
Technical Information

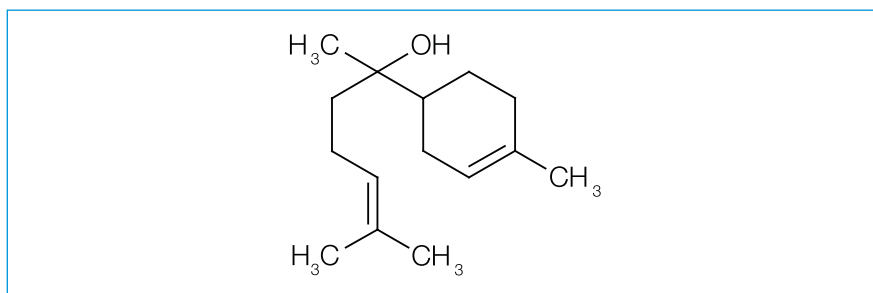
October 2010
Supersedes issue dated April 2010

04_060501e-08/Page 1 of 6

Bisabolol rac.

® = Registered trademark of BASF group

Active ingredient for the cosmetics industry.

Structural formula**Chemical name**

1-Methyl-4 (1,5-dimethyl-1-hydroxyhex-4(5)-enyl)cyclohexene

Synonyms

alpha-Bisabolol, Levomenol

Grade

Product	INCI name	CAS-No.	PRD-No.*
Bisabolol rac.	Bisabolol	515-69-5	30035139

* BASF's commercial product number

Properties

Bisabolol rac. is of synthetic origin. It contains the four isomers of alpha-Bisabolol which all occur in nature.

Bisabolol is a clear, colorless to slightly yellowish liquid with a faint, floral, sweetish odor.

Bisabolol is stable in formulations with a wide range of pH 3 – 11.

Bisabolol is soluble in ethanol, 2-propanol and in natural, mineral and synthetic fats and oils. It is insoluble in water and glycerol. Clear aqueous solutions can be prepared with the aid of solubilizers, e.g. Cremophor® CO 40.

	Unit	Bisabolol rac.
Purity	Area %	>85
Refractive index n(D/20)		1.492 – 1.498
Molecular weight	g/mol	222.4

Specification

See separate document: "Standard Specification" available via BASF's WorldAccount: <https://worldaccount.basf.com> (registered access).

Shelf life

Bisabolol rac. is stable for at least 24 months if stored in the original sealed containers in a dry place at max. 20 °C.

Application

Bisabolol is the main active ingredients of the medical plant chamomile (*Matricaria chamomilla*) which has been used in traditional medicine for hundreds of years.

Bisabolol protects and heals the skin from the effects of daily stress. It is a naturally occurring active ingredient that accelerates the healing process of skin. Bisabolol can be used with confidence in personal care formulations, especially in products for sensitive skin, baby care, after-shave, and after-sun applications. Its added anti-inflammatory properties make it a truly versatile active ingredient for skin care products.

Bisabolol can be combined with almost all common cosmetic ingredients in formulations.

Typical formulations

After shave balm

No. 07/00040

	%	Ingredients	Supplier	INCI name
A	0.25	Pemulen TR-1	(6)	Acrylates/C10-30 Alkyl Acrylate Crosspolymer
	1.50	Vitamine E-Acetate Care	(1)	Tocopheryl Acetate
	0.20	Bisabolol rac.	(1)	Bisabolol
	10.00	Miglyol 812	(11)	Carpilic/Capric Triglyceride
	0.20	Perfume "Round" 250 090	(70)	Perfume
	1.00	Cremophor® CO 40	(1)	PEG-40 Hydrogenated Castor Oil
B	1.00	D-Panthenol USP	(1)	Panthenol
	15.00	Ethanol 96%		Alcohol
	5.00	Glycerin 86 – 88%	(20)	Glycerin
	0.05	Tylose H 4000	(260a)	Hydroxyethyl Cellulose
	65.72	Water dem.		Aqua
C	0.08	Sodium Hydroxide	(28)	Sodium Hydroxide

Production:

Weigh out the components of phase A and mix them. Stir phase B into phase A whilst homogenizing and continue homogenizing for a while. Neutralize with phase C and homogenize again.

Properties:

Viscosity: 6,000 mPa·s Brookfield RVD VII+
pH value: 7.0

Pre shave

No. 07/00044

	%	Ingredients	Supplier	INCI name
A	81.70	Ethanol		Alcohol
	3.00	Vitamine E-Acetate Care	(1)	Tocopheryl Acetate
	1.00	Bisabolol rac.	(1)	Bisabolol
	0.20	Perfume		
	0.10	Menthol	(20)	Menthol
	4.00	Luvitol® EHO	(1)	Cetearyl Ethylhexanoate
	2.00	Eutanol G	(27)	Octyldodecanol
	2.00	Miglyol 812	(11)	Caprylic/Capric Triglyceride
	2.00	D-Panthenol USP	(1)	Panthenol
	2.00	Whitch Hazel Distillate	(212)	Hamamelis Virginiana (Whitch Hazel) Water, Alcohol
	2.00	Jojoba Oil		Simmondsia Chinensis (Jojoba) Seed Oil

Production:

Weigh out the components of phase A and dissolve them clearly.

