Distribuito da:
Tellerini s.p.a.
Via Bonazzi, 36
40013 Castel Maggiore (BO)
Tel: +39 051 6322111
Fax: +39 051 715380
sicurezza@tellerini.it
www.tellerini.it

MARLIPAL 31-90

Technical Data Sheet No. 1202 – February 2023

Product Description

MARLIPAL 31-90 is a fatty alcohol polyethyleneglycol ether, based on C11 branched and linear– C13 branched alcohol and ethylene oxide (about 9 moles). It is manufactured in Terranova dei Passerini (LO) plant. The chemical structure is the following:

$$R - CH_2 - O - (CH_2 - CH - O)_9\text{-}H$$
$$R = C_{10}H_{21} \text{ or } C_{12}H_{25} \text{ (branched)}$$

EINECS no. 949-938-0
INCI C11-13 PARETH-9

Sales Specification

Property	Test Method	Unit	Guaranteed Value[1]
√ Appearance at 25°C	Visual	-	Cloudy liquid
√ Colour	RCM 3668	APHA	≤ 50
√ Cloud point (1% in water)	RCM 3646	°C	54 – 56
√ pH (5%)	RCM 3645	-	5,0 – 7,0
√ Free Water (Karl Fischer)	RCM 3804	% mass	≤ 0,50

√ value reported on inspection certificate.
[1] specification No. 1972 rev. 2 of January 29th 2007.

Additional Properties

Property	Test Method	Unit	Typical Value
Ethylene Oxide content	Calculated	%w/w	66
HLB	Calculated	-	13,2
Hydroxyl number	EN 13926	mg KOH / g	100
Average Molecular weight	Calculated	g/mol	561
Polyethylene glycols	EN 12582	% mass	1,5
Pour point	ASTM D97	°C	19
Viscosity at 40°C	ASTM D445 / ASTM D7042	cSt	35
Density at 40°C	ASTM D7042 / ASTM D4052	kg/m^3	989
Flash point	ASTM D 93	°C	> 125

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

MARLIPAL 31-90

Technical Data Sheet No. 1202 – February 2023

Main Applications

MARLIPAL 31-90 can be used as degreasing agent in leather treatment and as emulsifier in agrochemical applications.
In metal working field MARLIPAL 31-90 shows good dispersing properties for chip or shaving particles as well as good emulsification behaviour regarding to the most common lubricating oils used.
In the textile field MARLIPAL 31-90 can be used as detergent surfactant.
MARLIPAL 31-90 is suitable for NPE 9 replacement.

Handling and Storage

MARLIPAL 31-90 should preferably be stored in stainless steel tanks.
It is suggested to keep the product at temperature below 40°C, it is preferable to avoid heating above 60°C and to store under nitrogen in order to minimise yellowish phenomena.
MARLIPAL 31-90 is a cloudy liquid at room temperature it becomes a solid wax at temperature lower than 25°C. Improvement of appearance and handling at low temperature can be achieved by mixing the product with 15 weight% water to obtain a clear liquid up to a temperature about -2 C°.
At room temperature MARLIPAL 31-90 is water soluble up to 30 weight%.
Over time the product can settle generating different layers of inhomogeneous material. This is not a sign of poor product quality, but it is a common feature of many non-ionic surfactants.
Products that have begun to precipitate should be reconstituted by gentle heating, at about 40°C, and mixing. The temperature must not be allowed to exceed 50°C.
Shelf-life is 36 months from production date for product in its original and sealed packaging.

Packaging

MARLIPAL 31-90 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.

Sasol Italy S.p.A.
Headquarters
Viale Forlanini, 23
20134 Milano, Italy
Phone +39-02 58453 1
Fax +39-02 58453 285

Technical Customer Support
Via E. Mattei, 4
26827 Terranova dei Passerini (LO), Italy
Phone +39-0377 463 1
Fax +39-0377 463 226

Sasol is a registered trademark of Sasol Ltd. Product trademarks displayed in this document are the property of the Sasol Group of companies, except where it is clear from the context that not. Users of this document are not permitted to use these trademarks without the prior written consent of their proprietor. All rights not expressly granted are reserved. Reference to trademarks used by other companies is neither a recommendation, nor should it give the impression that products of other companies cannot be used.
The information contained in this document is based on Sasol's knowledge and experience at the time of its creation. We reserve the right to make any changes to this document or the products described therein, as a result of technological progress or developments. This information implies no liability or other legal responsibility on our part, including with regard to existing third-party patent rights. In particular, no guarantee or warranty of properties in the legal sense is implied. The customer is not exempted from the obligation to conduct careful inspection and testing of incoming products. All our business transactions are governed exclusively by our General Business Terms.