

**Product Characteristic**

Deuteron	LE 151	LE 829
Active content	approx. 85 %	approx. 85 %
Reactive thinner	1.2 Ethandiol	1.4 Butandiol
Viscosity	approx. 300 mPa*s	approx. 400 mPa*s
Density	approx. 0.99 g/cm ³	approx. 0.98 g/cm ³
Acid number	approx. 5 mg KOH/g	approx. 5.5 mg KOH/g
pH-value	approx. 8 (1 % in water)	approx. 8 (1 % in water)
OH-content	approx. 8.2 %	approx. 5.7 %
Ionogenicity	cationic	
Appearance	slightly yellowish liquids	

**Product Description**

Deuteron LE 151 and Deuteron LE 829 are conductivity additives based on tetraalkylammonium ethyl sulphate. The use of our anti-static additives allows the adjustment of the surface and volume resistivity in various systems. The effect of Deuteron's anti-static additives is mainly based on surface migration and the ionic character of the cations.

Deuteron LE 151 and Deuteron LE 829 are liquid products that are already diluted in 2 functional alcohols. The dilution makes them especially suitable for the use in polyurethane systems where the carrier solvent acts as a reactive diluent. The products are miscible in all solvent mixtures commonly used in coatings, partly slight turbidity can occur.

Applications

Deuteron's antistatic additives are able to achieve resistivity ranges between 1×10^5 and $1 \times 10^9 \Omega$ (100 k Ω - 1 G Ω) – Anti-static properties according to EN ISO 20345.

Anti-static shoes:

1×10^5 and $1 \times 10^8 \Omega$ (100 k Ω - 100 M Ω)
(according to EN 61340-4-3)

ESD applications:

1×10^5 and $3,5 \times 10^7 \Omega$ (100 k Ω - 35 M Ω)
(according to EN 61340-5-1)

The effect of quaternary ammonium compounds is highly influenced by the type of system (resins, additives, pigments, etc. ...) and by the chosen measurement conditions. For details please refer to our separately available "Conductivity Agents" brochure.

Fields of application include:

- › Electrostatic adjustment of spray paints
- › PU systems (foam, shoe soles and casting resins)
- › Floor coatings
- › Synergistic wetting agent for carbon blacks, graphite and carbon fibres

Dosage

Typical addition level: 0.2 % - 5 %. The exact quantities to be used depend on the system and must be determined individually for the intended application.



Technical Data Sheet

DEUTERON LE 151, LE 829

Antistatic Additives based on Quaternary Ammonium Compounds in reactive thinners

Deuteron[®]
ADDITIVES TO YOUR SUCCESS

■ Processing

Deuteron LE products can be added to the system at any time during the production process or they can be used as post addition additives to further adjust resistivity. For use in isocyanate-systems the proportion of hydroxy groups of the carrier can be taken in consideration.

■ Storage Conditions

24 months in tightly closed original containers at room temperature. At low temperatures a viscosity increase or solidification can occur. The product can be regenerated by applying gentle heat. (The temperature should not exceed 60 °C)

■ Package Sizes

Steel drum (25 kg net)
Steel drum (200 kg net)

■ Safety

According to Regulation (EC) No. 1272/2008 Deuteron LE 151 and LE 829 are classified as dangerous products and therefore need to be labelled.

For detailed information please refer to the Safety Data Sheet and Regulatory Information Sheet. The documents are also available on our website:

<https://www.deuteron.com/en/download-center/>

■ Deuteron: First class products for the coating industry

Deuteron GmbH successfully develops and sells innovative additives since 1977. Our product range consists of matting agents, anti-static additives, texturing additives, thickeners and UV initiators. In the course of our company history we have become an important partner of the national and international paint, lacquer and coating industry with sales partners around the globe.

This leaflet intends to give technical advice without warranty and does not claim to be complete.



DEUTERON GmbH
In den Ellern 2-4
28832 Achim, Germany

Phone: +49 (0) 421 48 99 03-0
Fax +49 (0) 421 48 99 03-60

Mail contact@deuteron.com
URL www.deuteron.com

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