

Dow Corning® TI-3011 Gum Blend

FEATURES & BENEFITS

- Non volatile fluid as carrier
- Film Former
- Long lasting
- Wash off resistance
- Non occlusive
- Silky and lubricious feel

COMPOSITION

- High molecular weight dimethiconol dispersed in a non-volatile carrier
- INCI name: Dimethicone and Dimethiconol

REGULATORY SUPPORT

Ingredient Information Package (IIP)

- Ingredient Regulatory Information
- Elemental Impurities
- Summary of Health Data or Opinion Letter

Formulation ingredient for topical consumer healthcare applications

APPLICATIONS

- Dow Corning® TI-3011 Gum Blend is commonly used in topical formulations due to its long lasting, film barrier properties and wash-off resistance. Such silicone gum blend is currently used in a range of dermatological consumer healthcare, or medicated skin care applications as protective and barrier creams, sunscreen creams, gels for scar treatment, formulations for scalp and hair treatment.

TYPICAL PROPERTIES

Specification Writers: These values are not intended for use in preparing specifications. Please contact your local Dow Corning sales office or your Global Dow Corning Connection before writing specifications on this product.

Property	Unit	Result
Silicone content	%	100
Dimethiconol	%	12
Viscosity	mm ² /s	1500
Appearance		Clear, colorless
Specific gravity at 25°C (77°F)		0.92
Refractive index 25°C (77°F)		1.397
Flash point – closed cup	°C	118

DESCRIPTION

Dow Corning TI-3011 Gum Blend is a blend of an ultra high viscosity hydroxyl terminated polydimethylsiloxane (dimethiconol) in a low viscosity and non-volatile silicone fluid (dimethicone – 5 cSt).

and

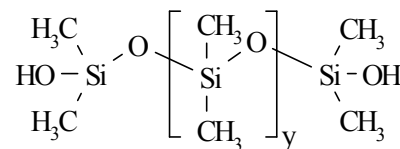
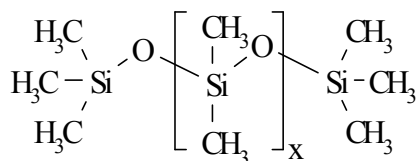


Figure 1: The chemical structure of these 2 compounds are as follows:



where x = approx. 8

where y = approx. 8000

SPECIFIC TESTING

- Infrared identification on each batch.
- Tested for elemental impurities according to <232> and ICH Q3D guideline for metal impurities, every 2 years.

HOW TO USE

Dow Corning TI-3011 Gum Blend is an easy to use blend of dimethicone and dimethiconol. It is compatible with a range of topical ingredients (refer to Table 1).

Dow Corning TI-3011 Gum Blend can be added to various anhydrous or water base formulations.

When preparing an emulsion containing *Dow Corning* TI-3011 Gum Blend, it is recommended to add the gum blend into the oil phase and to use a high shearing speed; the emulsion can then be potentially processed through a homogenizer to improve its stability.

REGULATORY INFORMATION

Dow Corning TI-3011 Gum Blend is produced at a Dow Corning manufacturing site registered as part of Dow Corning's global quality system according to ISO 9001:2008.

Dow Corning can provide an Ingredient Information Package (IIP) containing the following information:

- Ingredient Regulatory Information
- Elemental Impurities
- Summary of Health Data or Opinion Letter

**HANDLING
PRECAUTIONS
PRODUCT SAFETY
INFORMATION REQUIRED FOR
SAFE USE IS NOT INCLUDED IN
THIS DOCUMENT. BEFORE
HANDLING, READ PRODUCT
AND SAFETY DATA SHEETS
AND CONTAINER LABELS FOR
SAFE USE, PHYSICAL AND
HEALTH HAZARD
INFORMATION. THE SAFETY
DATA SHEET IS AVAILABLE ON
THE DOW CORNING WEBSITE
AT DOWCORNING.COM, OR
FROM YOUR DOW CORNING
SALES APPLICATION
ENGINEER, OR DISTRIBUTOR,
OR BY CALLING**

DOW CORNING CUSTOMER SERVICE.

USABLE LIFE AND STORAGE

Dow Corning TI-3011 gum blend has a usable life of 30 months from the date of production. Product should be stored at or below 25°C (77°F) in original unopened containers.

PACKAGING INFORMATION

This product is available in 18 kg pails, 180 kg drums.

Samples are available in 500 g.

LIMITATIONS

This product is neither tested nor represented as suitable for specific pharmaceutical use. However, should you wish to use this product in a pharmaceutical application, please contact Dow Corning to discuss such potential use.

It is the user's role responsibility to ensure that their intended use of these materials complies with all regulatory and legal requirements applicable to such use in each relevant jurisdiction including targeted geographic regions of manufacture and supply.

HEALTH AND ENVIRONMENTAL INFORMATION

To support customers in their product safety needs, Dow Corning has an extensive Product Stewardship organization and a team of Product Safety and Regulatory Compliance (PS&RC) specialists available in each area.

For further information, please see our website, dowcorning.com or consult your local Dow Corning representative.

LIMITED WARRANTY INFORMATION – PLEASE READ CAREFULLY

The information contained herein is offered in good faith and is believed to be accurate. However, because conditions and methods of use of our products are beyond our control, this information should not be used in substitution for customer's tests to ensure that our products are safe, effective, and fully satisfactory for the intended end use. Suggestions of use shall not be taken as inducements to infringe any patent.

Dow Corning's sole warranty is that our products will meet the sales specifications in effect at the time of shipment.

Your exclusive remedy for breach of such warranty is limited to refund of purchase price or replacement of any product shown to be other than as warranted.

TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, DOW CORNING SPECIFICALLY DISCLAIMS ANY OTHER EXPRESS OR IMPLIED WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE OR MERCHANTABILITY.

DOW CORNING DISCLAIMS LIABILITY FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES.

We help you invent the future.™

dowcorning.com

Table 1: Compatibility Data

Type of material	10% <i>Dow Corning</i> [®] TI-3011 Gum Blend	50% <i>Dow Corning</i> [®] TI-3011 Gum Blend	90% <i>Dow Corning</i> [®] TI-3011 Gum Blend
Water	NC	NC	NC
Propylene glycol	NC	NC	NC
Esters			
Isopropyl myristate	C	C	C
Isopropyl palmitate	C	C	C
Isopropyl laurate	C	C	C
Isopropyl stearate	NC	C	C
C12-C15 Alkyl Benzoate	NC	NC	C
Caprylic/Capric triglyceride	NC	NC	C
Octyl palmitate	NC	NC	C
Coco-caprylate/Caprates	NC	NC	C
Diisopropyl adipate	NC	NC	C
Hydrocarbons			
Mineral oil	NC	NC	C
Isododecane	C	C	C
Oils			
Almond oil	NC	NC	NC
Castor oil	NC	NC	NC
Jobba oil	NC	NC	NC
Soybean oil	NC	NC	NC
Sunflower oil	NC	NC	NC
Silicones			
Dimethicone (100 cSt)	C	C	C
Dimethicone (350 cSt)	C	C	C
Cyclopentasiloxane	C	C	C
Phenyltrimethicone	C	C	C
Dimethicone and Trimethylsilyloisilicate	C	C	C
Cetyl Dimethicone	NC	NC	NC
Stearyl Dimethicone	C	NC	NC

C= Compatible, NC= Non Compatible (forms 2 phases)