

Material Safety Data Sheet

Date: 17-09-2008
Revision: nr.7
Replaces all previous publications

Product name: **HYDROCELL® SYNTHETIC HARDFOAM**
Includes brand names; Fytofoam, Fytofoam, Fytofoam, Fytofoam and Fytofoam.

1. Identification of the Producer and the Marketing Company
 - a. Production Plant: Resins Agro B.V.
Nijverheidsweg 17
6651 KS Druten
The Netherlands
T:+31(0)487 593778 // F:+31(0)487594836
 - b. Marketing Company: Resins Agro B.V.
Ambachtsweg 6
6657 CK Boven Leeuwen
The Netherlands
T: +31(0)487 593778 // F:+31(0)487594836
 - c. Distributor: Fytogreen Australia Pty Ltd.....
3 Webbs Lane..
Somerville, 3912.
Victoria, Australia.
T: (03) 5978 0511 // F: (03) 5978 0744
2. Composition.
 - a. Chemical Name: Urea – Formaldehyde Polymer
 - b. Synonyms: Aminoplast Polymer
 - c. Chemical Family: Aminoplasts - Duroplasts
 - d. Molecular Formula: $[-(\text{CH}_2\text{OH})_2\text{-N-CO-NH-CH}_2\text{OH-}]^n$
3. Hazards Information. Formaldehyde (EC No: 200-001-8) 0.8 – 0.9%
 - a. NFPA R: 36 & 37
S: 51
4. First Aid Measures.
No particular first aid measures are needed
5. 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
6. 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
7. 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.
8. Exposure Protection and Personal Protection.
 - a. Exposure Protection: Always work in well ventilated area, to keep vapour concentrations below occupational exposure limits
 - b. Personal Protection: Wear a simple mouth cap for breath protection

Occupational Exposure Limits (EH40): Formaldehyde; **Australian Guidelines**

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 1 ppm – 8 hour TWA -MAXIMUM EXPOSURE LIMIT
 2 ppm – 15 min.ref period – MAXIMUM EXPOSURE LIMIT

9. Physical and Chemical Properties.

a. Appearance:	White solid Polymer
b. Odour:	Light smell of formaldehyde, when fresh
c. UF Resin percentage:	10 – 70 kg/m ³
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 ³
n. Solubility in water:	Non soluble
o. Dynamic Viscosity (cP at 30°C):	Solid

10. 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.
- Direct Contact with H₂O₂ 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.

11. 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 may cause sensitisations. 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

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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 2 ppm. Compliance with this requirement will virtually eliminate any carcinogenic risk that might have been present at higher levels of exposure.

12. Ecological Information

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

The product does not contain any substance that is classified under EC legislation for environmental effects.

Formaldehyde
LC 96hr Rainbow trout 440 mg/litre
⁵⁰
BOD5 > 0.5 Readily biodegradable
COD

13. Disposal Considerations.

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

14. Transport Information.

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

15. Regulatory Information.

- | | |
|-------------------|---|
| a. R – sentences: | EC labelling IRRITANT
R36 – Irritating to eyes
R37 – Irritating to the respiratory tract
R43 – May cause sensitisation by skin contact |
| b. S – sentences: | S51 – Use in ventilated area's |

16. Other Information.

For detailed information see manufacturer's specifications and manuals.

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