



BRB Dimethicone overview

INCI NAME: Dimethicone

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Description

A base fluid in a number of personal care products with unique characteristics.

Application

Dimethicone is an important ingredient in hand creams, skin protectants, suntan lotions and hair grooming aids because it forms a non greasy, protective film which resists water, yet it allows the skin to breathe.

Features

- Little change in physical properties over a wide temperature range.
- The fluids are thermally stable at 150 °C for extended time intervals.
- Excellent water repellency.
- Low surface tension. The fluid readily wets clean surfaces to impart
- Water repellency and release characteristics.
- Low toxicity.

Typical Data

Product name	Viscosity, Cst	Flashpoint, °C COC	Freezing point, °C	Specific gravity, 25 °C	Surface tension, mN/m	Refrac. index at 25 °C
BRB DM 0.65	0,65	-4	-67	0,760	15,9	1,375
BRB DM 1	1	40	-85	0,816	17,4	1,382
BRB DM 1.5	1.5	57	-76	0.851	18.0	1.387
BRB DM 2	2	48	-90	0,872	18,1	1,387
BRB DM 3	3	62	-100	0,900	18,9	1,392
BRB DM 5	5	136	-65	0,910	19,7	1,397
BRB DM 10	10	162	-65	0,930	20,1	1,399
BRB DM 20	20	230	-60	0,950	20,6	1,400
BRB DM 50	50	280	-55	0,959	20,7	1,402
BRB DM 100	100	>300	-55	0,965	20,9	1,403
BRB DM 200	200	>300	-50	0,970	21,0	1,403
BRB DM 300	300	>300	-50	0,970	21,1	1,403
BRB DM 350	350	>300	-50	0,970	21,1	1,403
BRB DM 500	500	>300	-50	0,970	21,1	1,403
BRB DM 1000	1000	>300	-50	0,970	21,2	1,403
BRB DM 5000	5000	>300	-50	0,975	21,4	1,403
BRB DM 10000	10000	>300	-50	0,975	21,5	1,403
BRB DM 12500	12500	>300	-50	0,975	21,5	1,403
BRB DM 30000	30000	>320	-50	0,975	21,5	1,403
BRB DM 60000	60000	>300	-50	0,975	21,5	1,403
BRB DM 100,000	100000	>300	-50	0,976	21,5	1,404
BRB DM 300,000	300000	>300	-45	0,976	21,5	1,404
BRB DM 500,000	500000	>300	-40	0,976	21,5	1,404

Toxicological information

BRB Dimethicone has been the subject of extensive toxicological studies. The oil is non-toxic and non-irritating. A temporary discomfort to the eyes may occur due to the hydrophable properties. The oil is approved as a food additive and/or for use in food contact in most countries of the world. Amongst others main US.FDA regulations concerned are:

173.340 (formexy 121.1099), 175.105 (121.2520), 175.300(121.2514), 167.170 (121.2526), 176.180 (121.2571), 167.200 (121.2557), 176.210 (121.2519), 177.1210 (121.2550), 177.2280 (121.2500), 178.3570 (121.2553), 178.3910 (121.2531), 181.28 (121.2001).

Please be advised that BRB Dimethicone are dimethylpolysiloxanes, and are listed under that terminology in a number of FDA regulations.

It must be noted that the status of this product depends upon the particular viscosity grade and amount employed, the nature of the use and, in some cases, the ability of a end product in which it is used to pass extractives limitations which vary according to the food-contacting conditions of the end use. The problem of meeting any pertinent extractives limitations must be left in the hands of our customers, for such limitations are in terms of total extractives and are affected by every component of the end product.

The comments made below are necessarily abbreviated, and all users should refer to the pertinent regulation for full details.

<u>Regulation</u> <u>21 CFR</u>	<u>Application</u>	<u>Limitations</u> (Visc. or amount)
173.340	Direct add'n to non-standardized food as defoaming agent.	300-1050 Cs. Visc. 10 ppm max. in most food, 0 ppm in milk
175.105	Defoamer in adhesives	No visc. limitations. Use no more than needed for effect.
175.300	Resinous and polymeric coatings as release agent.	No less than 300 cSt. total Extractives limitations; no less than 100 cSt. limited to metal substrates.
176.170	Component of paper, paperboard in contact with aqueous or fatty foods.	At least 100 cSt., total extractives limitations.
176.180	Paper, paperboard in contact with dry food.	At least 100 cSt.
176.200	Defoaming agent for coatings.	No visc. limitations, Use no more than needed.
176.210	Defoaming agent in mfr. paper or paperboard	No visc. limitations Use no more than needed.
177.1210	Release agent in closures with sealing gaskets for	No less than 300 cSt. Total extractives limitations

	food containers.	
177.1520	Release agent in the production of polyolefins	Minimum 300 cSt. visc. Finished product must meet any applicable extractives limitations.
177.2260	For fiber finishing in resin-bonded filters.	No visc. limitations, total Extractives limitations.
178.3120	Defoaming agent in animal glue.	No visc. limitation, use no more than needed.
178.3570	Lubricant on machinery.	Visc. greater than 300 cSt. no more than 1 ppm imparted to food.
178.3910	Forming lubricant in manufacturing metallic articles.	300-1050 cSt. visc., residue no more than 0.2 mg/sq. In.
181.28	Release agent in food packaging materials.	300- 1050 cSt. visc. Least amount possible.

Limitations

This product is neither tested nor represented as suitable for medical or pharmaceutical uses.

A Product Safety Data Sheet should be obtained from your BRB office prior to use.

ATTENTION: Before handling, read product information, Product Safety Data Sheets and container labels for safe use, and any physical and/or health hazard information.

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Warranty: The information given in this product data sheet are believed to be fully accurate. However, BRB International BV shall not be liable for its content and make no warranty with respect thereto. For additional information we request you to contact BRB International BV or visit our web-site: www.brb-international.com