

Advanced Materials

MIRALON® 150AQU Aqueous Dispersion (LME 11791 - Provisional TDS)

DATA SHEET

Aqueous masterbatch dispersion containing MIRALON® conductive carbon nanotube pulp and JEFFSPERSE® X-3202 as a dispersing agent in DI water

Applications

MIRALON® 150AQU Aqueous Dispersion (LME 11791) is a specialty component to create conductive electrode formulations for battery applications. It is suitable for the formulation of highly conductive water-based coatings.

MIRALON® 150AQU Aqueous Dispersion (LME 11791) is universally designed for both aqueous electrode (anode and cathode) slurries upon addition of respective battery active materials, binders or other formulation components.

Benefits

- Pre-dispersed conductive additive in water providing electrical and mechanical properties to various electrodes.
- Ready-to-use in combination with battery active material or upon dilution to the desired carbon content in the range of ≤1.5wt% of MIRALON® pulp
- Easy to mix solution with no requirement for heating prior to mixing.
- Composed of non-hazardous materials in a green solvent (water)

Properties

Overall purpose as water-based conductive additive to electrode slurries for battery applications.

This pre-dispersed masterbatch of MIRALON® pulp in water offers excellent electrical properties and is ready-to-use upon mixing with electrode active material via standard production processes.

Key data

Specified key data

Aspect (visual) Black paste

Specified key data are individually checked throughout and guaranteed.

Typical parameters

3-4 [Pa.s] Viscosity at 25 °C and 25 s⁻¹ (Shear thinning) <60 [µm] Particle size by Hegman gauge

As-supplied form Viscous liquid

Odor slight

Hazards Identification No hazardous decomposition products are known.

Refer to SDS for additional hazard information.

Disposal Regular procedures approved by local

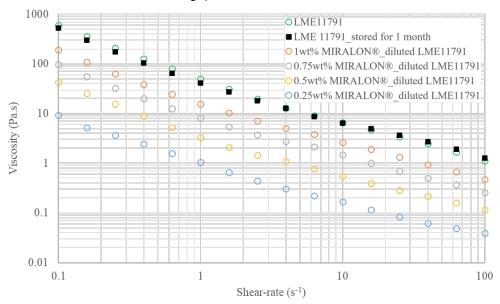
authorities.

Viscosity

The product has a shear thinning behaviour, i.e. viscosity is dependent on shear rate

Typical values of complex viscosity at 25°C for different strain rates in Pa.s.

Measurements performed on a TA Instruments AR 1500ex with a plate-plate geometry of 40mm diameter, 0.1% strain, and gap of 0.5mm.



After storing MIRALON® 150AQU Aqueous Dispersion (LME 11791) for 1 month, the viscosity remained within the same regime

Storage

MIRALON® 150AQU Aqueous Dispersion (LME 11791) should be stored in a cool, dry and well-ventilated place.

If visual phase separation occurs during storage, conventional mixing processes will return the masterbatch to its original condition.

Handling precautions

Mandatory and recommended industrial hygiene procedures should be followed whenever our products are being handled and processed. For additional information, please consult the corresponding product safety data sheets.

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