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# SAFETY DATA SHEET

Version 6.10 Revision Date 12/18/2024 Print Date 12/19/2024

## **SECTION 1. IDENTIFICATION**

## **1.1 Product identifiers**

Product name : 2,6-Dimethylaniline

Product Number	:	D146005
Brand	:	Aldrich
Index-No.	:	612-161-00-X
CAS-No.	:	87-62-7

# **1.2** Relevant identified uses of the substance or mixture and uses advised against

Identified uses	:	Laboratory	chemicals,	Synthesis of substances
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Uses advised against : The product is being supplied under the TSCA R&D Exemption (40 CFR Section 720.36). It is the recipient's responsibility to comply with the requirements of the R&D exemption. The product may not be used for a non-exempt commercial purpose under TSCA unless appropriate consent is granted in writing by MilliporeSigma.

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

Company	:	Sigma-Aldrich Inc. 3050 SPRUCE ST ST. LOUIS MO 63103 UNITED STATES
Telephone Fax		+1 314 771-5765 +1 800 325-5052
	•	+1 800 323-3032

## **1.4 Emergency telephone**

Emergency Phone #	: 800-424-9300 CHEMTREC (USA) +1-703-
	527-3887 CHEMTREC (International) 24
	Hours/day; 7 Days/week

## **SECTION 2. HAZARDS IDENTIFICATION**

GHS classification in accordance with the OSHA Hazard Communication
Standard (29 CFR 1910.1200)

Flammable liquids : Category 4

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Acute toxicity (Oral)	:	Category 4
Acute toxicity (Inhalation)	:	Category 4
Acute toxicity (Dermal)	:	Category 4
Skin irritation	:	Category 2
Eye irritation	:	Category 2A
Carcinogenicity	:	Category 2
Specific target organ tox- icity - single exposure	:	Category 3 (Respiratory system)
Short-term (acute) aquatic hazard	:	Category 3
Long-term (chronic) aquatic hazard	:	Category 2
GHS label elements Hazard pictograms :		
Signal Word	:	Warning
Hazard Statements	:	<ul> <li>H227 Combustible liquid.</li> <li>H302 + H312 + H332 Harmful if swallowed, in contact with skin or if inhaled.</li> <li>H315 Causes skin irritation.</li> <li>H319 Causes serious eye irritation.</li> <li>H335 May cause respiratory irritation.</li> <li>H351 Suspected of causing cancer.</li> <li>H402 Harmful to aquatic life.</li> <li>H411 Toxic to aquatic life with long lasting effects.</li> </ul>
Precautionary Statements	:	<ul> <li>Prevention:</li> <li>P201 Obtain special instructions before use.</li> <li>P202 Do not handle until all safety precautions have been read and understood.</li> <li>P210 Keep away from heat/ sparks/ open flames/ hot surfaces. No smoking.</li> <li>P261 Avoid breathing mist or vapors.</li> <li>P264 Wash skin thoroughly after handling.</li> <li>P270 Do not eat, drink or smoke when using this product.</li> <li>P271 Use only outdoors or in a well-ventilated area.</li> <li>P273 Avoid release to the environment.</li> </ul>

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

#### **Response:**

P301 + P312 + P330 IF SWALLOWED: Call a POISON CENTER/ doctor if you feel unwell. Rinse mouth. P302 + P352 + P312 IF ON SKIN: Wash with plenty of water.Call a POISON CENTER/ doctor if you feel unwell. P304 + P340 + P312 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/ doctor if you feel unwell. P305 + P351 + P338 IF IN EYES: Rinse cautiously with

water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P308 + P313 IF exposed or concerned: Get medical advice/ attention.

P332 + P313 If skin irritation occurs: Get medical advice/ attention.

P337 + P313 If eye irritation persists: Get medical advice/ attention.

P362 Take off contaminated clothing and wash before reuse.

P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish. P391 Collect spillage.

#### Storage:

P403 + P233 Store in a well-ventilated place. Keep container tightly closed. P403 + P235 Store in a well-ventilated place. Keep cool.

P405 Store locked up.

#### Disposal:

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

## **Other hazards**

None known.

