# Thermo Fisher SCIENTIFIC

# SAFETY DATA SHEET

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Revision Date 25-Apr-2024
Version 3

ALFAAA13922

# 3,5-Dichloroaniline

## SECTION 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

产品说明: 3,5-二氯苯胺, 98% Product Description: 3,5-Dichloroaniline

Cat No. : A13922

Synonyms 3,5-Dichloroaniline.; 3,5-Dichlorobenzeneamine; 1-Amino-3,5-dichlorobenzene

CAS No 626-43-7 Molecular Formula C6 H5 Cl2 N

**Supplier** Avocado Research Chemicals Ltd.

(Part of Thermo Fisher Scientific)

Shore Road, Heysham Lancashire, LA3 2XY, United Kingdom

Office Tel: +44 (0) 1524 850506 Office Fax: +44 (0) 1524 850608

Emergency Telephone Number For information US call: 001-800-227-6701 / 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

E-mail address begel.sdsdesk@thermofisher.com

Recommended Use Laboratory chemicals. Uses advised against No Information available

# **SECTION 2. HAZARD IDENTIFICATION**

Physical StateAppearanceOdorSolidBeigeNo information available

**Emergency Overview** 

Toxic if swallowed. Toxic in contact with skin. Toxic if inhaled. May cause damage to organs. May cause damage to organs through prolonged or repeated exposure. Toxic to aquatic life. Very toxic to aquatic life with long lasting effects.

## Classification of the substance or mixture

Acute Oral Toxicity	Category 3
Acute Dermal Toxicity	Category 3
Acute Inhalation Toxicity - Dusts and Mists	Category 3
Specific target organ toxicity - (single exposure)	Category 2
Specific target organ toxicity - (repeated exposure)	Category 2
Acute aquatic toxicity	Category 2 Category 1
Chronic aquatic toxicity	Category 1

# **Label Elements**

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#### 3,5-Dichloroaniline



# **Signal Word**

# Danger

#### **Hazard Statements**

H371 - May cause damage to organs

H373 - May cause damage to organs through prolonged or repeated exposure

H410 - Very toxic to aquatic life with long lasting effects

H301 + H311 + H331 - Toxic if swallowed, in contact with skin or if inhaled

#### **Precautionary Statements**

#### Prevention

P264 - Wash face, hands and any exposed skin thoroughly after handling

P270 - Do not eat, drink or smoke when using this product

P271 - Use only outdoors or in a well-ventilated area

P280 - Wear protective gloves/protective clothing/eye protection/face protection

#### Response

P301 + P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor

P302 + P352 - IF ON SKIN: Wash with plenty of soap and water

P304 + P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing

P311 - Call a POISON CENTER or doctor

P330 - Rinse mouth

P361 + P364 - Take off immediately all contaminated clothing and wash it before reuse

#### Storage

P403 + P233 - Store in a well-ventilated place. Keep container tightly closed

P405 - Store locked up

#### Disposal

P501 - Dispose of contents/ container to an approved waste disposal plant

## **Physical and Chemical Hazards**

None identified.

# **Health Hazards**

Toxic if swallowed. Toxic in contact with skin. Toxic if inhaled. Harmful if inhaled. May cause damage to organs.

#### **Environmental hazards**

Toxic to aquatic life. Very toxic to aquatic life with long lasting effects. Will likely be mobile in the environment due to its water solubility. The product is water soluble, and may spread in water systems.

This product does not contain any known or suspected endocrine disruptors.

# **SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**

ſ	Component	CAS No	Weight %		
Ī	Benzenamine, 3,5-dichloro-	626-43-7	98		

## **SECTION 4. FIRST AID MEASURES**

#### **Eve Contact**

Immediate medical attention is required. Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.

#### **Skin Contact**

Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Immediate medical attention is required.

#### Inhalation

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Remove from exposure, lie down. Remove to fresh air. If not breathing, give artificial respiration. Immediate medical attention is required.

## Ingestion

Call a physician immediately. Clean mouth with water.

## Most important symptoms and effects

No information available.

## Self-Protection of the First Aider

Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination.

# **Notes to Physician**

Treat symptomatically.

## **SECTION 5. FIRE-FIGHTING MEASURES**

#### **Suitable Extinguishing Media**

Water spray. Carbon dioxide (CO2). Dry chemical. Chemical foam.

#### Extinguishing media which must not be used for safety reasons

No information available.

#### **Specific Hazards Arising from the Chemical**

Containers may explode when heated. Do not allow run-off from fire-fighting to enter drains or water courses.

#### **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. Thermal decomposition can lead to release of irritating gases and vapors.

## **SECTION 6. ACCIDENTAL RELEASE MEASURES**

## **Personal Precautions**

Ensure adequate ventilation.

# **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.

#### Methods for Containment and Clean Up

Sweep up and shovel into suitable containers for disposal.

