

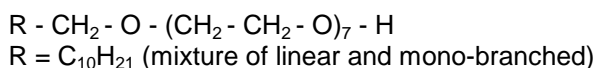


LIALET[®] 111-7

Technical Data Sheet No. 1153 – October 2012

Description

LIALET[®] 111-7 is a fatty alcohol polyethylenglycol ether, based on LIAL[®] 111 and ethylene oxide (7 moles). It is manufactured in in Terranova dei Passerini (Lodi, Italy) plant. The chemical structure is the following:



CAS registry no. 127036-24-2
INCI UNDECETH-7

Sales Specification

Property	Test Method	Unit	Guaranteed Value ¹
* Appearance at 25°C	visual	-	cloudy liquid
Physical state changement	MPL 1001.0	°C	13-17
* Colour	MPL 1002.0	APHA	≤ 50
* Cloud point ^a	MPL 2001.0	°C	53-55
Hydroxyl Number	MPL 1010.0	mg KOH/g	114-120
Polyethylenglycol	MPL 2002.0	% w/w	≤ 3.0
* pH (5% in water)	MPL 1007.0	-	5.0-7.0
* Water (Karl-Fisher)	MPL 1006.0	% w/w	≤ 0.50
Average Molecular Mass	calculated	g/mol	467-492

* values reported on inspection certificate.

¹ specification No. D001340 rev. 1 of June 1st, 2001.

^a 1 wt% water solution.

Additional Properties

Property	Test Method	Unit	Typical Value
Ethylene Oxide content	calculated	% w/w	64
HLB	calculated	-	12.8
Viscosity at 50°C	MPL 1004.0	cSt	20
Density at 50°C	MPL 1003.0	kg/l	0.97
Flash point	RCM 3628	°C	> 125

RCM and MPL are Sasol Italy analytical methods, internal or referred to international standard. Additional information available upon request.

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Main Applications

LIALET[®] 111-7 has a well balanced hydrophylic-lipophylic ratio.

LIALET[®] 111-7 is a good emulsifier agent for O/W emulsions.

It is a good wetting agent, with good degreasing performance. It improves degreasing performance of household detergent formulations. The combination of wetting and degreasing properties makes LIALET[®] 111-7 well suited for APC formulation as well as wool scouring process.

Handling and Storage

LIALET[®] 111-7 should preferably be stored in heated stainless steel tanks.

It is a cloudy liquid at room temperature and it becomes homogeneous and transparent at temperature between 25 and 35°C, it becomes a solid wax at temperature lower than 15°C.

It is preferable to avoid heating above 60°C and to store under nitrogen in order to minimise yellowish phenomena. Improvement of storage stability at low temperature can be achieved by mixing LIALET[®] 111-7 with water. In particular, the addition of 15 wt% of water makes this product a transparent liquid up to a temperature between 5 and 10°C.

At room temperature Lialet[®] 111-7 is water soluble up to 45 and 50 wt%.

Shelf-life is 36 months from production date for product in its original and sealed packaging.

Packaging

LIALET[®] 111-7 is generally supplied in drums, details on available packaging can be obtained from sales department.

Data regarding safety, transport classes, toxicology and biodegradability of the product can be obtained from the corresponding material safety data sheet.

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