

# **SAFETY DATA SHEET**

Creation Date 11-Feb-2010 Revision Date 03-Aug-2023 Revision Number 5

1. Identification

Product Name 2,6-Diisopropylaniline

Cat No.: AC169410000; AC169410050; AC169411000; AC169415000

**CAS No** 24544-04-5

Synonyms No information available

Recommended Use Laboratory chemicals.

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

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

Company

Fisher Scientific Company
One Reagent Lane
Fair Lawn, NJ 07410
Acros Organics
One Reagent Lane
Fair Lawn, NJ 07410
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

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Carcinogenicity Category 1B

Label Elements

**Signal Word** 

Danger

**Hazard Statements** 

May cause cancer



## **Precautionary Statements**

#### Prevention

Obtain special instructions before use

Do not handle until all safety precautions have been read and understood

Use personal protective equipment as required

#### Response

IF exposed or concerned: Get medical attention/advice

### Storage

Store locked up

### **Disposal**

Dispose of contents/container to an approved waste disposal plant

## Hazards not otherwise classified (HNOC)

Harmful to aquatic life with long lasting effects

WARNING. Cancer - https://www.p65warnings.ca.gov/.

# 3. Composition/Information on Ingredients

Component	CAS No	Weight %
Benzenamine, 2,6-bis(1-methylethyl)-	24544-04-5	>95
Aniline	62-53-3	0.1-0.2

# 4. First-aid measures

Eye Contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get

medical attention.

**Skin Contact** Wash off immediately with plenty of water for at least 15 minutes. Get medical attention

immediately if symptoms occur.

**Inhalation** Remove to fresh air. Get medical attention immediately if symptoms occur. If not breathing,

give artificial respiration.

**Ingestion** Do NOT induce vomiting. Get medical attention.

Most important symptoms and

effects

No information available.

Notes to Physician Treat symptomatically

## 5. Fire-fighting measures

Suitable Extinguishing Media Water spray, carbon dioxide (CO2), dry chemical, alcohol-resistant foam.

Unsuitable Extinguishing Media No information available

**Flash Point** 123 °C / 253.4 °F

Method - No information available

Autoignition Temperature 400 °C / 752 °F

### 2,6-Diisopropylaniline

**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**

Keep product and empty container away from heat and sources of ignition.

#### **Hazardous Combustion Products**

Carbon monoxide (CO). Carbon dioxide (CO<sub>2</sub>). Nitrogen oxides (NOx).

#### **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

HealthFlammabilityInstabilityPhysical hazards10N/A

## 6. Accidental release measures

Personal Precautions Environmental Precautions Ensure adequate ventilation. Use personal protective equipment as required. Should not be released into the environment. Do not flush into surface water or sanitary sewer system. See Section 12 for additional Ecological Information. Avoid release to the environment. Collect spillage.

**Methods for Containment and Clean** Soak up with inert absorbent material. Keep in suitable, closed containers for disposal. **Up** 

	7. Handling and storage
Handling	Wear personal protective equipment/face protection. Ensure adequate ventilation. Avoid
	contact with skin, eyes or clothing. Avoid ingestion and inhalation

contact with skin, eyes or clothing. Avoid ingestion and inhalation.

Storage. Keep containers tightly closed in a dry, cool and well-ventilated place. Incompatible

Materials. Strong oxidizing agents.

# 8. Exposure controls / personal protection

### **Exposure Guidelines**

Component	ACGIH TLV	OSHA PEL	NIOSH	Mexico OEL (TWA)
Aniline	TWA: 2 ppm	(Vacated) TWA: 2 ppm	IDLH: 100 ppm	TWA: 2 ppm
	Skin	(Vacated) TWA: 8 mg/m <sup>3</sup>		
		Skin		
		TWA: 5 ppm		
		TWA: 19 mg/m <sup>3</sup>		

#### <u>Legend</u>

ACGIH - American Conference of Governmental Industrial Hygienists

OSHA - Occupational Safety and Health Administration

NIOSH: NIOSH - National Institute for Occupational Safety and Health

Engineering Measures Ensure that eyewash stations and safety showers are close to the workstation location.

Ensure adequate ventilation, especially in confined areas.

**Personal Protective Equipment** 

Eye/face Protection Wear appropriate protective eyeglasses or chemical safety goggles as described by

OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard

EN166.

