

SAFETY DATA SHEET

Version 6.6 Revision Date 19.10.2022 Print Date 19.07.2024

SECTION 1: Identification of the substance/mixture and of the company/undertaking					
1.1	Product identifiers	,			
	Product name :	Leucocrystal Violet			
	Brand :	219215 Aldrich 603-48-5			
1.2	Other means of identification				
	4,4',4''-Methylidynetris(N,N-dimethylaniline) Leuco Crystal Violet				
1.3	Relevant identified uses	of the substance or mixture and uses advised against			
	Identified uses :	For R&D use only. Not for pharmaceutical, household or other uses.			
1.4	Details of the supplier of the safety data sheet				
	Company :	Merck Life Science Pty Ltd Ground Floor, Building 1, 885 Mountain Highway BAYSWATER VIC 3153 AUSTRALIA			
	•	+61 1800 800 097 customersupport.anz@merckgroup.com			
1.5	Emergency telephone				
	Emergency Phone # :	Free call (24/7): 1800 862 115 Int'l (24/7): +61 2 9037 2994 (CHEMTREC)			
SECTION 2: Hazards identification					
2.1	GHS Classification				
	Short-term (acute) aquatic hazard (Category 1), H400 Long-term (chronic) aquatic hazard (Category 1), H410				

For the full text of the H-Statements mentioned in this Section, see Section 16.

2.2 GHS Label elements, including precautionary statements

Pictogram



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Precautionary statement(s)			
Prevention P273	Avoid release to the environment.		
Response P391	Collect spillage.		
Disposal P501	Dispose of contents/ container to an approved waste disposal plant.		

2.3 Other hazards - none

SEC	TION 3: Composition/i Substance / Mixture		r mation on ingredients Substance		
3.1	Substances Synonyms	:	4,4',4''-Methylidynetris(N,N-dimethylaniline) Leuco Crystal Violet		
	Formula Molecular weight CAS-No. EC-No.	:	C ₂₅ H ₃₁ N ₃ 373.53 g/mol 603-48-5 210-043-9		

Hazardous ingredients

Component	Classification	Concentration
tris[4-(dimethylamino)phenyl]methane		
	Aquatic Acute 1; Aquatic Chronic 1; H400, H410	<= 100 %

For the full text of the H-Statements mentioned in this Section, see Section 16.

SECTION 4: First aid measures

4.1 Description of first-aid measures

If inhaled

After inhalation: fresh air.

In case of skin contact

In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower.

In case of eye contact

After eye contact: rinse out with plenty of water. Remove contact lenses.

If swallowed

After swallowing: make victim drink water (two glasses at most). Consult doctor if feeling unwell.

4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

4.3 Indication of any immediate medical attention and special treatment needed No data available

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SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.Water Foam Carbon dioxide (CO2) Dry powder

Unsuitable extinguishing media

For this substance/mixture no limitations of extinguishing agents are given. For this substance/mixture no limitations of extinguishing agents are given.

5.2 Special hazards arising from the substance or mixture
Nature of decomposition products not known.
Combustible.
Development of hazardous combustion gases or vapours possible in the event of fire.

5.3 Advice for firefighters

In the event of fire, wear self-contained breathing apparatus.

5.4 Further information

Suppress (knock down) gases/vapors/mists with a water spray jet. Prevent fire extinguishing water from contaminating surface water or the ground water system.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures Advice for non-emergency personnel: Avoid inhalation of dusts. Evacuate the danger area, observe emergency procedures, consult an expert. For personal protection see section 8.

6.2 Environmental precautions

Do not let product enter drains.

6.3 Methods and materials for containment and cleaning up

Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dusts.

6.4 Reference to other sections For disposal see section 13.

SECTION 7: Handling and storage

- **7.1 Precautions for safe handling** For precautions see section 2.2.
- 7.2 Conditions for safe storage, including any incompatibilities

Storage conditions

Tightly closed. Dry.

Air and light sensitive. Store under inert gas.

Storage class

Storage class (TRGS 510): 11: Combustible Solids

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7.3 Specific end use(s)

Apart from the uses mentioned in section 1.3 no other specific uses are stipulated.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Ingredients with workplace control parameters

Contains no substances with occupational exposure limit values.

8.2 Exposure controls

Appropriate engineering controls Change contaminated clothing. Wash hands after working with substance.

Personal protective equipment

Eye/face protection

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Safety glasses

Skin protection

This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN374 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de).

Full contact Material: Nitrile rubber Minimum layer thickness: 0.11 mm Break through time: 480 min Material tested:KCL 741 Dermatril® L

Splash contact Material: Nitrile rubber Minimum layer thickness: 0.11 mm Break through time: 480 min Material tested:KCL 741 Dermatril® L

Respiratory protection

required when dusts are generated. Our recommendations on filtering respiratory protection are based on the following standards: DIN EN 143, DIN 14387 and other accompanying standards relating to the used respiratory protection system.