Refer to protective measures listed in Sections 8 and 13.

## **SECTION 7. HANDLING AND STORAGE**

#### Handling

Do not breathe dust. Do not get in eyes, on skin, or on clothing. Handle product only in closed system or provide appropriate exhaust ventilation. Wash thoroughly after handling.

# Storage

Keep in a dry, cool and well-ventilated place. Keep container tightly closed. Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

#### Specific Use(s)

Use in laboratories

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# **SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

#### **Control Parameters**

#### Monitoring methods

BS EN 14042:2003 Title Identifier: Workplace atmospheres. Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents. MDHS14/3 General methods for sampling and gravimetric analysis of respirable and inhalable dust

#### **Exposure Controls**

# **Engineering Measures**

Ensure adequate ventilation, especially in confined areas. 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 (European standard - EN 166)

Hand Protection Protective gloves

Γ	Glove material	Breakthrough time	Glove thickness	EU standard	Glove comments
	Natural rubber	See manufacturers	-	EN 374	(minimum requirement)
1	Nitrile rubber	recommendations			
1	Neoprene				
	PVC				

Inspect gloves before use.

Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. (Refer to manufacturer/supplier for information)

Ensure 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.

Remove gloves with care avoiding skin contamination.

Skin and body protection	Wear appropriate protective gloves and clothing to prevent skin exposure
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**Respiratory Protection** When workers are facing concentrations above the exposure limit they must use

appropriate certified respirators.

To protect the wearer, respiratory protective equipment must be the correct fit and be used

and maintained properly

Large scale/emergency use Use a NIOSH/MSHA or European Standard EN 136 approved respirator if exposure limits

are exceeded or if irritation or other symptoms are experienced **Recommended Filter type:** Particulates filter conforming to EN 143

Small scale/Laboratory use Use a NIOSH/MSHA or European Standard EN 149:2001 approved respirator if exposure

limits are exceeded or if irritation or other symptoms are experienced.

Recommended half mask:- Valve filtering: EN405; or; Half mask: EN140; plus filter, EN

141

When RPE is used a face piece Fit Test should be conducted

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

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.

## **SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

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#### 3,5-Dichloroaniline

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AppearanceBeigePhysical StateSolid

Odor No information available
Odor Threshold No data available
pH No information available

Melting Point/Range 49 - 53 °C / 120.2 - 127.4 °F

Softening Point No data available

**Boiling Point/Range** 260 °C / 500 °F @ 741 mmHg **Flash Point** 133 °C / 271.4 °F **Method -** No information available

Evaporation Rate Not applicable Solid

Flammability (solid,gas)

Explosion Limits

No information available

No data available

Vapor Pressure 30 mmHg @ 150 °C

Vapor Density Not applicable Solid

Specific Gravity / Density 1.580

Bulk DensityNo data availableWater Solubility0.6 g/L (26°C)

Solubility in other solvents No information available

Partition Coefficient (n-octanol/water)

Autoignition Temperature 620 °C / 1148 °F
Decomposition Temperature No data available
Viscosity Not applicable

Explosive Properties No information available Oxidizing Properties No information available

Molecular Formula C6 H5 Cl2 N

## **SECTION 10. STABILITY AND REACTIVITY**

Solid

Stability Stable.

**Hazardous Reactions**No information available.

**Hazardous Polymerization** Hazardous polymerization does not occur.

162.02

Conditions to Avoid Heat, flames and sparks. Exposure to air. Exposure to light. Incompatible products.

Materials to avoid Acids. Acid anhydrides. Acid chlorides.

Hazardous Decomposition Products Nitrogen oxides (NOx). Carbon monoxide (CO). Carbon dioxide (CO2). Hydrogen chloride

gas.

## **SECTION 11. TOXICOLOGICAL INFORMATION**

**Product Information** 

**Molecular Weight** 

(a) acute toxicity;

(b) skin corrosion/irritation; No data available

(c) serious eye damage/irritation; No data available

(d) respiratory or skin sensitization;

**Respiratory** No data available

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Skin No data available

(e) germ cell mutagenicity; No data available

(f) carcinogenicity; No data available

There are no known carcinogenic chemicals in this product

(g) reproductive toxicity; No data available

(h) STOT-single exposure; No data available

(i) STOT-repeated exposure; Category 2

Route of exposure Oral Target Organs Kidney.

(j) aspiration hazard; Not applicable

Solid

Symptoms / effects,both acute and No information available

delayed

# **SECTION 12. ECOLOGICAL INFORMATION**

**Ecotoxicity effects**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 Fish	Water Flea	Freshwater Algae	Microtox
Benzenamine, 3,5-dichloro-				EC50 = 10.5 mg/L 30
				min
				EC50 = 10.7 mg/L 15
				min
				EC50 = 9.54 mg/L 5 min

Persistence and Degradability

Persistence

Degradation in sewage

treatment plant

Soluble in water, Persistence is unlikely, based on information available.

