REWOPAL® PIB 1000

Gloss additive for lipsticks and make-up products
Film former for O/W sunscreens

- Gloss additive
- Imparts long lasting shine
- Provides enhanced wear resistance
- Improves stability of emulsions and pigments in make-up formulations
- Improves the water resistance of oil in water (O/W) sunscreens

Personal Care

INCI Name (CTFA Name)

Polyisobutene

Chemical and physical properties (not part of specifications)	
Appearance (20 °C)	Clear, highly viscous liquid

Properties

REWOPAL® PIB 1000 is a clear viscous liquid. It provides high gloss, fluidity, smooth consistency, long lasting shine, and long lasting color in a cosmetic composition, such as a lip gloss composition. In addition, it enhances wear resistance e.g. non-feathering and non-bleeding of such cosmetic compositions.

REWOPAL® PIB 1000 increases the adherence of the color pigments used in make-up preparations. It improves the stability of emulsions and pigment in make-up products.

In sunscreen formulations, REWOPAL® PIB 1000 increases the water resistance due to its film forming properties. Additionally, REWOPAL® PIB 1000 may enhance the SPF of sunscreen formulations.

REWOPAL® PIB 1000 is soluble in hydrocarbons (mineral oils), waxes and all non-polar solvents. It is not soluble in polar solvents. It is easy to handle in combination with triglycerides, lanolin and its hydrophobic variations.

Application

REWOPAL® PIB 1000 is used as a gloss improver for lipsticks and make-up products, and as a film former for O/W sunscreens.

Suggested usage concentration

3 – 80 %

For sunscreen, we would recommend to use max. 2 % due to its influence on skin feel properties.

Packaging

700 kg pallet (4 x 175 kg)

Hazardous goods classification

Information concerning

- classification and labeling according to regulations for transport and for dangerous substances
- protective measures for storage and handling
- measures in accidents and fires
- toxicity and ecological effects

is given in our material safety data sheets.

Guide Line Formulations

Degussa 2006 "Jelly Lip Gloss" Intense Color LG-C 0317	
Phase A	
REWOPAL® PIB 1000	60.00 %
TEGOSOFT® CI (Cetearyl Isononanoate)	29.80 %
Phase B	
Isobutylparaben; Isopropylparaben; Butylparaben (LiquaPar Oil, Sutton Laboratories)	0.20 %
Phase C	
Silica Silylate (Aerosil R 812)	5.50 %
Phase D	
CI 77891; Mica; CI 77947 (Microna Matte White, Merck)	1.50 %
CI 77491; Mica (Microna Matte Red, Merck)	2.00 %
Mica; Titanium Dioxide (Timiron MP-1001 Supersheen, Merck)	1.00 %

Preparation:

1. Combine phase A ingredients and heat to 70 °C under stirring.
2. Add phase B and stir for further 10 minutes.
3. Add phase C while homogenizing or stirring with a dissolver.
4. Add phase D while homogenizing or stirring with a dissolver.
5. Homogenize (or stir with a dissolver) until complete dispersion is obtained.
6. Homogenize for further 5-10 minutes if necessary.

Creamy Lipstick AW 070 M	
Phase A	
ABIL® Wax 2440 (Behenoxy Dimethicone)	0.95 %
ABIL® Wax 2434 (Stearoxy Dimethicone)	0.95 %
TEGOSOFT® Liquid (Cetearyl Ethylhexanoate)	12.50 %
REWOPAL® PIB 1000	4.90 %
TEGOSOFT® SH (Stearyl Heptanoate)	0.95 %
PVP/Eicosene Copolymer	0.25 %
Phase B	
Castor Oil	4.50 %
Ceresin	3.65 %
Ricinus Communis (Castor) Seed Oil; CI 77891 (Covapate Uniwhite LC 7981, LCW -Sensient Cosmetic Technologies)	9.60 %
Ricinus Communis (Castor) Seed Oil; CI 45410 (Covapate Unired LC 3728, LCW -Sensient Cosmetic Technologies))	3.90 %
CI 15850; Ricinus Communis (Castor) Seed Oil (Rubis Covapate W 4765, LCW -Sensient Cosmetic Technologies)	1.45 %
Ricinus Communis (Castor) Seed Oil; Iron Oxides (Brun Covapate W 8760, LCW -Sensient Cosmetic Technologies)	5.63 %
Lanolin Oil	13.45 %
Lanolin	19.25 %
Myristyl Lactate	8.15 %
Euphorbia Cerifera (Candelilla Wax)	7.50 %
Copernicia Cerifera (Carnauba Wax)	2.40 %
Antioxidant	0.02 %

