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Emerald Innovation[™] 1000

Emerald Innovation 1000 is a versatile polymeric brominated flame retardant with excellent thermal stability. **Emerald Innovation 1000** is effective in a broad spectrum of applications in consumer electronics, automotive, textile back coating and construction materials.

Chemical Structure

Typical Properties of Emerald Innovation 1000

| Appearance | | Off-White Powder | |
|--------------------------------|---|--|--|
| Bromine Content, % | | 78 | |
| | m) | 5-6 | |
| Tg, ⁰ C | | 157 | |
| Sp. Gr. | | 2.9 | |
| | | | |
| Thermo | ogravimetric A | nalysis (@ 10 °C/min under | N ₂) |
| 5% Weight Loss, ⁰ C | | 410 | |
| | Solubility | r (g/ 100 g Solvent) | |
| Water | < 0.1 | Toluene | 2.2 |
| Dichloromethane | 0.2 | Methyl Ethyl Ketone | 0.1 |
| Methanol | < 0.1 | | |
| | Bromine Content, % Average Particle Size (μ Tg, ⁰ C Sp. Gr. 5% Weight Loss, ⁰ C Water Dichloromethane | Bromine Content, % Average Particle Size (μm) Tg, ⁰ C Sp. Gr. Thermogravimetric A 5% Weight Loss, ⁰ C Solubility Water < 0.1 Dichloromethane 0.2 | Bromine Content, % 78 Average Particle Size (μm) 5-6 Tg, °C 157 Sp. Gr. 2.9 Thermogravimetric Analysis (@ 10 °C/min under 5% Weight Loss, °C 410 Solubility (g/ 100 g Solvent) Water < 0.1 |

Emerald Innovation 1000 is an effective replacement for Decabromodiphenyl oxide and Decabromodiphenyl ethane flame retardants currently used in thermoplastic, elastomeric and thermoset polymer systems, such as HIPS, ABS, polypropylene, LDPE, HDPE, EPDM, unsaturated polyester, and epoxy resins. **Emerald Innovation 1000** is a versatile flame retardant that can also be used for coatings and adhesive systems, including backcoatings for fabrics.

The use of proper protective equipment is recommended. Excess exposure to the product should be avoided. Wash thoroughly after handling. Store the product in a cool, dry, well-ventilated area away from incompatible materials. Unless stated, proper storage will permit usage of the product for 6 to 12 months from the date of receipt. With any developmental flame retardant there is limited information available about its properties.

For additional handling and toxicological information, consult the Chemtura Material Safety Data Sheet.

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