

Technical Bulletin

Product Name: **ENVIROPEG™ E4000**

Chemical Description: Polyethylene Glycol
 CAS Registry No: 25322-68-3
 Linear Formula: H-(OCH₂CH₂)_n-OH
 Chemical Family: Oxyalkylene Polymer

Available Material Forms: Solid (SO), Flake (FL), Powder (PD)

Product Description: ENVIROPEG™ E4000 is 100% active white solid that is soluble in water and other polar organic solvents. ENVIROPEG™ E4000 is used as a lubricant, viscosity modifier, softener, carrier and humectant in diverse range of industries and applications. Polyethylene Glycols have two primary hydroxyl groups which make them versatile chemistries for the Chemical Intermediate market.

Markets:

- Adhesives
- Agrochemicals
- Chemical Intermediates
- HI&I
- Paints & Coatings
- Personal Care
- Pulp & Paper
- Rubber & Elastomers
- Textiles
- Wood Treatment

Applications:

- Floor Polishes
- Hand & Body Creams
- Hot Melt Adhesives
- Lubricants
- Rubber Process Aids
- Textile Softeners
- Water Soluble Adjuvants
- Wood Impregnation

Typical Properties:	Average Molecular Weight Range	3600 – 4400
	Average Hydroxyl Number Range, mg KOH/g	25.5 – 31.1
	Viscosity @ 210°F, cSt	110.0 – 158.0
	pH @ 25°C (5% in H ₂ O)	4.5 – 7.5
	Moisture, % (Solid and Flake)	0.0 – 0.24
	Moisture, % (Powder)	0.0 – 0.50
	Melting or Freezing Range, °C (°F)	53 – 58 (127 – 136)
	Solubility in Water (Wt% @ 20°C)	55
	Density (g/cm ³ @ 20°C)	1.224

1. Typical Properties, not to be construed as specifications.

* Refer to the ENVIROPEG™ Polyethylene Glycols and Methoxypolyethylene Glycols brochure for more specific application information

Toxicity & Safety: For information on the toxicity and safe handling of this product, read the Safety Data Sheet prior to use of product.

Storage & Handling: Normal safety precautions (i.e. gloves and safety goggles) should be employed when handling ENVIROPEG™ products. Contact with the eyes and prolonged contact with the skin should be avoided. Wash thoroughly after handling.

Storage & Handling Cont. Bulk Storage Information: Stainless steel and glass fiber-reinforced polyethylene tanks are recommended. Many oven-cured phenolic and epoxy/phenolic linings may also be used. If storage time is prolonged, or if tank is heated or in a hot climate, it is preferable to store this product under a nitrogen atmosphere. If heated storage is required, metal temperature should not exceed 50°C (125°F)

Shipping Data: ENVIROPEG™ E4000 is available in rail tanks, tank trucks, 507 pound (230 kg) & 485 pound (220 kg) steel drums as well as 50 pound bags. Small samples are available by contacting our sample department at 480-945-8400.

Regulatory Information:

U.S DOT Classification	Non-Regulated
HMIS Code	1-1-0
CAS Registry No.	25322-68-3
TSCA Inventory	Yes
Canadian DSL	Yes

Biodegradability: ENVIROPEG™ E Series products are readily biodegradable. A detailed biodegradability statement is available upon request.

Product Stewardship: Environmental Fluids encourages its customer and potential users to review their application from the standpoint of human health and environmental aspects. To help ensure that Environmental Fluids products are not used in ways for which they are not intended or tested, Environmental Fluids personnel will assist customers in dealing with environmental and product safety considerations. Environmental Fluids literature, including Safety Data Sheets, should be consulted prior to use.



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