Contains substances known to be hazardous to the environment or not degradable in waste

water treatment plants.

Bioaccumulative Potential Bioaccumulation is unlikely

Mobility in soil

The product is water soluble, and may spread in water systems. Will likely be mobile in the

environment due to its water solubility Highly mobile in soils

Endocrine Disruptor Information Persistent Organic Pollutant

Ozone Depletion Potential

This product does not contain any known or suspected endocrine disruptors

This product does not contain any known or suspected substance This product does not contain any known or suspected substance

# **SECTION 13. DISPOSAL CONSIDERATIONS**

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# 3,5-Dichloroaniline

Waste from Residues/Unused

**Products** 

Should not be released into the environment. Waste is classified as hazardous. Dispose of in accordance with the European Directives on waste and hazardous waste. Dispose of in

accordance with local regulations.

**Contaminated Packaging** Dispose of this container to hazardous or special waste collection point.

**Other Information** Do not flush to sewer. Waste codes should be assigned by the user based on the

application for which the product was used. Do not empty into drains. Do not let this

chemical enter the environment.

## **SECTION 14. TRANSPORT INFORMATION**

# Road and Rail Transport

UN-No UN3442

Proper Shipping Name DICHLOROANILINES, SOLID

Hazard Class 6.1
Packing Group

#### IMDG/IMO

UN-No UN3442

Proper Shipping Name DICHLOROANILINES, SOLID

Hazard Class 6.1 Packing Group

IATA

UN-No UN3442

Proper Shipping Name DICHLOROANILINES, SOLID

Hazard Class 6.1 Packing Group II

Special Precautions for User No special precautions required

# **SECTION 15. REGULATORY INFORMATION**

#### **International Inventories**

X = listed, China (IECSC), Europe (EINECS/ELINCS/NLP), U.S.A. (TSCA), Canada (DSL/NDSL), Philippines (PICCS), Japan (ENCS), Japan (ISHL), Australia (AICS), Korea (KECL).

Component	The Inventory of Hazardous Chemicals (2015 Edition)	•	TCSI	IECSC	EINECS	TSCA	DSL	PICCS	ENCS	ISHL	AICS	KECL
Benzenamine, 3,5-dichloro-	X	-	X	Х	210-948-9	Х	-	-	Х	Х	Х	KE-10065

# **National Regulations**

## **SECTION 16. OTHER INFORMATION**

Prepared By Health, Safety and Environmental Department

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#### 3,5-Dichloroaniline

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**Revision Summary** New emergency telephone response service provider.

**Training Advice** 

Chemical hazard awareness training, incorporating labelling, Safety Data Sheets (SDS), Personal Protective Equipment (PPE) and hygiene.

Use of personal protective equipment, covering appropriate selection, compatibility, breakthrough thresholds, care, maintenance, fit and standards.

First aid for chemical exposure, including the use of eye wash and safety showers.

Chemical incident response training.

#### Legend

**CAS** - Chemical Abstracts Service

EINECS/ELINCS - European Inventory of Existing Commercial Chemical DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances/EU List of Notified Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

IECSC - Chinese Inventory of Existing Chemical Substances **KECL** - Korean Existing and Evaluated Chemical Substances

WEL - Workplace Exposure Limit

**ACGIH** - American Conference of Governmental Industrial Hygienists

**DNEL** - Derived No Effect Level

RPE - Respiratory Protective Equipment LC50 - Lethal Concentration 50%

NOEC - No Observed Effect Concentration PBT - Persistent. Bioaccumulative. Toxic

ICAO/IATA - International Civil Aviation Organization/International Air **Transport Association** 

ADR - European Agreement Concerning the International Carriage of Dangerous Goods by Road

**OECD** - Organisation for Economic Co-operation and Development

**BCF** - Bioconcentration factor

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

Substances List

**ENCS** - Japanese Existing and New Chemical Substances

AICS - Australian Inventory of Chemical Substances

NZIoC - New Zealand Inventory of Chemicals

TWA - Time Weighted Average

IARC - International Agency for Research on Cancer

PNEC - Predicted No Effect Concentration

LD50 - Lethal Dose 50%

EC50 - Effective Concentration 50% POW - Partition coefficient Octanol:Water vPvB - very Persistent, very Bioaccumulative

IMO/IMDG - International Maritime Organization/International Maritime Dangerous Goods Code

MARPOL - International Convention for the Prevention of Pollution from Ships

ATE - Acute Toxicity Estimate VOC - (Volatile Organic Compound)

# Key literature references and sources for data

https://echa.europa.eu/information-on-chemicals

Suppliers safety data sheet, Chemadvisor - LOLI, Merck index, RTECS

#### **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 Safety Data Sheet**