

Version 1.0 Revision Date 29.11.2021 Print Date 29.11.2021 <u>www.markherb.com</u>

Section 1. Product and Company Information

GHS Product Name:	Benzyl Benzoate
Product Code:	PHE-33-10
CAS:	[120-51-4]
Molecular Formula:	$C_{14}H_{12}O_2$
	Ascabiol; Benzoic acid benzyl ester; Novoscabin; Scabitox;
Company:	MarkHerb
Address:	Gedung Riset dan Inovasi (ex. PAU Lt. 8), Institut Teknologi Bandung, Jl Ganesha 10,
	Bandung 40132
Tel.:	+62 877-4556-0063
Fax:	-
Website:	www.markherb.com
E-mail:	info@markherb.com

Section 2. Hazards Identification

2.1 GHS classification PHYSICAL HAZARDS Not classified HEALTH HAZARDS Acute toxicity – Oral (Category 4), H302 ENVIRONMENTAL HAZARDS Acute aquatic toxicity (Category 1), H400 Long-term (chronic) aquatic hazard (Category 4), H411

2.2 GHS label elements, including precautionary statements

Pictograms or hazard symbols



Signal word Warning

Hazard statements

- H302 Harmful if swallowed
- H400 Very toxic to aquatic life
- H411 Toxic to aquatic life with long lasting effects.

Precautionary statements

P264	Wash skin thoroughly after handling
P270	Do not eat, drink or smoke when using this product
P273	Avoid release to the environment

P301 + 312	IF SWALLOWED: Call a POISON CENTER/ doctor if you feel unwell
P330	Rinse mouth
P391	Collect spillage
P501	Dispose of contents/ container to an approved waste disposal plant.

Section 3. Information on Basic Physical and Chemical Properties

Physical States:	[] Gas [X] Liquid [] Solid		
Melting Point:	17-20°C		
Boiling Point:	323-324°C		
Flash Pt:	148°C - closed cup		
Evaporation Rate:	< 1 (Butyl Acetate = 1	1)	
Flammability (solid, gas):	No data available.		
Explosive Limits:	LEL: No data.	UEL: No data	
Vapor Pressure (vs. Air or mm Hg):	0.0±0.7 mmHg at 25°	PC	
Vapor Density (vs. Air = 1):	7.31		
Specific Gravity (Water = 1):	1.118 g/cm ³ at 20°C		
Solubility in Water:	0.0153 g/L at 20°C (S	lightly soluble); insoluble in cold water	
Solubility Notes:	Methanol; n-octanol; acetone		
Autoignition Pt:	480°C (896°F)		
Percent Volatile:	No data		
Partition coefficient:	log Pow: 3.97 at 25°0	2	
pH:	No data		

Section 4. First aid measures

Description of first aid measuresIf inhaledIf breathed in, move person into fresh air. If not breathing, give artificial respiration.In case of skin contactWash off with soap and plenty of water.In case of eye contactFlush eyes with water as a precaution.If swallowedNever give anything by mouth to an unconscious person. Rinse mouth with water.Most important symptoms and effects, both acute and delayedThe most important known symptoms and effects are described in the labelling (see section 2.2).Indication of any immediate medical attention and special treatment neededNo data available

Section 5. Fire Fighting Measures

Suitable extinguishing

Media: Dry chemical, foam, water spray, carbon dioxide.

Precautions for firefighters: Fire-extinguishing work is done from the windward and the suitable fire-extinguishing method according to the surrounding situation is used. Uninvolved persons should evacuate to a safe place. In case of fire in the surroundings: Remove movable containers if safe to do so.

equipment for firefighters: When extinguishing fire, be sure to wear personal protective equipment.

Section 6. Accidental Release Measures

Personal precautions, protective equipment and emergency procedures
Avoid dust formation. Avoid breathing vapors, mist or gas.
Environmental precautions
Do not let product enter drains.
General Information:
Use proper personal protective equipment as indicated in Section 8.
Spills/Leaks:
Clean up spills immediately, observing precautions in the Protective Equipment section. Sweep up, then place into a suitable container for disposal. Decontaminate spill site with 10% caustic solution and ventilate area until after disposal is complete.

