



Technical Data Sheet

EcoSmooth™ Universal Fluid 1100

INCI NAME: Ethyl PG-Acetal Levulinate

Features & Benefits

- Bio-based & biodegradable cosmetic fluid
- Good spreadability
- Non-greasy & non-tacky for a light feel
- Soft skin feel
- Partly volatile allowing good play time but still low residue after feel
- Unique & broad compatibility profile with cosmetic ingredients and fragrances

Composition

- High purity ketal ester

Applications

- Personal care products such as deodorants, cleansing products, skin creams, lotions, color cosmetics

Typical Properties

Specification Writers: These values are not intended for use in preparing specifications.

Test ¹	Property	Unit	Result
	Appearance		Crystal clear liquid
	Refractive index at 25°C (77°F)		1.43
	Flash point, closed cup	°C	111.5
	Boiling point	°C	225.2
	Viscosity	cPs at 25°C	3.5
	Specific gravity		1.03 at 23.9°C
	Surface tension	mN/m at 22°C	31.03
	Vapor pressure	kPa at 25°C	0.0065
ISO 16128	Naturality origin index		0.7
ASTM E 1720 -01	Biodegradability		Ultimately biodegradable

1. ISO: International Standardization Organization
ASTM: American Society for Testing and Materials

Description	EcoSmooth™ Universal Fluid 1100, is a renewable feedstock sourced material made with what is left from plant cultivation after harvesting, is biodegradable and has a good safety profile, making this carrier ideal for the formulation of very high naturally content.
How to Use	EcoSmooth™ Universal Fluid 1100 is added into the oil phase and mixed until solved or dispersed evenly. Thanks to its high polarity, it is compatible with a wide range of organic ingredients including cosmetic actives and sunscreens. Being slightly volatile, it provides a non tacky, non greasy light and soft feel to various formulations including ones with high natural content. Being nonflammable and very compatible, this material is easy to handle and to incorporate into a broad range of formulations including lipsticks and pigmented formulations.
Handling Precautions	PRODUCT SAFETY INFORMATION REQUIRED FOR SAFE USE IS NOT INCLUDED IN THIS DOCUMENT. BEFORE HANDLING, READ PRODUCT AND SAFETY DATA SHEETS AND CONTAINER LABELS FOR SAFE USE, PHYSICAL AND HEALTH HAZARD INFORMATION. THE SAFETY DATA SHEET IS AVAILABLE ON THE DOW WEBSITE AT DOW.COM, OR FROM YOUR DOW SALES APPLICATION ENGINEER, OR DISTRIBUTOR, OR BY CALLING DOW CUSTOMER SERVICE.
Usable Life and Storage	When stored at or below 25°C (77°F) in the original unopened containers, this product has a usable life ranging of 730 days from the date of production depending on viscosity.
Packaging Information	This product is available in 210 kg drums. Samples are available in 500 g bottles.
Limitations	This product is neither tested nor represented as suitable for medical or pharmaceutical uses.
Health and Environmental Information	To support customers in their product safety needs, Dow has an extensive Product Stewardship organization and a team of product safety and regulatory compliance specialists available in each area. For further information, please see our website, dow.com or consult your local Dow representative.
Disposal Considerations	Dispose in accordance with all local, state (provincial) and federal regulations. Empty containers may contain hazardous residues. This material and its container must be disposed in a safe and legal manner. It is the user's responsibility to verify that treatment and disposal procedures comply with local, state (provincial) and federal regulations. Contact your Dow Technical Representative for more information.
Product Stewardship	Dow has a fundamental concern for all who make, distribute, and use its products, and for the environment in which we live. This concern is the basis for our product stewardship philosophy by which we assess the safety, health, and environmental information on our products and then take appropriate steps to protect employee and public health and our environment. The success of our product stewardship program rests with each and every individual involved with Dow products - from the initial concept and research, to manufacture, use, sale, disposal, and recycle of each product.

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