

1,3 BUTYLENE GLYCOL CQ

MATERIAL PROPERTIES

A yellow circle with a white border and a white number "2" inside, set against a background of water splashes.

2

MATERIAL PROPERTIES

OXEA's 1,3 Butylene Glycol Cosmetic Quality (short form: 1,3 Butylene Glycol CQ or 1,3 BG CQ) is a clear, colorless and lightly viscous liquid. It is used in the formulation of a broad variety of cosmetic and personal care products, such as skin and face care, hair care, eye and facial make-up, fragrances, personal cleanliness products, shaving products and wet cleansing wipes.

Butylene Glycol is used as a moisturizer, solubilizer, solvents, viscosity modifier, film spreading agent in cosmetics and personal care products.

Find out more about detailed material properties of 1,3 BG CQ in this brochure! Talk to us if you have any questions.

Product Description

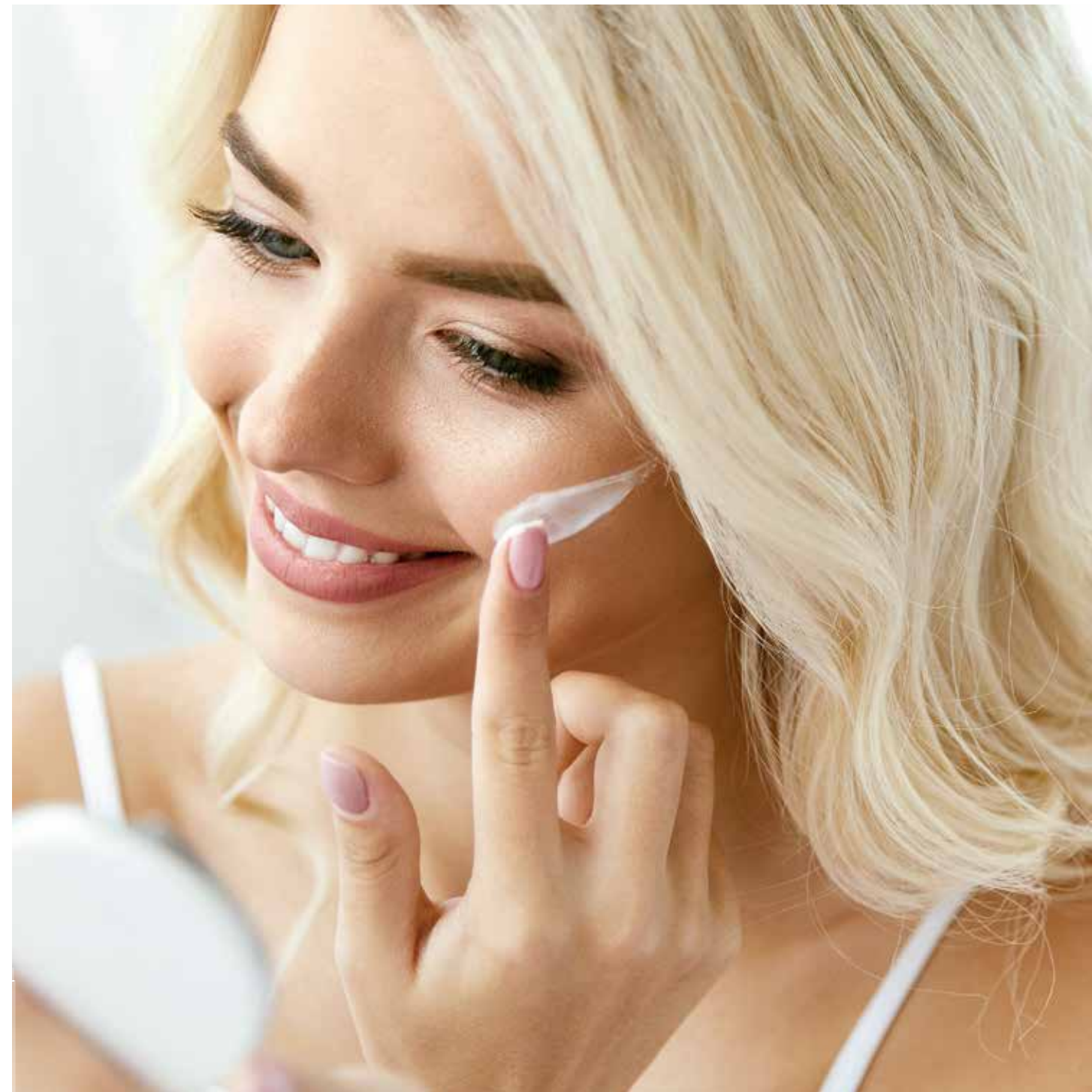
INCI name	Butylene Glycol
CAS Number	107-88-0
EINECS No.	203-529-7
REACH Registration	For OR representation, please contact OXEA