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

**Respiratory Protection** No protective equipment is needed under normal use conditions.

**Hygiene Measures** Handle in accordance with good industrial hygiene and safety practice.

## 9. Physical and chemical properties

Physical State Liquid

Appearance No information available

**Odor** Odorless

Odor Threshold

pH

No information available

No information available

Melting Point/Range -45 °C / -49 °F

Boiling Point/Range 257 °C / 494.6 °F @ 760 mmHg

Flash Point 123 °C / 253.4 °F
Evaporation Rate No information available

Flammability (solid,gas) Not applicable

Flammability or explosive limits

Upper<br/>LowerNo data available<br/>No data availableVapor Pressure<0.01 mmHg @ 20 °C</th>Vapor DensityNo information available

Specific Gravity 0.940

SolubilitySlightly soluble in waterPartition coefficient; n-octanol/waterNo data availableAutoignition Temperature400 °C / 752 °FDecomposition TemperatureNo information available

Viscosity
No information available
Molecular Formula
C12 H19 N

Molecular Formula C12 H19 I Molecular Weight 177.29

# 10. Stability and reactivity

Reactive Hazard None known, based on information available

**Stability** Stable under normal conditions.

Conditions to Avoid Incompatible products. Excess heat.

Incompatible Materials Strong oxidizing agents

Hazardous Decomposition Products Carbon monoxide (CO), Carbon dioxide (CO2), Nitrogen oxides (NOx)

Hazardous Polymerization Hazardous polymerization does not occur.

**Hazardous Reactions**None under normal processing.

## 11. Toxicological information

## **Acute Toxicity**

#### **Product Information**

#### **Component Information**

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Benzenamine,	LD50 = 3204 mg/kg (Rat)	Not listed	Not listed
2,6-bis(1-methylethyl)-			
Aniline	LD50 = 440 mg/kg (Rat)	LD50 = 442  mg/kg (Rat)	1 mg/L (Rat) 4 h

### 2,6-Diisopropylaniline

1.82 mg/L(Rat)4 h

**Toxicologically Synergistic** 

**Products** 

No information available

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

IrritationNo information availableSensitizationNo information available

Carcinogenicity

The table below indicates whether each agency has listed any ingredient as a carcinogen.

Component	CAS No	IARC	NTP	ACGIH	OSHA	Mexico
Benzenamine,	24544-04-5	Not listed				
2,6-bis(1-methylethyl)-						
Aniline	62-53-3	Group 2A	Not listed	A3	Х	A3

IARC (International Agency for Research on Cancer)

IARC (International Agency for Research on Cancer)

Group 1 - Carcinogenic to Humans

Group 2A - Probably Carcinogenic to Humans Group 2B - Possibly Carcinogenic to Humans

ACGIH: (American Conference of Governmental Industrial Hygienists)

A1 - Known Human Carcinogen
A2 - Suspected Human Carcinogen

A2 - Suspected Human Carcino A3 - Animal Carcinogen

Mexico - Occupational Exposure Limits - Carcinogens

ACGIH: (American Conference of Governmental Industrial Hygienists)

Mexico - Occupational Exposure Limits - Carcinogens

A1 - Confirmed Human Carcinogen A2 - Suspected Human Carcinogen A3 - Confirmed Animal Carcinogen

A4 - Not Classifiable as a Human Carcinogen
A5 - Not Suspected as a Human Carcinogen

Mutagenic Effects No information available

**Reproductive Effects** No information available.

**Developmental Effects**No information available.

**Teratogenicity** No information available.

STOT - single exposure None known STOT - repeated exposure None known

Aspiration hazard No information available

Symptoms / effects,both acute and No information available

delayed

**Endocrine Disruptor Information** No information available

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

## 12. Ecological information

# **Ecotoxicity**

The product contains following substances which are hazardous for the environment. Contains a substance which is:. Harmful to aquatic organisms.

Component	Freshwater Algae	Freshwater Fish	Microtox	Water Flea
Benzenamine,	Not listed	Pimephales promelas:	Not listed	EC50 = 15 mgL 48h
2,6-bis(1-methylethyl)-		LC50=14mg/L 96h		-
Aniline	Not listed	Oncorhynchus mykiss: LC50	EC50 = 425 mg/L 5 min	EC50 = 0.16 mg/L 48h
		= 10.96 mg/L 96h	EC50 = 488 mg/L 15 min	

Persistence and Degradability

Persistence is unlikely

**Bioaccumulation/ Accumulation** 

No information available.

