

Material Safety Data Sheet

Date Printed: 31/JAN/2005
Date Updated: 13/MAR/2004
Version 1.3
According to 91/155/EEC

1 - Product and Company Information

Product Name BENZOIN
Product Number 12510

Company Sigma-Aldrich Pty, Ltd
Unit 2, 14 Anella Avenue
Castle Hill NSW 1765
Australia
Technical Phone # +61 2 9841 0555
Fax +61 2 9841 0500
Emergency Phone # +61 2 9841 0566

2 - Composition/Information on Ingredients

Product Name	CAS #	EC no	Annex I Index Number
BENZOIN	119-53-9	204-331-3	None
Formula C14H12O2			
Molecular Weight 212.25 AMU			
Synonyms	Acetophenone, 2-hydroxy-2-phenyl- *		
	Benzoylphenylcarbinol *		
	Bitter almond oil		
	camphor *		
	Ethanone, 2-hydroxy-1,2-diphenyl- *		
	Fenyl-alpha-hydroxybenzylketon (Czech) *		
	alpha-Hydroxybenzyl phenyl ketone *		
	alpha-Hydroxy-alpha-phenylacetophenone *		
	2-Hydroxy-2-phenylacetophenone *		
	Ketone,		
	alpha-hydroxybenzyl phenyl * NCI-C50011 *		
	WY-42956		

3 - Hazards Identification

4 - First Aid Measures

AFTER INHALATION

If inhaled, remove to fresh air. If not breathing give artificial respiration. If breathing is difficult, give oxygen.

AFTER SKIN CONTACT

In case of contact, immediately wash skin with soap and copious amounts of water.

AFTER EYE CONTACT

In case of contact, immediately flush eyes with copious amounts of water for at least 15 minutes.

AFTER INGESTION

If swallowed, wash out mouth with water provided person is conscious. Call a physician.

5 - Fire Fighting Measures

EXTINGUISHING MEDIA

Suitable: Water spray. Carbon dioxide, dry chemical powder, or appropriate foam.

SPECIAL RISKS

Specific Hazard(s): Emits toxic fumes under fire conditions.

SPECIAL PROTECTIVE EQUIPMENT FOR FIREFIGHTERS

Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

6 - Accidental Release Measures

PROCEDURE(S) OF PERSONAL PRECAUTION(S)

Wear respirator, chemical safety goggles, rubber boots, and heavy rubber gloves.

METHODS FOR CLEANING UP

Sweep up, place in a bag and hold for waste disposal. Avoid raising dust. Ventilate area and wash spill site after material pickup is complete.

7 - Handling and Storage

HANDLING

Directions for Safe Handling: Avoid inhalation. Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated exposure.

STORAGE

Conditions of Storage: Keep tightly closed. Store in a cool dry place.

8 - Exposure Controls / Personal Protection

ENGINEERING CONTROLS

Safety shower and eye bath. Mechanical exhaust required.

GENERAL HYGIENE MEASURES

Wash thoroughly after handling. Wash contaminated clothing before reuse.

PERSONAL PROTECTIVE EQUIPMENT

Respiratory Protection: Government approved respirator.

Hand Protection: Compatible chemical-resistant gloves.

Eye Protection: Chemical safety goggles.

9 - Physical and Chemical Properties

Appearance	Color: Slightly yellow Form: Fine crystals	
Property	Value	At Temperature or Pressure
pH	N/A	
BP/BP Range	194 °C	12 mmHg
MP/MP Range	133 °C	
Flash Point	181 °C	Method: closed cup
Flammability	N/A	

Autoignition Temp	N/A
Oxidizing Properties	N/A
Explosive Properties	N/A
Explosion Limits	N/A
Vapor Pressure	N/A
SG/Density	N/A
Partition Coefficient	N/A
Viscosity	N/A
Vapor Density	N/A
Saturated Vapor Conc.	N/A
Evaporation Rate	N/A
Bulk Density	N/A
Decomposition Temp.	N/A
Solvent Content	N/A
Water Content	N/A
Surface Tension	N/A
Conductivity	N/A
Miscellaneous Data	N/A
Solubility	N/A

10 - Stability and Reactivity

STABILITY

Materials to Avoid: Strong oxidizing agents.

HAZARDOUS DECOMPOSITION PRODUCTS

Hazardous Decomposition Products: Carbon monoxide, Carbon dioxide.

11 - Toxicological Information

RTECS NUMBER: DI1590000

ACUTE TOXICITY

LD50
Oral
Rat
10000 mg/kg

LD50
Oral
Mouse
> 3000 mg/kg
Remarks: Behavioral: Somnolence (general depressed activity).

LD50
Skin
Rabbit
8870 mg/kg

SIGNS AND SYMPTOMS OF EXPOSURE

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

ROUTE OF EXPOSURE

Skin Contact: May cause skin irritation.
Eye Contact: May cause eye irritation.
Inhalation: Material may be irritating to mucous membranes and upper respiratory tract.
Multiple Routes: May be harmful by inhalation, ingestion, or skin absorption.

CHRONIC EXPOSURE - MUTAGEN

Rat
63700 UG/L
Cell Type: liver
DNA damage

Rat
500 MG/KG
Intraperitoneal
DNA damage

Rat
1 MMOL/L
Cell Type: liver
Unscheduled DNA synthesis

Rat
1 GM/KG
Oral
Unscheduled DNA synthesis

Mouse
10 MG/L (+S9)
Cell Type: lymphocyte
Mutation in microorganisms

Mouse
500 MG/KG
Intraperitoneal
Unscheduled DNA synthesis

Mouse
62500 UG/L
Cell Type: lymphocyte
Mutation in mammalian somatic cells.

Hamster
20 MG/L
Cell Type: lung
Cytogenetic analysis

Hamster
500 MG/L
Cell Type: ovary
Sister chromatid exchange

12 - Ecological Information

No data available.

13 - Disposal Considerations

SUBSTANCE DISPOSAL

Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Observe all federal, state, and local environmental regulations.

14 - Transport Information

RID/ADR

Non-hazardous for road transport.

IMDG

Non-hazardous for sea transport.

IATA

Non-hazardous for air transport.

15 - Regulatory Information

COUNTRY SPECIFIC INFORMATION

Germany

WGK: 2

SWITZERLAND

SWISS POISON CLASS: 3

16 - Other Information

DISCLAIMER

For R&D use only. Not for drug, household or other uses.