



The safe alternative to glycol ethers

Hexasol® is a clear and water-white oxygenated solvent that demonstrates outstanding solvency: it is miscible in aliphatic and aromatic hydrocarbons as well as in polar substances such as water, alcohols and fatty acids. This makes Hexasol® a versatile coupling agent that will assist formulators to bring together oil and water miscible substances.

MAIN PROPERTIES OF HEXASOL®

- /// Low surface tension
- /// Low viscosity
- /// Low volatility
- /// Low flammability
- /// High solubility in water
- /// High compatibility with polar and non polar solvents
- /// High solvent power
- /// Hexasol® is not a VOC according to VOC n° 1999/13/CE regulation
- /// (Vapor pressure lower than 10 Pa at 20°C)

HEXASOL®... A SAFE ALTERNATIVE TO GLYCOL ETHERS

For many years, glycol ethers have been used as coupling agents or additives in aqueous formulations.

In the 80's and 90's, following toxicological studies, some of them were classified CMR (Carcinogenic Mutagenic Reprotoxic) and banned in many industries. Glycol ethers are still widely used but several of them possess low Occupational Exposure Limits.

With its low flammability and its toxicity/ecotoxicity profile, Hexasol® is a safe alternative to glycol ethers.

	CAS N°	GHS LABELLING	HAZARD STATEMENTS
HEXASOL®	107-41-5	⚠	H315/H319
BUTYL GLYCOL	111-76-2	⚠	H302/H312/H332/H315/H319



HEXASOL® EXHIBITS SIMILAR PROPERTIES TO MOST GLYCOL ETHERS

	Molecular weight	Density (kg / m ³)	Boiling point (°C)	Vapor pressure at 20°C (Pa)	Evaporation rate (Butyl acetate =1)	Flash Point closed cup (°C)	Hansen Δ D (MPa 0.5)	Hansen Δ p (MPa 0.5)	Hansen Δ h (MPa 0.5)	Superficial tension (Dynes/cm)
Hexasol®	118.18	0.92	197.5	7	0.01	97	15.8	8.4	17.8	28.5
Butyl glycol	118.18	0.90	170	90	0.8	68	16.0	5.1	12.3	26.1
Butyl diglycol	162.23	0.95	230.5	3	0.004	105	16.0	7.0	10.6	30.0

HEXASOL®... IS ALREADY USED IN MANY APPLICATIONS

Household and Industrial cleaners

- Hexasol® has a very low surface tension: adding it in a cleaner is a way to improve its wetting properties, to help the penetration of the soil and to keep it suspended in water until the rinsing step.
- Hexasol® is an excellent coupling agent.

Cosmetics, Fragrances and Personal Care

- Hexasol®'s high solvent power and coupling properties make it a very efficient additive to stabilize cosmetic and toiletry formulations. Active products remain suspended and available instead of settling.
- Shelf life and appearance of these formulations are improved.

Miscellaneous industrial applications

- Textile and Leather emulsions
- Hydraulic fluids, Metal working fluids, Drilling fluids
- Fire fighting foams
- Adhesives
- Additive for concretes and cements (anti-caking / shrinkage reduction)...
- Solvent for synthesis (pharmaceuticals, ...).

Paints and Coatings

- Regulations evolution leads to new formulation challenges. Hexasol® can help formulators to face them: low aromatic, high solid and waterborne coatings.

Waterborne

- Hexasol® high solvent power improves film formation of the paint
- Hexasol® high boiling point helps adjusting the open time.

Solventborne

- Hexasol® dissolves many resins
- Hexasol®'s high solvent power leads to low viscosity even in high solid formulations
- Hexasol® can be combined with other solvents to optimize the evaporation rate and improve the leveling
- Hexasol®'s low surface tension can help to improve the formulation wetting properties on different substrates.

Arkema La Chambre is a Global leading facility in the production of Oxygenated Solvents with an efficient Global Supply Chain:

- Storage and distribution centers established in 4 continents,
- Extensive range of packaging: tank trucks, railcars, isotank, drums and IBC.

Arkema's Oxygenated Solvents are mainly used in formulations and synthesis in various applications such as fragrances, coatings, personal care, agrochemicals, pharmaceutical and mining.

Please consult Arkema's disclaimer regarding the use of Arkema's products on <http://www.arkema.com/en/social-responsibility/responsible-product-management/medical-device-policy/index.html>

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SOLVENTS

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