δ-Valerolactone

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DVL · Technical Data Sheet

Product name	δ-Valerolactone	**Abbreviation**	DVL
CAS No.	542-28-9	**EC No.**	208-807-1
Molecular formula	C5H8O2	**Molecular weight**	100.12 g/mol

Product description. A colourless transparent liquid for fragrance, polyester, polymer-material, pharmaceutical-intermediate, ink and coating applications.

1 Key physical data

Appearance	Colourless transparent liquid at 20 °C	**Solubility**	Soluble in water, ethanol and ether
Melting point	−13 °C	**Boiling point**	218–220 °C
Flash point	107 °C, closed cup	**Relative density**	1.08
Vapour pressure	0.04 kPa at 25 °C		

2 Quality specification

Product-grade limits. Batch-specific COA is provided for individual shipment release.

Test item	Typical method	Unit	Superior	First	Qualified
δ-Valerolactone content	GC (typical)	% w/w	⩾ 99.0	⩾ 98.5	⩾ 98.0
Water	Karl Fischer (typical)	% w/w	⩽ 0.06	⩽ 0.10	⩽ 0.15
Colour	APHA / Hazen (typical)	Hazen	⩽ 20	⩽ 30	⩽ 50
Acid value	Acid-base titration (typical)	mg KOH/g	⩽ 0.10	⩽ 0.20	⩽ 0.50

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3 Applications

Fragrance and flavour intermediates; polyester and degradable polymer materials; pharmaceutical and chemical intermediates; inks, coatings and battery-electrolyte applications.

4 Product information

This Technical Data Sheet presents key product and quality information for business-to-business evaluation. Product selection should be based on the intended process, formulation and applicable customer requirements.

5 Packaging, storage and documentation

Standard packaging	200 kg galvanized iron drum; 1,000 kg plastic IBC drum. Other pack sizes may be available upon request.
Storage conditions	Store at 2–8 °C in tightly closed containers in a cool, well-ventilated area. Storage at −20 °C is recommended. Protect from heat, direct sunlight and strong oxidizers.
Shelf life	6 months unopened when stored under normal low-temperature conditions.
Batch documentation	Batch-specific Certificate of Analysis (COA) available for shipment release. Current SDS/MSDS available on request.
Safety and transport	For safety, handling, storage, transport and emergency measures, refer to the current SDS/MSDS applicable to the supplied product and destination.

Technical-document note. The specification values in this sheet apply to the selected product grade. Product data are subject to revision. For safety information and shipment-specific results, refer to the current SDS/MSDS and the batch-specific COA.

GLOBAL EXPORT DESK

For batch-specific COA, commercial packaging (200kg drums / IBC / ISO Tank), or custom spec inquiries, contact our Global Export Desk:

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