

BENZYL ALCOHOL
TECHNICAL GRADE

VCC97R01

Benzyl Alcohol is a clear, colorless liquid with a mild, pleasant aromatic odor. The technical grade was designed for industrial use.

APPLICATIONS / BENEFITS

- **Reactive Intermediate:** Benzyl alcohol reacts quickly with various acids to form esters useful in the soap, perfume and flavor industries. Other useful product derivatives are possible.
- **Solvent:** Benzyl alcohol is a strongly polar solvent with limited water solubility. It is used as a degreasing agent in cleaners and as a solvent for ink and coatings. In industrial applications, it is a solvent for dyestuffs. In the textile industry, it is used in the process of dyeing polyamide filament and textiles.

SPECIFICATIONS

Appearance	Water white liquid
Assay, (G.C.), % min	98.0
Benzaldehyde content (HPLC determination), % max	0.3
Halogen (Beilstein)	Negative
Solubility, in 30 ml water @ 25°C, grams	< 1

TYPICAL PROPERTIES

Autoignition, °C	436.1
Boiling point @ 5 mm Hg, °C	81
Boiling point @ 760 mm Hg, °C	205
Coefficient of expansion	0.00075
Flash point, °C, (Tag, Closed Cup)	90
Heat of combustion, K cal/mole	895-3
Melting point, °C	- 15
Molecular weight (theoretical)	108.14
Odor	Faint aromatic
Refractive index, 25°C	1.5390 – 1.5410
Specific gravity, 25°C/25°C	1.042 – 1.047
Vapor density (air = 1)	3.72
Vapor pressure @ 30°C, mm Hg	0.1
Vapor pressure @ 100°C, mm Hg	13.3
Viscosity @ 25°C, mPa.s	505

SOLUBILITIES

In Water, 17°C, %..... 4.0

In 50% Ethanol, g/ml..... 0.67

Also miscible with ether, chloroform and acetone

REGULATORY INFORMATION

<i>Europe</i>	
EINECS Status	Listed, Benzyl Alcohol EC # 202-859-9
EU Classification for Dangerous Preparation Directive	Annex 1 Index # 603-057-00-5
<i>Americas</i>	
U.S. TSCA Inventory	Listed, Benzenemethanol CASRN 100-51-6
Canadian DSL	Listed, Benzenemethanol
<i>Pacific Rim</i>	
Australian Inventory AICS	Listed, Benzenemethanol
Japan MITI/MHW Chemical Substances Control Inventory for Existing and New Chemical Substances	Listed, Benzenemethanol ENCS # (3)-1011
South Korean Existing Chemicals List	Listed, Benzenemethanol Korean Gazette # KE-02570
Philippines Inventory (PICCS)	Listed, Benzenemethanol
Chinese Inventory (Draft)	Listed, Benzenemethanol Chinese Section # I

The information in this data sheet is, to the best of our knowledge, true and accurate. The representations about the product are based upon test results achieved under laboratory practices supervised and controlled by Velsicol Chemical Corporation. Since formulations, preparation or conditions of use may vary, Velsicol is unable to guarantee the same performance as indicated.

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Benzyl Alcohol Technical Grade

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BENZOFLEX[®] 6000

Proprietary Plasticizer for PVC

VCC97R01

Benzoflex[®] 6000 is a clear, low viscosity diol ester. It imparts excellent stain resistance when formulated into floor and wall coverings and is further valued for its resistance to organic extraction. It has excellent compatibility in polyvinyl chloride (PVC), promoting fusion and building physical properties. This strong affinity for PVC provides those materials plasticized with Benzoflex[®] benzoates with surfaces possessing excellent paintability.

APPLICATIONS / BENEFITS

Benzoflex[®] benzoates are often formulated into the clear plastisol "wear layer" of sheet vinyl flooring as non-staining plasticizers. Benzoflex[®] 6000 has four significant attributes that significantly enhance stain resistance.

- > Strong compatibility with PVC
- > Low affinity to common stainant chemicals
- > Minimal migration
- > A small volatile component which tends to harden the surface

Plastisols made from Benzoflex[®] benzoates are readily mixed and deaerated. They can be poured, pumped and sprayed. Thin, even films can be doctored, rolled and spread coated. High durometer organosols and even plastisols made with high filler loadings can be similarly handled. For calendering, extrusion, injection molding and other melt processing, compounding can be accomplished in either high or low intensity powder mixers, followed by fusion or by compounding in single or twin screw extruders, or Banbury-type mixers, either batch or continuous.

SPECIFICATIONS

Acid number, mg KOH/g, max	0.30
Color, APHA, max	125
Moisture, % max	0.10
Specific gravity, 25°C/25°C (range)	1.015 – 1.021

SOLUBILITIES

Acetone	Easily soluble
Diethyl ether.....	Partially soluble
Methanol	Partially soluble
Water (cold or hot).....	Slightly soluble

TYPICAL PROPERTIES

Appearance	Colorless to light yellow oily liquid
Boiling point, °C	280
Dibenzoate, % max	20
Diester, % min	55
Flash point, °C, Closed cup	> 93.3
Odor	Ester-like
Miscellaneous Esters, % max	12
Refractive Index, 25°C	1.4850
Specific gravity (weighted average)	1.04
TXIB, % max	17

REGULATORY INFORMATION

<i>Europe</i>	
EINECS Status	Listed: Mixture EC # 245-054-8; 268-316-3; 229-934-9
<i>Americas</i>	
U.S. TSCA Inventory	Listed: Mixture Propanoic acid, 2-methyl-, 3-(benzoyloxy)-2,2,4-trimethylpentyl ester, CASRN 22527-63-5 2,2,4-trimethyl-1,3-pentanediol dibenzoate, CASRN 68052-23-3 Propanoic acid, 2-methyl-, 2,2-dimethyl-1-(1-methylethyl)-1,3-propanediyl ester, CASRN 6846-50-0
Canadian DSL	Listed
<i>Pacific Rim</i>	
Australian Inventory AICS	Not listed
Japan MITI/MHW Chemical Substances Control Inventory for Existing and New Chemical Substances	Not listed
South Korean Existing Chemicals List	Not listed
Philippines Inventory (PICCS)	Not listed
Chinese Inventory (Draft)	Not listed

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