

To the responsible department

DATUM
10.02.2022

E-MAIL
Nasim.Mamedov@armacell.com

Manufacturer's declaration – DGNB 2018 requirements

Dear Sir or Madam,

According to the certification body DGNB, criterion ENV 1.2 - Risks for the local environment (**DGNB version 2018**), the production of plastic foam insulation materials for thermal insulation and main insulation materials for building services must be **free of halogenated blowing agents**.

We can hereby confirm that all our ArmaFlex insulation materials are foamed **without halogenated blowing agents**. Although the products contain halogens, which are primarily used as flame retardants, they are embedded in the insulation material. **No brominated flame retardants and no PVC** are used in the manufacture of the ArmaFlex Ultima product. ArmaFlex Ultima achieves the building material class **B_L-s1, d0 resp. B-s2,d0**, which was previously unattainable with flexible insulation materials. This means that the insulation material has an extremely low smoke density and thus makes a significant contribution to the fire safety level of buildings.

For the **DGNB version 2018 / quality level 4**, you can only use NH/ArmaFlex of all ArmaFlex products to the best of our knowledge. Please note the building material class of NH/ArmaFlex. NH/ArmaFlex is foamed without halogenated blowing agents during the manufacturing process. **The finished product is also halogen-free** according to DIN VDE 0472-815. The fire behaviour of NH/ArmaFlex: **normal flammability**, self-extinguishing, non-dripping, does not conduct fire.

We hereby confirm for our product

1. NH/ArmaFlex

- free from halogenated blowing agents
- Halogen free acc. to DIN VDE 0472-815
- free from Hexabromcyclododecan (HBCD)
- **no chlorinated paraffins (SCCP, MCCP, LCCP)** and no polybrominated biphenyls (PBB)
- no polybrominated diphenyl ethers (PBDE) + TCEP < 0.1 % tris(2-chloroethyl)phosphate
- no boron compounds < 0.1 %

2. AF/ArmaFlex Evo, AF/ArmaFlex, HT/ArmaFlex, SH/ArmaFlex und ArmaFlex XG

- free from halogenated blowing agents
- free from Hexabromcyclododecan (HBCD)
- **no chlorinated paraffins (SCCP und MCCP)** and no polybrominated biphenyls (PBB)
- no polybrominated diphenyl ethers (PBDE) + TCEP < 0.1 % tris(2-chloroethyl)phosphate
- no boron compounds < 0.1 %

4. ArmaFlex Ultima

- free from halogenated blowing agents
- free from Hexabromcyclododecan (HBCD)
- **no chlorinated paraffins (SCCP und MCCP)** and no polybrominated biphenyls (PBB)
- no polybrominated diphenyl ethers (PBDE) + TCEP < 0.1 % tris(2-chloroethyl)phosphate
- no boron compounds < 0.1 %
- free from PVC und Brom

5. ArmaFlex Protect

- free from halogenated blowing agents, enthält jedoch Chlorparaffine
- free from Hexabromcyclododecan (HBCD)
- **no chlorinated paraffins (SCCP und MCCP)** and no polybrominated biphenyls (PBB)
- no polybrominated diphenyl ethers (PBDE) + TCEP < 0.1 % tris(2-chloroethyl)phosphate t
- no boron compounds < 0.1 %

6. Armaprotect A1

- free from halogenated blowing agents
- free from Hexabromcyclododecan (HBCD)
- no chlorinated paraffins
- no polybrominated biphenyls (PBB)
- no polybrominated diphenyl ethers (PBDE) + TCEP < 0.1 % tris(2-chloroethyl)phosphate
- no boron compounds < 0.1 %

7. ArmaFlex Protect 1000 (Brandschutzpaste)

- Chlorinated paraffins and TCEP < 0.1 %

Note: If absolutely no products containing chlorinated paraffins are allowed to be installed, then only a combination of NH/ArmaFlex and Pyrostat Uni (G+H Insulations) would be suitable as a fire protection solution for pipe penetrations.

8. All ArmaFix products (pipe supports) are without halogenated blowing agents and HBCD-free.

Special feature of **NH-ArmaFix** pipe support:

- free from halogenated blowing agents
- **no chlorinated paraffins (SCCP und MCCP)** and no polybrominated biphenyls (PBB)
- free from hexabromocyclododecane (HBCD)
- no chlorinated paraffins
- none Polybrominated biphenyls (PBB)
- no polybrominated diphenyl ethers (PBDE) + TCEP < 0.1 % tris(2-chloroethyl)phosphate

9. SVHC: We can confirm that none of our products contain substances (e.g. SVHC) in concentrations above 0.1% that are mentioned in the ECHA candidate list of substances of very high concern. (Status of the list: 17.01.2022).

10. ArmaFlex adhesive based on polychloroprene

Furthermore, we would like to confirm that our **ArmaFlex adhesives based on polychloroprene (ArmaFlex 520, ArmaFlex 525, ArmaFlex HT625, ArmaFlex Ultima 700, ArmaFlex RS850)** do not fall under the DGNB criteria and are therefore not relevant for DGNB quality assessments.

11. ArmaFlex SF 990 Adhesive and ArmaFlex Ultima SF 990 Adhesive:

- no chlorinated paraffins > 0.1 wt.-%
- Halogens: very low chloride content. Therefore, in our opinion, the halogen content is negligible.
- CWS plasticiser < 0.1 %
- solvent-free

If you have any further questions in this regard, please do not hesitate to contact us.

Best regards,


Nasim Mamedov
Technical Project Specialist
Technical Marketing EMEA
Armacell GmbH