

Product name: BACEL® HARDFOAM 1

## 1. Identification of the Producer and the Marketing Company

- a. Production Plant: Aqua Resins Technologies B.V.  
Nijverheidsweg 17,17a,17b  
6651 KS Druten  
The Netherlands www.aquaresinstechnologies.com  
T:+31(0)487 593778
- b. Marketing Company: Aqua Resins Technologies B.V.  
Nijverheidsweg 17,17a,17b  
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T:+31(0)487 593778
- c. Distributor: Aqua Resins Technologies B.V.  
Nijverheidsweg 17,17a,17b  
6651 KS Druten  
The Netherlands www.aquaresinstechnologies.com  
T:+31(0)487 593778

## 2. Composition.

- a. Chemical Name: Urea – Formaldehyde Polymer  
b. Synonyms: Aminoplast Hardfoam  
c. Chemical Family: Aminoplasts - Duroplasts

## 1. Hazards Information. Formaldehyde (EC No. 200-001-8) 0.1 – 0.5%

- a. T; H: 301/311/331/  
P: 305 & 271  
C; H: 314  
Carc. Cat; H: 373  
Xi; H: 311
- b. This water-based hard foam is non hazardous  
c. When freshly prepared it has light irritation effects on eyes, skin and when inhaled



## 2. First Aid Measures.

No particular first aid measures are needed

## 3. Fire Fighting Measures.

- a. Flammability: The polymer is non flammable, does not ignite nor burn  
b. Suitable extinguishing Media: not applicable  
c. Unsuitable Extinguishing Media: not applicable  
d. Special Hazards: not applicable  
e. Protective Equipment: see 8

## 4. Accidental Release Measures.

- a. Personal Precautions: Keep away from non involved people  
b. Environmental precautions: No particular precautions needed  
The polymer is water-based and biodegradable  
c. Methods for cleaning: Brush up / dig up etc

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## 5. Handling and Storage.

- a. Handling: Operators must be trained to work with polymers. Operators must avoid breathing fine particles of product (dust).
- b. Storage: Keep storage container/area ventilated. Protect from direct sun light. Store in ventilated area.

## 6. Exposure Protection and Personal Protection.

- a. Exposure Protection: Always work in well ventilated area
- b. Personal Protection: Wear a simple mouth cap for breath protection

Occupational Exposure Limits (EH40): Formaldehyde; **EEC Guidelines**  
0,2 ppm – 8 hour TWA -MAXIMUM EXPOSURE LIMIT  
0,4 ppm – 15 min.ref period – MAXIMUM EXPOSURE LIMIT

Occupational Exposure Limits (EH40): Formaldehyde; **UK Guidelines**  
1 ppm – 8 hour TWA -MAXIMUM EXPOSURE LIMIT  
2 ppm – 15 min.ref period – MAXIMUM EXPOSURE LIMIT

## 7. Physical and Chemical Properties.

- a. Appearance: White solid Polymer
- b. Odour: Light smell of formaldehyde, when fresh
- c. Dry Weight : 10 – 70 kg/m<sup>3</sup>
- d. pH: 1,8 – 2,8
- e. Melting Point: 120 °C
- f. Flash ignition: 235°C
- g. Self ignition: 620 °C
- h. Flammability: Non flammable (<25 by ASTM E-84-76A)
- i. Explosive properties: None
- j. Oxidizing Properties: None
- k. Vapour Pressure: not applicable / non volatile acid
- l. Vapour Density: not applicable / non volatile acid
- m. Density: 10 – 70 kg/m<sup>3</sup>
- n. Solubility in water: Non soluble
- o. Dynamic Viscosity (cP at 30°C): Solid

## 8. Stability and Reactivity.

The polymer remains stable in dry conditions for at least 150 years after production, subject to proper storage and handling.

Under composting conditions, maximum 5% degradation per annum.

Avoid direct exposure to sunlight.

Temperatures above 45°C will result in decomposition of the product

Direct Contact with H<sub>2</sub>O<sub>2</sub> will result in degradation of the product.

Contact with hydrogen chloride (hydrochloric acid) which may, under certain conditions, lead to the formation of toxic and carcinogenic bischloromethyl ether (bis-CME).

## Hazardous Decomposition Products.

Thermal decomposition products may include formaldehyde, oxides of nitrogen and carbon monoxide

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## 9. Toxicological Information.

- |                     |   |
|---------------------|---|
| a. Carcinogenicity: | The polymer is non carcinogenic / non mutagenic |
| b. Eyes:            | Slightly irritating                             |
| c. Skin:            | Slightly irritating                             |
| d. Inhalation:      | Slightly irritating                             |

## Human Data:

Formaldehyde is irritating to the eyes, skin and respiratory tract, and many cause sensitisation. Formaldehyde has been classified as a Category 3 carcinogen. Category 3 substances are those which cause concern for man owing to possible carcinogen effects. Formaldehyde has been placed in the lowest category because, although it has been shown to cause cancer in rats, the large number of human studies has provided no convincing evidence that formaldehyde produces cancer in man. Current risk assessments show that if there is any risk at all, it must be small in absolute terms. Exposure to formaldehyde in the workplace should be reduced as far as is reasonably practicable and in any case, below the Maximum Exposure Limit 0,4 ppm. (EEC) and 2 ppm within the UK. Compliance with this requirement will virtually eliminate any carcinogenic risk that might have been present at higher levels of exposure.

## 10. Ecological Information

- |                           |                      |
|---------------------------|----------------------|
| a. Environmental effects: | None (Biodegradable) |
| b. Eco toxicity:          | None                 |
| c. Bio concentration:     | None                 |

## 11. Disposal Considerations.

- |                     |   |
|---------------------|---|
| a. Disposal Method: | Burn or handle as normal waste or bio waste<br>Disposal in landfill |
|---------------------|---|

## 12. Transport Information.

- |                           |                                   |
|---------------------------|-----------------------------------|
| a. Identification Number: | 39211900                          |
| b. Transport Name:        | UF or aminoplast polymer or BACEL |
| c. ADR/RID:               | Not applicable                    |
| d. IMO-IMDG code:         | Not applicable                    |
| e. ICAO/IATA:             | Not applicable                    |

## 13. Regulatory Information. EC labelling IRRITANT

- |                   |  |
|-------------------|--|
| a. R – sentences: | R20 – Do not inhale emanations<br>R43 – Irritate skin, rinse immediately and abundantly with water |
|-------------------|--|

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- b. S – sentences:
- S26 – Irritate eyes, rinse eyes immediately and abundantly with water and require medical advise
  - S37 – Wear suitable gloves
  - S51 – Use in ventilated area's

14. Other Information.

For detailed information see manufacturer's specifications and manuals.

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