Preparation:

1. Heat all ingredients of phase A to approx. 85 °C under stirring until homogenous.
2. Add the pigment dispersions of phase B. Stir for at least 30 min.
3. Pour into a lipstick mould and place the mould in a freezer below 0°C.
4. After 30 min. the sticks should immediately be removed from the mould and placed into lipstick cases.

Long Lasting Lipstick with Volatile Silicones VS 030	
Phase A	
Cyclopentasiloxane	34.00 %
ABIL Wax® 2440 (Behenoxy Dimethicone)	3.00 %
ABIL Wax® 9800 (Stearyl Dimethicone)	10.00 %
REWOPAL® PIB 1000	5.00 %
Phenyl Trimethicone	8.00 %
Isododecane (Permethyl 99A)	4.00 %
Phase B	
Bis-Diglyceryl Polyacyladipate-2 (Softisan 649)	4.00 %
Ceresin (Lunacera W 80)	24.00 %
Titanium Dioxide, CI 77891 (Soft-Tex White C47-7756)	1.00 %
Carmine Red, CI 75470 (Soft-Tex)	1.00 %
D&C Red No. 7 Ca-Lake, CI 15850:1 (Soft-Tex)	3.00 %
Polyethylene (Polymist B-6)	2.00 %
Aluminum Starch Octenylsuccinate & Lauroyl Lysine (Dry Flo Elite LL)	1.00 %

Preparation:

1. Heat all ingredients of phase A to approx. 82 °C under stirring until homogenous.
2. Add the pigment dispersions of phase B. Stir for at least 30 min. Be careful to avoid aeration. Prior to moulding replace loss of Cyclopentasiloxane.
3. Pour into a lipstick mould and place the mould in a freezer at or below 0 °C.
4. After 30 min. remove mould from freezer.
5. Immediately remove sticks from the mould and place into lipstick cases.

O/W Sun Protection Lotion Ma 49/06-5 (SPF 8*, UVA, WR**)	
Phase A	
TEGO® Care LTP (Sorbitan Laurate, Polyglyceryl-4 Laurate, Dilauryl Citrate)	2.00 %
TEGIN® M Pellets (Glyceryl Stearate)	3.50 %
TEGO® Alkanol 18 (Stearyl Alcohol)	3.50 %
TEGOSOFT® OP (Ethylhexyl Palmitate)	6.00 %
REWOPAL® PIB 1000	2.00 %
Octocrylene	6.00 %
Butyl Methoxydibenzoylmethane	2.00 %
Phase B	
Water	70.20 %
Glycerin	3.00 %
Phase C	
TEGOSOFT® OP (Ethylhexyl Palmitate)	0.40 %
TEGO® Carbomer 134 (Carbomer)	0.10 %
Phase D	
Sodium Hydroxide (10 % in water)	0.3 %
Phase E	
Phenoxyethanol; Methylparaben; Ethylparaben; Butylparaben; Propylparaben; Isobutylparaben (EUXYL K 300)	1.00 %

Preparation:

1. Heat phase A and B separately to approx. 80 °C.
2. Add phase A to phase B under stirring).
3. Homogenize.
4. Cool with gentle stirring to approx. 60 °C and add phase C.
5. Homogenize for a short time.
6. Cool with gentle stirring and add phase D/E below 40 °C.

* (Optometrics SPF-290S; 1 mg/cm²; on PMMA slide)
**Water resistance according to an internal in-vitro test method

E 12/09

Evonik Industries AG Goldschmidtstraße 100 45127 Essen, Germany
P.O. BOX 45116 Essen PHONE +49 201 173-2854 FAX +49 201 173-1828
personal-care@evonik.com www.evonik.com/personal-care

EVONIK INDUSTRIES