
Technical Information

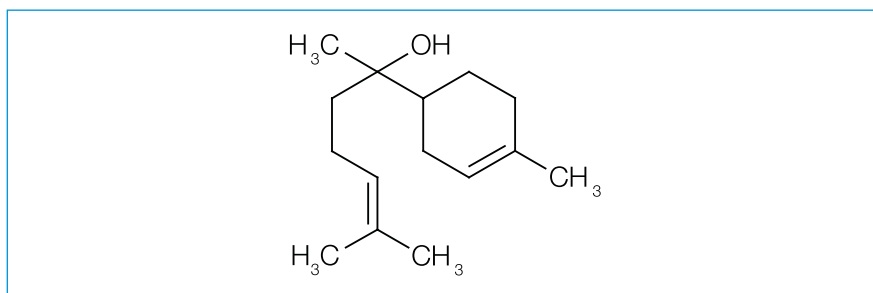
October 2010
Supersedes issue dated April 2010

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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

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October 2010

Bisabolol rac.

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TEST PARAMETER	REQUIREMENTS	METHOD
Characters		
Appearance	Clear, colourless to slight yellowish liquid	PM00064QA
Identification		
Tests		
Refractive Index n(20/D)	Min. 1.492 Max. 1.498	PM00066QA
Purity (GC)	Min. 85.0 area-%	PM02186QA

Bisabolol rac. meets the requirements of this specification.

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