#### **Mobility**

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

Component	log Pow
Benzenamine, 2,6-bis(1-methylethyl)-	3.18
Aniline	0.91

# 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.

Component	RCRA - U Series Wastes	RCRA - P Series Wastes
Aniline - 62-53-3	U012	-

# 14. Transport information

DOTNot regulatedTDGNot regulatedIATANot regulatedIMDG/IMONot regulated

# 15. Regulatory information

### **United States of America Inventory**

Component	CAS No	TSCA	TSCA Inventory notification - Active-Inactive	TSCA - EPA Regulatory Flags
Benzenamine, 2,6-bis(1-methylethyl)-	24544-04-5	Х	ACTIVE	-
Aniline	62-53-3	Χ	ACTIVE	-

#### Legend:

TSCA US EPA (TSCA) - Toxic Substances Control Act, (40 CFR Part 710)

X - Listed

'-' - Not Listed

TSCA - Per 40 CFR 751, Regulation of Certain Chemical Substances & Mixtures, Under TSCA Section 6(h) (PBT)

Not applicable

TSCA 12(b) - Notices of Export

Not applicable

#### **International Inventories**

Canada (DSL/NDSL), Europe (EINECS/ELINCS/NLP), Philippines (PICCS), Japan (ENCS), Japan (ISHL), Australia (AICS), China (IECSC), Korea (KECL).

Component	CAS No	DSL	NDSL	EINECS	PICCS	ENCS	ISHL	AICS	IECSC	KECL
Benzenamine,	24544-04-5	-	Х	246-305-4	-	Χ	Х	Х	Х	-
2,6-bis(1-methylethyl)-										
Aniline	62-53-3	Х	-	200-539-3	Х	Χ	Х	Х	Х	KE-01180

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

#### U.S. Federal Regulations

## **SARA 313**

Component	CAS No	Weight %	SARA 313 - Threshold Values %
Aniline	62-53-3	0.1-0.2	1.0

SARA 311/312 Hazard Categories See section 2 for more information

**CWA (Clean Water Act)** 

Component	CWA - Hazardous Substances	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants
Aniline	X	5000 lb	-	-

#### Clean Air Act

Component	HAPS Data	Class 1 Ozone Depletors	Class 2 Ozone Depletors	
Aniline	X		-	

**OSHA** - Occupational Safety and

Not applicable

Health Administration

**CERCLA** Not applicable

Component	Hazardous Substances RQs	CERCLA EHS RQs	
Aniline	5000 lb	5000 lb	

## **California Proposition 65**

This product contains the following Proposition 65 chemicals.

Component	CAS No	California Prop. 65	Prop 65 NSRL	Category
Aniline	62-53-3	Carcinogen	100 μg/day	Carcinogen

# U.S. State Right-to-Know

## Regulations

	Component	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Г	Aniline	X	X	Х	X	Х

## **U.S. Department of Transportation**

Reportable Quantity (RQ): Ν DOT Marine Pollutant Ν **DOT Severe Marine Pollutant** Ν

# U.S. Department of Homeland

Security

This product does not contain any DHS chemicals.

Other International Regulations

Mexico - Grade Slight risk, Grade 1

# Authorisation/Restrictions according to EU REACH

Component	CAS No	REACH (1907/2006) - Annex XIV - Substances Subject to Authorization		REACH Regulation (EC 1907/2006) article 59 - Candidate List of Substances of Very High Concern (SVHC)
Benzenamine, 2,6-bis(1-methylethyl)-	24544-04-5	-	-	-
Aniline	62-53-3	-	Use restricted. See item 75. (see link for restriction details)	-

https://echa.europa.eu/substances-restricted-under-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)
Benzenamine,	24544-04-5	Listed	Not applicable	Not applicable	Not applicable

### 2,6-Diisopropylaniline

2,6-bis(1-methylethyl)-					
Aniline	62-53-3	Listed	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)
Benzenamine, 2,6-bis(1-methylethyl)-	24544-04-5	Not applicable	Not applicable	Not applicable	Not applicable
Aniline	62-53-3	Not applicable	Not applicable	Not applicable	Not applicable

## 16. Other information

Prepared By Regulatory Affairs

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Revision Summary

This document has been updated to comply with the US OSHA HazCom 2012 Standard

replacing the current legislation under 29 CFR 1910.1200 to align with the Globally

Harmonized System of Classification and Labeling of Chemicals (GHS).

#### 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**