PRODUCT PROPERTIES

1,3 Butylene Glycol CQ low molecular weight substance which contains 2 hydroxyl groups. It is stable against water, alcohols, polyols, ketones, esters and hydrocarbons. The Hydroxy-groups may react in the usual way with Carboxylic acids to form a variety of Esters. Contact with strong mineral acids or bases should be avoided as it may give rise to undesirable degradation reactions.

While 1,3 Butylene Glycol CQ is not specifically air- or light-sensitive blanketing with dry inert gas (e.g. dry Nitrogen) may be used to retain material quality in long-term storage conditions.

1,3 Butylene Glycol CQ is hygroscopic. This means it should be stored in tightly sealed containers. In order to maintain the product quality, we recommend avoiding overheating for prolonged periods of time. It may cause undesirable degradation which can lead to odor and color problems. For adequate material handling please also refer to latest available issues of OXEA's 1,3 Butylene Glycol CQ Handling Guide and OXEA's 1,3 Butylene Glycol CQ Material safety Data Sheet (MSDS).



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Material Property Data

Visual Appearance	clear, colorless, slightly viscous liquid, free of particles
Odor	Odor less
Taste	bitter-sweet
Purity	min 99.5%
Water	max 0.5%
Melting Point	- 57 °C
Boiling Point	209 °C
Vapor Pressure	< 1 hPa @ 20 °C 1.8 hPa @ 50 °C
Vapor Density	3.2 @ 20 °C (Air = 1)
Flash Point	115 °C
Autoignition Temperature	410 °C
Explosion Limits	1.9 – 12.6 Vol.-%
Density [20 °C]	1.0035 g/cm ³
Viscosity [20 °C]	131.8 mPas
Refractive Index [20 °C]	1.440
Surface Tension [20 °C]	72.6 mN/m @ 1g/l
Soluble in	Water, Ethanol, n-/iso-Propanol, Propylene Glycol and other Glycols, Glycerol, Polyols, Esters and Ketones
Insoluble in	Hydrocarbons, Isododecane, Paraffin Oils Dimethicones, Dimethiconols, Amodimethicones, Cyclomethicones D5 and D6

Typical Material Property Data; please refer also to most recent OXEA's 1,3 Butylene Glycol CQ Sales Specification and Material Safety Data Sheet (MSDS).