Control of environmental exposure

Do not let product enter drains.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

- a) Physical state powder
- b) Color light yellow
- c) Odor pungent

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d)	Melting point/freezing point	Melting point/range: 175 - 177 °C - lit.
e)	Initial boiling point and boiling range	227.8 °C - OECD Test Guideline 103 - (decomposition)
f)	Flammability (solid, gas)	No data available
g)	Upper/lower flammability or explosive limits	No data available
h)	Flash point	Not applicable
i)	Autoignition temperature	No data available
j)	Decomposition temperature	No data available
k)	рН	No data available
I)	Viscosity	Viscosity, kinematic: No data available Viscosity, dynamic: No data available
m)	Water solubility	0.1 g/l at 20 °C - OECD Test Guideline 105
n)	Partition coefficient: n-octanol/water	log Pow: 5.9 - (ECHA), Potential bioaccumulation
o)	Vapor pressure	No data available
p)	Density	No data available
	Relative density	1.141 at 19.6 °C - OECD Test Guideline 109
q)	Relative vapor density	
r)	Particle characteristics	No data available

- s) Explosive properties No data available
- t) Oxidizing properties none

9.2 Other safety information

No data available

SECTION 10: Stability and reactivity

10.1 Reactivity

The following applies in general to flammable organic substances and mixtures: in correspondingly fine distribution, when whirled up a dust explosion potential may generally be assumed.

10.2 Chemical stability

The product is chemically stable under standard ambient conditions (room temperature) .

10.3 Possibility of hazardous reactions No data available

10.4 Conditions to avoid

Air sensitive.

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no information available

- **10.5 Incompatible materials** Strong oxidizing agents
- **10.6 Hazardous decomposition products** In the event of fire: see section 5

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Oral: (ECHA) Inhalation: No data available Dermal: No data available

Skin corrosion/irritation

Skin - Rabbit Result: No skin irritation (OECD Test Guideline 404)

Serious eye damage/eye irritation

Eyes - Rabbit Result: No eye irritation (OECD Test Guideline 405)

Respiratory or skin sensitization

Local lymph node assay (LLNA) - Rabbit Result: Not a skin sensitizer. (OECD Test Guideline 429)

Germ cell mutagenicity

Test Type: Ames test Test system: S. typhimurium Metabolic activation: with and without metabolic activation Method: OECD Test Guideline 471 Result: negative

Carcinogenicity

No data available

Reproductive toxicity

No data available

Specific target organ toxicity - single exposure No data available

Specific target organ toxicity - repeated exposure No data available

Aspiration hazard

No data available

11.2 Additional Information

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

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SECTION 12: Ecological information

12.1 Toxicity

Toxicity to fish	static test LC50 - Leuciscus idus (Golden orfe) - > 10,000 mg/l - 96
	h
	Remarks: (ECHA)

Toxicity to daphnia static test EC50 - Daphnia magna (Water flea) - 0.05 mg/l - 48 h and other aquatic Remarks: (ECHA) invertebrates

12.2 Persistence and degradability

Biodegradability Result: - Not readily biodegradable. Remarks: (ECHA)

- 12.3 Bioaccumulative potential No data available
- **12.4 Mobility in soil** No data available

12.5 Results of PBT and vPvB assessment PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

- **12.6 Endocrine disrupting properties** No data available
- **12.7 Other adverse effects** No data available

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product

Waste material must be disposed of in accordance with the national and local regulations. Leave chemicals in original containers. No mixing with other waste. Handle uncleaned containers like the product itself.

ECTION 14: Transport 4.1 UN number ADR/RID: 3077	IMDG: 3077	IATA-DGR: 3077	
4.2 UN proper shippiı	ng name		
ADR/RID:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (tris[4-(dimethylamino)phenyl]methane)		
IMDG:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (tris[4-(dimethylamino)phenyl]methane) Environmentally hazardous substance, solid, n.o.s. (tris[4- (dimethylamino)phenyl]methane)		
IATA-DGR:			
4.3 Transport hazard	class(es)		
ADR/RID: 9	IMDG: 9	IATA-DGR: 9	

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14.4	Packaging group ADR/RID: III	IMDG: III	IATA-DGR: III		
14.5	Environmental hazards ADR/RID: yes	IMDG Marine pollutant: yes	IATA-DGR: yes		
14.6	4.6 Special precautions for user				
14.7	7 Incompatible materials Strong oxidizing agents				
	Further information EHS-Mark required (ADR 2.2.9.1.10, IMDG code 2.10.3) for single packagings and combination packagings containing inner packagings with Dangerous Goods > 5L for liquids or > 5kg for solids.Packages smaller than or equal to 5 kg / L, not dangerous goods of				

Class 9

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

Standard for the Uniform Scheduling of Medicines and Poisons

: No poison schedule number allocated

SECTION 16: Other information

Full text of H-Statements referred to under sections 2 and 3.

H400	Verv	toxic to	aquatic life.
	• • • •		aquationion

H410 Very toxic to aquatic life with long lasting effects.

Further information

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Corporation and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.sigma-aldrich.com and/or the reverse side of invoice or packing slip for additional terms and conditions of sale.

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