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

Substance / Mixture : Substance

#### Components

Chemical name	CAS-No.	Concentration (% w/w)
2,6-dimethylaniline	87-62-7	>= 90 - <= 100
Actual concentration is wit	abald as a trada assert	

Actual concentration is withheld as a trade secret

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

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General advice	:	Show this material safety data sheet to the doctor in
If inhaled	:	attendance. After inhalation: fresh air. Immediately call in physi- cian.
		If breathing stops: immediately apply artificial respira- tion, if necessary also oxygen.
In case of skin contact	:	In case of skin contact: Take off immediately all con- taminated clothing. Rinse skin with water/ shower. Consult a physician.
In case of eye contact	:	After eye contact: rinse out with plenty of water. Call in ophthalmologist. Remove contact lenses.
If swallowed	:	After swallowing: immediately make victim drink wa- ter (two glasses at most). Consult a physician.
Most important symp- toms 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
Protection of first-aiders	:	For personal protection see section 8.
Notes to physician	:	No data available

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

Suitable extinguishing media	:	Carbon dioxide (CO2) Foam Dry powder
Unsuitable extinguishing media	:	For this substance/mixture no limitations of extin- guishing agents are given.
Specific hazards during fire fighting	:	Combustible.
		Vapors are heavier than air and may spread along floors.
		Forms explosive mixtures with air on intense heating.
		Development of hazardous combustion gases or va- pours possible in the event of fire.

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Hazardous combustion products	:	Carbon oxides
		Nitrogen oxides (NOx)
Specific extinguishing methods	:	No data available
Further information	:	Remove container from danger zone and cool with water. Suppress (knock down) gases/vapors/mists with a water spray jet. Prevent fire extinguishing water from contaminating surface water or the ground water system.
Special protective equip- ment for fire-fighters	:	Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.

## SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	:	Advice for non-emergency personnel: Do not breathe vapors, aerosols. Avoid substance contact. Ensure adequate ventilation. Keep away from heat and sources of ignition. Evacuate the danger area, observe emergency proce- dures, consult an expert. Advice for emergency responders: For personal protection see section 8.
Environmental precau- tions	:	Do not let product enter drains.
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 with liquid-absorbent and neutralising mate- rial (e.g. Chemizorb® OH <sup>-</sup> , Merck Art. No. 101596). Dispose of properly. Clean up affected area.

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

For precautions see section 2.2.

Advice on protection	
against fire and explosion	

: Keep away from open flames, hot surfaces and sources of ignition.

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		Take precautionary measures against static discharge.
Advice on safe handling	:	Work under hood. Do not inhale substance/mixture. Avoid generation of vapours/aerosols.
Further information on storage conditions	:	Tightly closed. Keep in a well-ventilated place. Keep locked up or in an area accessible only to quali- fied or authorized persons.
Storage class	:	6.1A, Combustible, acute toxic Cat. 1 and 2 / very toxic hazardous materials
Recommended storage temperature	:	Recommended storage temperature see product label.
Packaging material	:	Suitable material: Amber Glass Bottle/Jar

## SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

## Ingredients with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control param- eters / Permis- sible concentra- tion	Basis
2,6-dimethylaniline	87-62-7	TWA	5 ppm 19 mg/m3	OSHA Z-1
		TWA (In- halable fraction and vapor)	0.5 ppm	ACGIH

**Engineering measures** : No data available

## Personal protective equipment

Respiratory protection	:	required when vapours/aerosols are generated. Our recommendations on filtering respiratory protec- tion are based on the following standards: DIN EN 143, DIN 14387 and other accompanying standards relating to the used respiratory protection system.
Recommended Filter type:	:	Filter A (acc. to DIN 3181) for vapours of organic compounds

The entrepeneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be properly documented.

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Hand protection Material Break through time Glove thickness Protective index Manufacturer	:	Viton® 480 min 0.7 mm Full contact Vitoject® (KCL 890 / Aldrich Z677698, Size M)
Material Break through time Glove thickness Protective index Manufacturer	::	Nitrile rubber 30 min 0.4 mm Splash contact Camatril® (KCL 730 / Aldrich Z677442, Size M)
Remarks	:	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 EN 16523-1 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D- 36124 Eichenzell, Internet: www.kcl.de).
Eye protection	:	Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Safety glasses
Skin and body protection	:	protective clothing
Hygiene measures	:	Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance.

