

## SAFETY DATA SHEET

Creation Date 09-May-2011

Revision Date 24-December-2021

Revision Number 5

### 1. Identification

**Product Name** Dibenzylamine

**Cat No. :** AC112610000; AC112610010; AC112610050; AC112612500

**CAS-No** 103-49-1

**Synonyms** N-(Phenylmethyl)benzenemethanamine

**Recommended Use** Laboratory chemicals.

**Uses advised against** Food, drug, pesticide or biocidal product use.

#### Details of the supplier of the safety data sheet

##### Company

##### **Importer/Distributor**

Fisher Scientific  
112 Colonnade Road,  
Ottawa, ON K2E 7L6,  
Canada  
Tel: 1-800-234-7437

Acros Organics  
One Reagent Lane  
Fair Lawn, NJ 07410

##### **Manufacturer**

Fisher Scientific Company  
One Reagent Lane  
Fair Lawn, NJ 07410  
Tel: (201) 796-7100

##### **Emergency Telephone Number**

For information **US** call: 001-800-ACROS-01 / **Europe** call: +32 14 57 52 11  
Emergency Number **US**:001-201-796-7100 / **Europe**: +32 14 57 52 99  
**CHEMTREC** Tel. No.**US**:001-800-424-9300 / **Europe**:001-703-527-3887

### 2. Hazard(s) identification

#### Classification

##### **WHMIS 2015 Classification**

Classified as hazardous under the Hazardous Products Regulations (SOR/2015-17)

<b>Acute oral toxicity</b>	Category 4
<b>Skin Corrosion/Irritation</b>	Category 1 C
<b>Serious Eye Damage/Eye Irritation</b>	Category 1
<b>Specific target organ toxicity (single exposure)</b>	Category 3
Target Organs - Respiratory system.	

#### Label Elements

##### **Signal Word**

Danger

##### **Hazard Statements**

Harmful if swallowed  
Causes severe skin burns and eye damage

May cause respiratory irritation



### Precautionary Statements

#### Prevention

Do not breathe dust/fumes/gas/mist/vapours/spray  
Wash face, hands and any exposed skin thoroughly after handling  
Do not eat, drink or smoke when using this product  
Use only outdoors or in a well-ventilated area  
Wear protective gloves/protective clothing/eye protection/face protection

#### Response

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower  
IF INHALED: Remove person to fresh air and keep comfortable for breathing  
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
Immediately call a POISON CENTER/doctor  
Rinse mouth  
Do NOT induce vomiting  
Wash contaminated clothing before reuse

#### Storage

Store locked up  
Store in a well-ventilated place. Keep container tightly closed

#### Disposal

Dispose of contents/container to an approved waste disposal plant

#### Other Hazards

Very toxic to aquatic life with long lasting effects

## 3. Composition/Information on Ingredients

Component	CAS-No	Weight %
Benzenemethanamine, N-(phenylmethyl)-	103-49-1	>95

## 4. First-aid measures

<b>Eye Contact</b>	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention.
<b>Skin Contact</b>	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Get medical attention.
<b>Inhalation</b>	Remove from exposure, lie down. Remove to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Get medical attention.
<b>Ingestion</b>	Clean mouth with water. Get medical attention.
<b>Most important symptoms/effects</b>	Causes burns by all exposure routes. Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated: Ingestion causes severe swelling, severe damage to the delicate tissue and danger of perforation
<b>Notes to Physician</b>	Treat symptomatically

## 5. Fire-fighting measures

**Suitable Extinguishing Media** Water spray. Carbon dioxide (CO<sub>2</sub>). Dry chemical. Chemical foam.

**Unsuitable Extinguishing Media** No information available

**Flash Point** 138 °C / 280.4 °F

**Method -** CC (closed cup)

**Autoignition Temperature** 425 °C / 797 °F

### Explosion Limits

**Upper** No data available

**Lower** No data available

**Sensitivity to Mechanical Impact** No information available

**Sensitivity to Static Discharge** No information available

### Specific Hazards Arising from the Chemical

Do not allow run-off from fire-fighting to enter drains or water courses.

### Hazardous Combustion Products

Nitrogen oxides (NO<sub>x</sub>). Carbon monoxide (CO). Carbon dioxide (CO<sub>2</sub>).

### Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

### NFPA

**Health**  
3

**Flammability**  
1

**Instability**  
0

**Physical hazards**  
N/A

## 6. Accidental release measures

**Personal Precautions** Ensure adequate ventilation. Use personal protective equipment as required.

**Environmental Precautions** Do not flush into surface water or sanitary sewer system. Do not allow material to contaminate ground water system. Prevent product from entering drains. Local authorities should be advised if significant spillages cannot be contained. See Section 12 for additional Ecological Information. Avoid release to the environment. Collect spillage.

