Ingredient	CAS Number	**Exposure Limits**
Benzyl alcohol	100-51-6	10 ppm TWA (AIHA-WEEL)

8.2 Exposure controls

Always provide effective general and, when necessary, local exhaust ventilation to draw spray, aerosol, fume, mist and vapor away from workers to prevent routine inhalation. Ventilation must be adequate to maintain the ambient workplace atmosphere below the exposure limit(s) outlined in the SDS. (Ventilation guidelines/techniques may be found in publications such as Industrial Ventilation: American Conference of Governmental Industrial Hygienists, 1330 Kemper Meadow Drive, Cincinnati, OH, 45240-1634, USA.) (http://www.acgih.org/home.htm).

Personal protective equipment

Eye/face protection

Safety glasses or goggles required.

Skin and body protection

Wear protective gloves. Use good laboratory/workplace procedures including personal protective clothing: lab coat, safety glasses and protective gloves.

Respiratory protection

In case of insufficient ventilation, wear suitable respiratory equipment. Wear an approved respirator (e.g., an organic vapor respirator, a full face air purifying respirator for organic vapors, or a self-contained breathing apparatus) whenever exposure to aerosol, mist, spray, fume or vapor exceed the applicable exposure limit(s) of any chemical substance listed in this SDS. Gas mask with filter Type A. Use respirator in accordance with manufacturer's use limitations and OSHA standard 1910.134 (29CFR).

Control of environmental exposure

Do not flush liquid into public sewer, water systems or surface waters.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical State	Liquid.
Appearance	Colorless.
Odor	Slight aromatic.
Odor Thresh	Not available.
pH	Not available.
Melting Point/Range	-15.4- -15.3 °C (4.3-4.5 °F)
Boiling Point/Range	205 °C @ 1013 hPa (401 °F @ 1013 hPa)
Flash Point	99-100 °C (210-213 °F) Closed Cup
Evaporation Rate	<0.01
Flammability (solid, gas)	Not applicable.
Flammability or explosive limit	
Upper	: 13%
Lower	: 1.3%
Vapor Pressure	<1 mm Hg @ 20 °C
Vapor Density	3.7 (Air=1)
Density	1.045 @ 20°C
Solubility	40 g/L @ 25°C (in water)
Partition coefficient; n-octanol/water	1.05 @ 20°C
Autoignition Temp	436 °C (817 °F)
Decomposition Temp	Not available.
Viscosity	5.8-8 cP @ 20°C
Molecular Formula	C7H8O
Molecular Weight	108.14
VOC Content(%)	100%
Oxidizing properties	Not oxidizing.

9.2 Other safety information

Amounts specified are typical and do not represent a specification.

SECTION 10: Stability and reactivity

10.1 Reactivity

Can react violently in contact with strong oxidizing agents, isocyanates, acetaldehyde, lithium aluminum hydride, aluminum alkyl compounds, strong mineral acids (i.e. sulfuric acid), and hydrogen bromide.

10.2 Chemical stability

This product is stable. In the presence of air, benzyl alcohol will very slowly oxidize to benzaldehyde.

10.3 Possibility of hazardous reactions

Hazardous polymerization does not occur.

10.4 Conditions to avoid

Avoid exposure to air, moisture, ignition sources and elevated temperatures.

10.5 Incompatible materials

Avoid strong acids and oxidizing agents. Avoid contact with iron and aluminum. Will attack some form of plastics.

10.6 Hazardous decomposition products

Carbon dioxide and carbon monoxide. Benzaldehyde.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Product Information
Component Information

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Benzyl alcohol	1620 mg/kg (Rabbit)	NA	>4178 mg/m3 - 4hr,aerosol (Rat)

Skin corrosion/irritation

Not classified.

Serious eye damage/eye irritation

Causes serious eye irritation.

Respiratory or skin sensitization

Not classified.

Germ cell mutagenicity

Not classified.

Carcinogenicity

Not classified.

Reproductive toxicity

Not classified.

Specific target organ toxicity - single exposure

Not classified.

Specific target organ toxicity - repeated exposure

Not classified.

Aspiration hazard

Not classified.

Chronic effects

No information available.

11.2 Additional information

None.

SECTION 12. Ecological information

12.1 Toxicity

Ecotoxicity:

Toxicity to Micro-organisms, inhibition of microbial activity, 24 hours, EC50 = 390 mg/L.

Component	Fish	Invertebrates	Algae
Benzyl alcohol	LC50 460 mg/L (96hrs) Acute LC50 >100 mg/L (96hrs) Acute	EC50 230 mg/L (48hrs) Acute EC50 400mg/L (24hrs) Acute NOEC 51 mg/L (21days) Chronic	EC50 770 mg/L (72hrs) Acute NOEC310 mg/L (72hrs) Chronic

12.2 Persistence and Degradability

Expected to be readily biodegradable.

12.3 Bioaccumulative Potential

Bioconcentration Factor (BCF) - 1.37 L/kg (calculated). Log Kow - 1.05 @ 20°C.

12.4 Mobility in Soil

15.7 (calculated)

12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

12.6 Endocrine disrupting properties

No data available.

12.7 Other adverse effects

No additional information available.

SECTION 13. Disposal considerations

13.1 Waste Disposal Methods

For waste disposal purposes, this product is not known to be defined or designated as hazardous by current provisions of the Federal (EPA) Resource Conservation and Recovery Act (RCRA, 40CFR261). Incinerate waste product when in liquid form (i.e., as supplied) in a properly permitted (approved) incineration facility in accordance with federal, state and local regulations. Liquids cannot be disposed of in a landfill. See Section 8 for recommendations on the use of personal protective equipment.

SECTION 14: Transport information

DOT

UN-No	Not Regulated
Proper Shipping Name	
Hazard Class	
Subsidiary Hazard Class	
Packing Group	

IATA

UN-No	Not Regulated.
Proper Shipping Name	
Hazard Class	
Subsidiary Hazard Class	
Packing Group	

IMDG/IMO

UN-No	Not Regulated.
Proper Shipping Name	
Hazard Class	
Subsidiary Hazard Class	
Packing Group	

ADR

UN-No	Not Regulated.
Proper Shipping Name	
Hazard Class	
Subsidiary Hazard Class	
Packing Group	