Skin conditioning gel with vitamins**No. 62/00099 V1**

	%	Ingredients	Supplier	INCI name
A	3.60	Cremophor RH 40	(1)	PEG-40 Hydrogenated Castor Oil
	15.00	Ethanol		Alcohol
	0.10	Bisabolol rac.	(1)	Bisabolol
	0.50	Vitamin E-Acetate Care	(1)	Tocopheryl Acetate
	q.s.	Perfume		
B	3.00	D-Panthenol USP	(1)	Panthenol
	0.60	Carbopol 940 Polymer	(6)	Carbomer
	76.40	Water dem.		Aqua
C	0.80	Triethanolamine Care	(1)	Triethanolamine

Production:

Dissolve phase A clearly.
 Allow phase B to swell and neutralize it with phase C.
 Stir phase A into the neutralized phases B + C and homogenize.

Properties:

Viscosity: 57,600 mPa·s Brookfield RVD VII+
 pH value: 7.7

Deostick transparent**No. 63/00017**

	%	Ingredients	Supplier	INCI name
A	3.00	Cremophor® A 25	(1)	Cetareth-25
	3.00	Cremophor CO 40	(1)	PEG-40 Hydrogenated Castor Oil
	0.20	Bisabolol rac.	(1)	Bisabolol
	1.00	Vitamin E-Acetate Care	(1)	Tocopheryl Acetate
	3.00	Perfume		
	5.00	Sodium Stearate	(10)	Sodium Stearate
	0.50	Irgasan DP 300	(12)	Triclosan
	15.00	Glycerin 86 – 88%	(20)	Glycerin
	60.00	1,2-Propylene Glycol Care	(1)	Propylene Glycol
	9.30	Water dem.		Aqua

Production:

Weigh out the components of phase A and melt them.
 Cast the melted mixture into appropriate moulds.

Properties:

pH value: 9.0

Suppliers

1. **BASF SE**
67056 Ludwigshafen, Germany
Tel.: +49(621) 60-0
Fax: +49(621) 60-42525
www.basf.com
6. **The Lubrizol Corporation**
29400 Lakeland Boulevard, Wickliffe, Ohio 44092, USA
Tel.: +1(440) 943 4200
www.lubrizol.com
10. **Bärlocher GmbH**
Freisinger Straße 1, 85716 Unterschleißheim, Germany
Tel.: +49(89) 14373-0
Fax: +49(89) 14373-312
www.baerlocher.de
11. **Sasol Germany GmbH – Witten**
Arthur-Imhausen-Str. 92, 58453 Witten/Ruhr, Germany
Tel.: +49(2302) 925-537
Fax: +49(2302) 925-358
www.sasol.com
12. **Ciba Spezialitätenchemie AG**
Klybeckstraße 141, 4002 Basel, Switzerland
Tel.: +41(61) 6361111
www.cibasc.com
20. **Merck KGaA**
Frankfurter Straße 250, 64293 Darmstadt, Germany
Tel.: +49(6151) 72-7869
Fax: +49(6151) 72-8333
www.merck.com
27. **Cognis Deutschland GmbH – Care Chemicals**
Henkelstraße 67, 40191 Düsseldorf-Holthausen, Germany
Tel.: +49(211) 7940-2289
Fax: +49(211) 798-2016
www.cognis.com
28. **Clariant GmbH – Functional Chemicals Division
Personal Care**
D 562, 65926 Frankfurt/Main, Germany
Tel.: +49(69) 305 44291
Fax: +49(69) 305 89129
44. **Evonik Goldschmidt GmbH**
Goldschmidtstraße 100, 45127 Essen, Germany
Tel.: +49(201) 173-01
Fax: +49(201) 173-3000
www.evonik.com
70. **Drom Fragrances International**
Oberdiller Straße 18, 82065 Baierbrunn, Germany
Tel.: +49(89) 744-250
Fax: +49(89) 793-4966
www.drom.com

212. Symrise GmbH & Co. KG

Mühlenfeldstrasse 1, 37603 Holzminden, Germany

Tel.: +49(5531) 90-0

Fax: +49(5531) 90-1649

www.symrise.com

260a SE Tylose GmbH & Co. KG

Rheingastr. 190-196, D-65203 Wiesbaden

Tel.: +49(611) 962-6462

Fax: +49(611) 962-9071

www.setylose.de

Note

This document, or any answers or information provided herein by BASF, does not constitute a legally binding obligation of BASF. While the descriptions, designs, data and information contained herein are presented in good faith and believed to be accurate, it is provided for your guidance only. Because many factors may affect processing or application/use, we recommend that you make tests to determine the suitability of a product for your particular purpose prior to use. It does not relieve our customers from the obligation to perform a full inspection of the products upon delivery or any other obligation. NO WARRANTIES OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, ARE MADE REGARDING PRODUCTS DESCRIBED OR DESIGNS, DATA OR INFORMATION SET FORTH, OR THAT THE PRODUCTS, DESIGNS, DATA OR INFORMATION MAY BE USED WITHOUT INFRINGING THE INTELLECTUAL PROPERTY RIGHTS OF OTHERS. IN NO CASE SHALL THE DESCRIPTIONS, INFORMATION, DATA OR DESIGNS PROVIDED BE CONSIDERED A PART OF OUR TERMS AND CONDITIONS OF SALE.

October 2010