**Methods for Containment and Clean Up** Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Keep in suitable, closed containers for disposal. Do not let this chemical enter the environment.

## 7. Handling and storage

**Handling** Avoid contact with skin and eyes. Do not breathe mist/vapors/spray. Do not ingest. If swallowed then seek immediate medical assistance.

**Storage.** Keep in a dry, cool and well-ventilated place. Keep container tightly closed. Incompatible Materials. Acids. Strong oxidizing agents. Acid anhydrides. Acid chlorides. Chloroformates.

## 8. Exposure controls / personal protection

**Exposure Guidelines** This product does not contain any hazardous materials with occupational exposure limit established by the region specific regulatory bodies.

### Engineering Measures

Ensure adequate ventilation, especially in confined areas. Ensure that eyewash stations and safety showers are close to the workstation location.

Wherever possible, engineering control measures such as the isolation or enclosure of the process, the introduction of process or equipment changes to minimise release or contact, and the use of properly designed ventilation systems, should be adopted to control hazardous materials at source

### Personal protective equipment

#### Eye Protection

Goggles

#### Hand Protection

Protective gloves

Glove material	Breakthrough time	Glove thickness	Glove comments
Nitrile rubber	See manufacturers	-	Splash protection only
Neoprene	recommendations		
Natural rubber			
PVC			

Inspect gloves before use. observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. (Refer to manufacturer/supplier for information) gloves are suitable for the task: Chemical compatability, Dexterity, Operational conditions, User susceptibility, e.g. sensitisation effects, also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion. gloves with care avoiding skin contamination.

#### Respiratory Protection

No protective equipment is needed under normal use conditions.

### Environmental exposure controls

Prevent product from entering drains. Do not allow material to contaminate ground water system. Local authorities should be advised if significant spillages cannot be contained.

### Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice. Keep away from food, drink and animal feeding stuffs. Do not eat, drink or smoke when using this product. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Wash hands before breaks and after work.

## 9. Physical and chemical properties

Physical State	Liquid
Appearance	Clear
Odor	Ammonia-like
Odor Threshold	No information available
pH	10.6
Melting Point/Range	-26 °C / -14.8 °F
Boiling Point/Range	300 °C / 572 °F @ 760 mmHg
Flash Point	138 °C / 280.4 °F
Method -	CC (closed cup)
Evaporation Rate	No information available
Flammability (solid,gas)	Not applicable
Flammability or explosive limits	
Upper	No data available
Lower	No data available
Vapor Pressure	0.3 Pa @ 20 °C
Vapor Density	No information available
Specific Gravity	1.020
Solubility	Slightly soluble in water
Partition coefficient; n-octanol/water	No data available
Autoignition Temperature	425 °C / 797 °F
Decomposition Temperature	> 150°C
Viscosity	No information available
Molecular Formula	C14 H15 N

Molecular Weight

197.28

## 10. Stability and reactivity

<b>Reactive Hazard</b>	None known, based on information available
<b>Stability</b>	Stable under recommended storage conditions.
<b>Conditions to Avoid</b>	Incompatible products.
<b>Incompatible Materials</b>	Acids, Strong oxidizing agents, Acid anhydrides, Acid chlorides, Chloroformates
<b>Hazardous Decomposition Products</b>	Nitrogen oxides (NO <sub>x</sub> ), Carbon monoxide (CO), Carbon dioxide (CO <sub>2</sub> )
<b>Hazardous Polymerization</b>	Hazardous polymerization does not occur.
<b>Hazardous Reactions</b>	None under normal processing.

## 11. Toxicological information

### Acute Toxicity

#### Product Information Component Information

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Benzenemethanamine, N-(phenylmethyl)-	632 mg/kg (Rat)	>2000 mg/kg (Rat)	Not listed

**Toxicologically Synergistic Products** No information available

#### Delayed and immediate effects as well as chronic effects from short and long-term exposure

<b>Irritation</b>	Causes burns by all exposure routes
<b>Sensitization</b>	No information available
<b>Carcinogenicity</b>	The table below indicates whether each agency has listed any ingredient as a carcinogen.

