



RioCare India Private Limited

Plot No. R-940, TTC Industrial Area, MIDC Rabale, Navi Mumbai – 400 701, District: Thane,
Maharashtra, INDIA

FINISHED PRODUCT SPECIFICATION

Dimethicone (DMPS)	Effective Date : 22/06/2022	Reference
Specification No.: SPEC- DMPS-01-08	Supersedes doc. : 01/04/2022	USP-NF 2022, Issue 1

NAME : Dimethicone [9006-65-9]
 α -(Trimethylsilyl)- ω -methylpoly[oxy (dimethylsilylene)].

DEFINITION : Dimethicone is a mixture of fully methylated linear siloxane polymers containing repeating units of the formula $[-(\text{CH}_3)_2\text{SiO-}]_n$ stabilized with trimethylsiloxy end-blocking units of formula $[(\text{CH}_3)_3\text{SiO-}]$ wherein n has an average value such that the corresponding nominal viscosity is in discrete range between 20 and 30,000 centistokes. It contains NLT 97.0% and NMT 103.0% of Polydimethylsiloxane $([-(\text{CH}_3)_2\text{SiO-}]_n)$.

DESCRIPTION AND RELATIVE SOLUBILITY : A clear, colorless, and odorless liquid. Soluble in chlorinated hydrocarbons, in benzene, in toluene, in xylene, in n-hexane, in petroleum spirits, in ether, and in amyl acetate; very slightly soluble in isopropyl alcohol; insoluble in water, in methanol, in alcohol, and in acetone.

IDENTIFICATION : A. By infrared absorption.

ASSAY : 97.0 - 103.0%

SPECIFIC GRAVITY (at 25°C) :

1. 20cSt – limit 0.946 - 0.954
2. 50cSt – limit 0.955 - 0.965
3. 100cSt – limit 0.962 - 0.970
4. 200cSt – limit 0.964 - 0.972
5. 350cSt – limit 0.965 - 0.973
6. 500cSt – limit 0.967 - 0.975
7. 1000cSt – limit 0.967 - 0.975

REFRACTIVE INDEX (at 25°C) :

1. 20cSt – limit 1.3980 – 1.4020
2. 50cSt – limit 1.4005 – 1.4045
3. 100cSt – limit 1.4005 – 1.4045
4. 200cSt – limit 1.4013 – 1.4053
5. 350cSt – limit 1.4013 – 1.4053
6. 500cSt – limit 1.4013 – 1.4053
7. 1000cSt – limit 1.4013 – 1.4053

	Prepared by	Checked by	Reviewed by	Approved by
Name	Vaishali Badekar	Leena Panchal	Meena Vaidya	Kalpakam Venkatesan
Designation	Sr. Officer -QC	Manager - QC	Manager - QA	Director
Signature and Date	 20/06/2022	 20/06/2022	 21/06/2022	 21/06/2022


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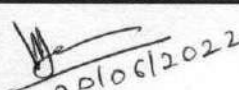
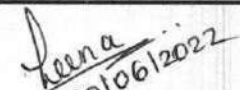
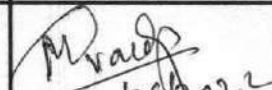
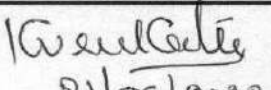
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ACIDITY : NMT 0.10 ml of 0.050 N alc. KOH.

LOSS ON HEATING : NMT 20.0% (for 20cSt).
(150°C for 2 hrs.) NMT 2.0% (for 50cSt).
NMT 0.3% (for 100-1000cSt).

VISCOSITY (at 25°C)
(BROOKFIELD VISCOMETER):

1. 20cSt – limit 18.0 - 22.0 cSt
2. 50cSt – limit 47.5 - 52.5 cSt
3. 100cSt – limit 95.0 - 105.0 cSt
4. 200cSt – limit 190.0 - 220.0 cSt
5. 350cSt – limit 332.5 - 367.5 cSt
6. 500cSt – limit 475.0 - 525.0 cSt
7. 1000cSt – limit 950.0 - 1050.0 cSt

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Dimethicone (DMPS)	Effective Date : 22/06/2022	Reference
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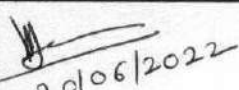
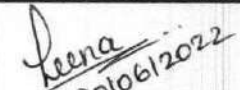
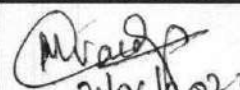
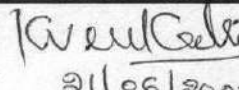
RETEST DATE : 4 years from the date of manufacture.

STORAGE CONDITION : Store in air tight containers.
Recommended temperature 25⁰C– 40⁰C.

Reason for review:

CCD No.: CC/20-22/054 dt. 23/03/2022 : Updated as per USP 44/NF 39.

CCD No.: CC/22-24/001 dt. 16/06/2022 : As per official USP notification the current version is changed from USP 44 to USP–NF 2022, Issue 1.

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