 Danger to drinking water if even small quantities leak into the ground.
- **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:**
 Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.

14 Transport information

· UN-Number	
· DOT, IMDG, IATA	UN2810
· UN proper shipping name	
· DOT	Toxic, liquids, organic, n.o.s. (3-isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate)
· IMDG	TOXIC LIQUID, ORGANIC, N.O.S. (3-isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate), MARINE POLLUTANT
· IATA	TOXIC LIQUID, ORGANIC, N.O.S. (3-isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate)
· Transport hazard class(es)	
· DOT	
	
· Class	6.1 Toxic substances
· Label	6.1
· IMDG	
	 
· Class	6.1 Toxic substances


(Contd. on page 8)

Printing date 10/15/2015

Reviewed on 10/15/2015

Trade name: *AFC-8100 PART A*

(Contd. of page 7)

· Label	6.1
· IATA	
	
· Class	6.1 Toxic substances
· Label	6.1
· Packing group	II
· DOT, IMDG, IATA	II
· Environmental hazards:	Product contains environmentally hazardous substances: 3-isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate
· Marine pollutant:	Symbol (fish and tree)
· Special precautions for user	Warning: Toxic substances
· Danger code (Kemler):	60
· EMS Number:	F-A,S-A
· Transport in bulk according to Annex II of MARPOL/73/78 and the IBC Code	Not applicable.
· Transport/Additional information:	
· DOT	
· Quantity limitations	On passenger aircraft/rail: 5 L On cargo aircraft only: 60 L
· IMDG	
· Limited quantities (LQ)	100 ml
· Excepted quantities (EQ)	Code: E4 Maximum net quantity per inner packaging: 1 ml Maximum net quantity per outer packaging: 500 ml
· UN "Model Regulation":	UN 2810 TOXIC, LIQUIDS, ORGANIC, N.O.S. (3-ISOCYANATOMETHYL-3,5,5-TRIMETHYLCYCLOHEXYL ISOCYANATE), 6.1, II, (D/E), ENVIRONMENTALLY HAZARDOUS

15 Regulatory information

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

· Section 355 (extremely hazardous substances):	
4098-71-9	3-isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate
· Section 313 (Specific toxic chemical listings):	
4098-71-9	3-isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate
· TSCA (Toxic Substances Control Act):	
4098-71-9	3-isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate
2530-83-8	[3-(2,3-epoxypropoxy)propyl]trimethoxysilane
119-47-1	6,6'-di-tert-butyl-2,2'-methylenedi-p-cresol

(Contd. on page 9)

US

Printing date 10/15/2015

Reviewed on 10/15/2015

Trade name: AFC-8100 PART A

(Contd. of page 8)

· 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.

· Carcinogenic categories
· EPA (Environmental Protection Agency)

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.

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

· Hazard pictograms


GHS05 GHS06 GHS07 GHS08

· Signal word Danger

· Hazard-determining components of labeling:

3-isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate

· Hazard statements

H330 Fatal if inhaled.

H314 Causes severe skin burns and eye damage.

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H317 May cause an allergic skin reaction.

H335 May cause respiratory irritation.

· Precautionary statements

P260 Do not breathe dusts or mists.

P284 [In case of inadequate ventilation] wear respiratory protection.

P280 Wear protective gloves.

P280 Wear eye protection / face protection.

P264 Wash thoroughly after handling.

P271 Use only outdoors or in a well-ventilated area.

P272 Contaminated work clothing must not be allowed out of the workplace.

P303+P361+P353 If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

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

P310 Immediately call a POISON CENTER/doctor.

P320 Specific treatment is urgent (see on this label).

P342+P311 If experiencing respiratory symptoms: Call a POISON CENTER/doctor.

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

(Contd. on page 10)

Printing date 10/15/2015

Reviewed on 10/15/2015

Trade name: *AFC-8100 PART A*

(Contd. of page 9)

P363 Wash contaminated clothing before reuse.
 P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
 P301+P330+P331 If swallowed: Rinse mouth. Do NOT induce vomiting.
 P405 Store locked up.
 P403+P233 Store in a well-ventilated place. Keep container tightly closed.
 P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

· **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:** Environment protection department.
- **Contact:** Mr. Edward Poznysz, VP of Technologies: epoznysz@resindesigns.com
- **Date of preparation / last revision** 10/15/2015 / -

· **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
 ACGIH: American Conference of Governmental Industrial Hygienists
 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)
 NFPA: National Fire Protection Association (USA)
 HMIS: Hazardous Materials Identification System (USA)
 PBT: Persistent, Bioaccumulative and Toxic
 vPvB: very Persistent and very Bioaccumulative
 Acute Tox. 2: Acute toxicity, Hazard Category 2
 Skin Corr. 1C: Skin corrosion/irritation, Hazard Category 1C
 Eye Dam. 1: Serious eye damage/eye irritation, Hazard Category 1
 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