Component	CAS-No	IARC	NTP	ACGIH	OSHA	Mexico
Benzenemethanamine, N-(phenylmethyl)-	103-49-1	Not listed	Not listed	Not listed	Not listed	Not listed

**Mutagenic Effects** Not mutagenic in AMES Test

**Reproductive Effects** No information available.

**Developmental Effects** No information available.

**Teratogenicity** No information available.

**STOT - single exposure** Respiratory system

**STOT - repeated exposure** None known

**Aspiration hazard** No information available

**Symptoms / effects, both acute and delayed** Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated: Ingestion causes severe swelling, severe damage to the delicate tissue and danger of perforation

**Endocrine Disruptor Information** No information available

**Other Adverse Effects** The toxicological properties have not been fully investigated.

## 12. Ecological information

### Ecotoxicity

Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. The product contains following substances which are hazardous for the environment.

Component	Freshwater Algae	Freshwater Fish	Microtox	Water Flea
Benzenemethanamine, N-(phenylmethyl)-	EC50 = 18.8 mg/L, 72h NOEC = 0.1 mg/L (Desmodesmus subspicatus)	LC50 = 21.4 mg/L, 96h (Danio rerio)	EC50 = 171 mg/L, 30 min	EC50 = 9.7 mg/L, 48h (Daphnia magna)

**Persistence and Degradability** Insoluble in water Persistence is unlikely

**Bioaccumulation/ Accumulation** No information available.

**Mobility** Is not likely mobile in the environment due its low water solubility.

Component	log Pow
Benzenemethanamine, N-(phenylmethyl)-	2.67

## 13. Disposal considerations

**Waste Disposal Methods** Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

## 14. Transport information

### DOT

UN-No UN2735  
 Proper Shipping Name AMINES, LIQUID, CORROSIVE, N.O.S.  
 Technical Name Benzenemethanamine, N-(phenylmethyl)-  
 Hazard Class 8  
 Packing Group III

### TDG

UN-No UN2735  
 Proper Shipping Name AMINES, LIQUID, CORROSIVE, N.O.S.  
 Hazard Class 8  
 Packing Group III

### IATA

UN-No UN2735  
 Proper Shipping Name AMINES, LIQUID, CORROSIVE, N.O.S.  
 Hazard Class 8  
 Packing Group III

### IMDG/IMO

UN-No UN2735  
 Proper Shipping Name AMINES, LIQUID, CORROSIVE, N.O.S.  
 Hazard Class 8  
 Packing Group III

## 15. Regulatory information

### International Inventories

Component	CAS-No	DSL	NDSL	TSCA	TSCA Inventory notification - Active-Inactive	EINECS	ELINCS	NLP
Benzenemethanamine, N-(phenylmethyl)-	103-49-1	X	-	X	ACTIVE	203-117-7	-	-

Component	CAS-No	IECSC	KECL	ENCS	ISHL	TCSI	AICS	NZIoC	PICCS
Benzenemethanamine, N-(phenylmethyl)-	103-49-1	X	KE-28393	X	X	X	X	X	X

**Legend:**

X - Listed '-' - Not Listed

KECL - NIER number or KE number (<http://ncis.nier.go.kr/en/main.do>)

DSL/NDL - Canadian Domestic Substances List/Non-Domestic Substances List

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

IECSC - Chinese Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

ENCS - Japanese Existing and New Chemical Substances

AICS - Australian Inventory of Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

**Canada**

SDS in compliance with provisions of information as set out in Canadian Standard - Part 4, Schedule 1 and 2 of the Hazardous Products Regulations (HPR) and meets the requirements of the HPR (Paragraph 13(1)(a) of the Hazardous Products Act (HPA)).

**Other International Regulations****Authorisation/Restrictions according to EU REACH****Safety, health and environmental regulations/legislation specific for the substance or mixture**

Component	CAS-No	OECD HPV	Persistent Organic Pollutant	Ozone Depletion Potential	Restriction of Hazardous Substances (RoHS)
Benzenemethanamine, N-(phenylmethyl)-	103-49-1	Not applicable	Not applicable	Not applicable	Not applicable

Component	CAS-No	Seveso III Directive (2012/18/EC) - Qualifying Quantities for Major Accident Notification	Seveso III Directive (2012/18/EC) - Qualifying Quantities for Safety Report Requirements	Rotterdam Convention (PIC)	Basel Convention (Hazardous Waste)
Benzenemethanamine, N-(phenylmethyl)-	103-49-1	Not applicable	Not applicable	Not applicable	Not applicable

**16. Other information****Prepared By**

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**Revision Summary**

This document has been updated to comply with the requirements of WHMIS 2015 to align with the Globally Harmonised System (GHS) for the Classification and Labelling of Chemicals.

**Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text

**End of SDS**