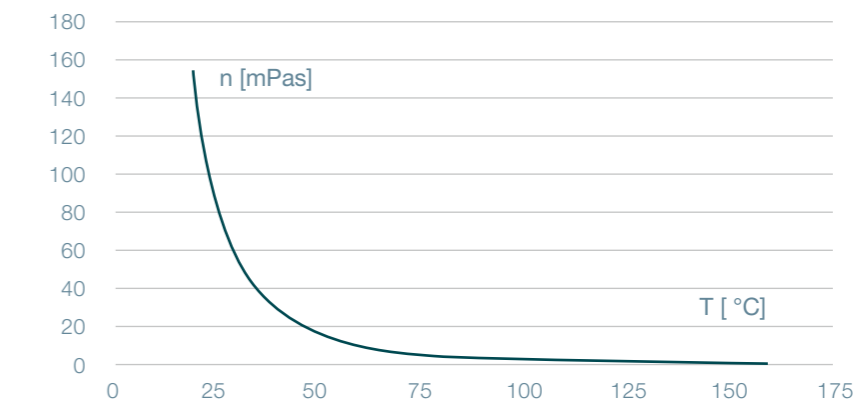
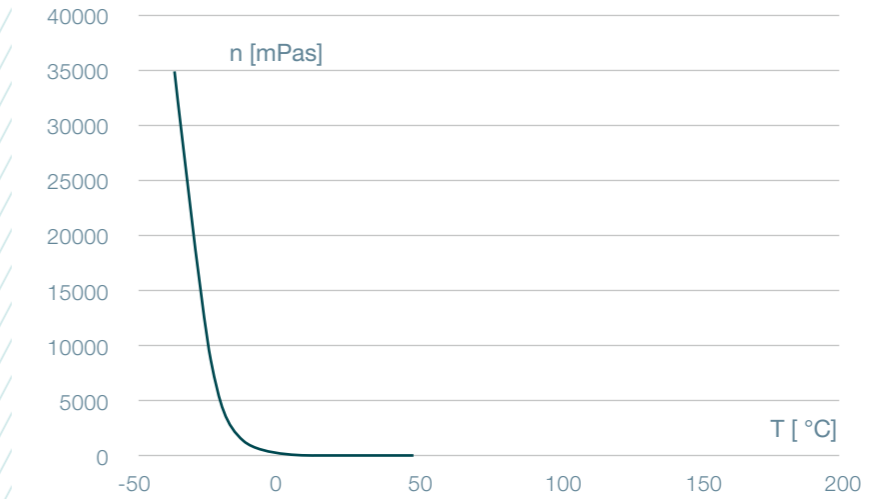
FACTS ABOUT SOLUBILITY

OXEA's 1,3 Butylene Glycol CQ is:

- Completely soluble in water. It can be conveniently added directly to the aqueous phase of water-based cosmetic formulations.
- Completely miscible with lower alcohols such as Ethanol, n-Propanol, iso-Propanol, Propylene Glycol, Methylpropanediol or Glycerol. It is completely soluble in many ketones like Acetone or Methylisobutylketone (MIBK) or esters like Ethylacetate, Propylacetate, Butylacetate.
- Insoluble in, however compatible with a variety of Hydrocarbons (e.g. Isododecane, Paraffins) and silicone specialty fluids and resins commonly used in personal care products (e.g. Dimethicone, Dimethiconol, Amodimethicone, Cyclomethicones D5 and D6).

OXEA's 1,3 Butylene Glycol CQ dissolves readily most essential oils.

Viscosity versus Temperature



1,3 BG CQ is also used as a viscosity modifier in cosmetic formulations, which means that as an add-on to other properties formulators use its ability to adjust the viscosity of fluids, gels et cetera.

BIODEGRADABILITY

Biodegradation:
81% (29d), activated sludge (domestic), aerobic, non-adapted (OECD 301 B).

PBT and vPvP Assessment:
1,3 Butylene Glycol CQ is not considered to be persistent, bioaccumulating nor toxic (PBT) nor very bioaccumulating (vPvB).

OSHA Regulatory Status:
1,3 Butylene Glycol CQ is non-hazardous as defined by the American OSHA Hazard Communication Standard (29CFR 1910.1200).



For further information please contact your nearest
OXEA Sales Representative.

USA

Phone: +1 972-481-2700

Germany

Phone: +49 2173 9993-0

info@oxea-chemicals.com



[www.oxea-chemicals.com/en/
contact/sales-cr.html](http://www.oxea-chemicals.com/en/contact/sales-cr.html)

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Imprint

OXEA GmbH
Rheinpromenade 4a
40789 Monheim am Rhein
Germany

Phone: +49 2173 9993-0
info@oxea-chemicals.com

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