Section 7. Handling and Storage

Precautions for safe handling:

Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Avoid contact with eyes, skin, and clothing. Avoid ingestion and inhalation. Keep away from sources of ignition. Avoid prolonged or repeated exposure.

Storage:

Store in a well closed container. Protected from air and light, refrigerate or freeze (2-8°C)

Specific end uses

Use in a laboratory fume hood where possible. Refer to employer is COSHH risk assessment.

Section 8. Exposure Controls / Personal Protection

Engineering controls:

Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits. Use process enclosure, local exhaust ventilation, or other engineering controls to control airborne levels.

Control parameters: Not set up

Personal protective equipment:

Respiratory protection: Dust respirator. Follow local and national regulations.

Hand protection: Protective gloves.

Eye protection: Wear safety glasses and chemical goggles if splashing is possible.

Skin and body protection: Wear appropriate protective gloves and clothing to prevent skin exposure.

Section 9. Stability and Reactivity

Reactivity

Stable under recommended transport or storage conditions.

Chemical Stability

Stable under normal temperatures and pressures.
Conditions to Avoid
Incompatible materials, strong oxidants, heat.
Incompatibilities with Other Materials
Strong oxidising/reducing agents, strong acids/alkalis.
Hazardous Decomposition Products
Nitrogen oxides, carbon monoxide, irritating and toxic fumes and gases, carbon dioxide, nitrogen.
Hazardous Polymerization
Has not been reported.

Section 10. Toxicological Information

Acute Toxicity:	LD ₅₀ Oral - Rat - 1900 mg/kg LD ₅₀ Oral - Mouse - 1400 mg/kg LD ₅₀ Oral - Rabbit - 1680 mg/kg LD ₅₀ Dermal - Rabbit - 4000 mg/kg	
	LC_{50} Inhalation - >5.2 mg/l	
Skin corrosion/irritation:	Skin - Rabbit	
	Result: No skin irritation - 4 h	
Serious eye damage/irritation:	Eyes - Rabbit	
	Result: No eye Irritation	
Germ cell mutagenicity:	Test type: unscheduled DNA synthesis assay	
	Species: Rat	
	Cell type: Liver cells	
	Application Route: Oral	
	Result: Negative	
Carcinogenicity:	IARC = No data NTP = No data	
Reproductive toxicity:	No data	

Section 11. Ecological Information

Toxicity:			
Toxicity to fish	: semi static test LC ₅₀ - Danio rerio (zebra fish) - 2.32 mg/l - 96 h		
Toxicity to daphnia	: EC ₅₀ - Daphnia magna - 2 mg/L - 24 h		
	EC _{50 –} Daphn	ia magna _ 0.05 mg/L _ 48 h	
Toxicity to algae	: static test ErC ₅₀ - Pseudokirchneriella subcapitata (green algae) - 0.475 mg/l - 72 h		
Toxicity to bacteria	: static test EC ₅₀ - activated sludge - >10000 mg/l - 3 h		
Persistence and degradability:			
Biodegradability	aerobic - Exposure time 28 h		
	Result: 94% - I	Readily biodegradable	
Bioaccumulative potential:		No data	
Mobility in soil:		No data	
Results of PBT & vPvB assessment:		No data	
Other adverse effects:		May be harmful to the aquatic environment.	

Section 12. Disposal Considerations

Dispose of in a manner consistent with federal, state, and local regulations.

Section 13. Transport Information

	or classification as hazardous fo	or transport.		
UN number				
ADR/RID: 3082	IMDG: 3082	IATA: 3082		
UN proper shipping name				
ADR/RID				
ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Benzyl benzoate)				
IMDG				
ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Benzyl benzoate)				
ΙΑΤΑ				
Environmentally hazardous	substance, liquid, n.o.s. (Benzyl	benzoate)		
Transport hazard class(es)				
ADR/RID: 9	IMDG: 9	IATA: 9		

Section 14. Regulatory Information

Safety, health and environmental regulations/legislation specific for the substance or mixture no data Chemical Safety Assessment no data

Section 15. Additional Information

This MSDS above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no way shall the company be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if the company has been advised of the possibility of such damages.

----End of safety data sheet----