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	: liquid
Color	: light yellow
Odor	: No data available
Odor Threshold pH	: No data available : 12.5 (68 °F / 20 °C) Concentration: 100 g/l
Melting point/ range	: 50 - 54 °F / 10 - 12 °C Method: lit.



Boiling point/boiling range	:	417 °F / 214 °C (985 hPa) Method: lit.
Flash point	:	196 °F / 91 °C
		Method: closed cup
Evaporation rate	:	No data available
Flammability (solid, gas)	:	No data available
Flammability (liquids)	:	No data available
Burning rate	:	No data available
Upper explosion limit / Upper flammability limit	:	6.9 %(V)
Lower explosion limit / Lower flammability limit	:	1.3 %(V)
Vapor pressure	:	0.2 hPa (77 °F / 25 °C) Method: OECD Test Guideline 104 GLP: yes
Relative vapor density	:	No data available
Relative density	:	No data available
Density	:	0.984 g/cm3 (77 °F / 25 °C) Method: lit.
Water solubility	:	No data available
Partition coefficient: n- octanol/water	:	log Pow: 1.96 (77 °F / 25 °C) pH: 6.8 Bioaccumulation is not expected.
Autoignition temperature	:	900 °F / 482 °C (1,013.25 hPa) Method: Regulation (EC) No. 440/2008, Annex, A.15 GLP: yes
Decomposition tempera- ture	:	No data available
Viscosity Viscosity, dynamic	:	0.003 Pas (68 °F / 20 °C)
		1.7 mPa.s (122 °F / 50 °C) Method: OECD Test Guideline 114
		1.16 mPa.s (158 °F / 70 °C)
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## Method: OECD Test Guideline 114

Viscosity, kinematic	:	No data available
Flow time	:	No data available
Explosive properties	:	Not classified as explosive.
Oxidizing properties	:	none
Molecular weight	:	121.18 g/mol
Particle characteristics Particle size	:	No data available

## SECTION 10. STABILITY AND REACTIVITY

Reactivity	:	Forms explosive mixtures with air on intense heating.
		A range from approx. 15 Kelvin below the flash point is to be rated as critical.
Chemical stability	:	The product is chemically stable under standard ambi- ent conditions (room temperature) .
Possibility of hazardous reactions	:	Violent reactions possible with: Oxidizing agents acids acid halides halogens Acid anhydrides rubber various plastics Caution! In contact with nitrites, nitrates, nitrous acid possible liberation of nitrosamines!
Conditions to avoid	:	Strong heating.
Incompatible materials	:	No data available
Hazardous decomposition products	:	In the event of fire: see section 5

## SECTION 11. TOXICOLOGICAL INFORMATION

## **11.1 Information on toxicological effects**

## Acute toxicity

LD50 Oral - Rat - 840 mg/kg Remarks: Behavioral:Somnolence (general depressed activity). Cyanosis

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Blood:Changes in spleen. (RTECS) Acute toxicity estimate Inhalation - 4 h - 11 mg/l - vapor

(Expert judgment) Remarks: Classified according to Regulation (EU) 1272/2008, Annex VI (Table 3.1/3.2) Inhalation: Irritating to respiratory system. Symptoms: mucosal irritations, Cough, Shortness of breath, Possible damages:, damage of respiratory tract Acute toxicity estimate Dermal - 1,100.1 mg/kg (Expert judgment) Remarks: Classified according to Regulation (EU) 1272/2008, Annex VI (Table 3.1/3.2)

## Skin corrosion/irritation

Skin - Rabbit Result: Irritating to skin. - 4 h (OECD Test Guideline 404) Remarks: Classified according to Regulation (EU) 1272/2008, Annex VI (Table 3.1/3.2)

## Serious eye damage/eye irritation

Eyes - Rabbit Result: Irritating to eyes. (OECD Test Guideline 405)

## **Respiratory or skin sensitization**

Local lymph node assay (LLNA) - Mouse Result: negative (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: Positive results were obtained in some in vitro tests. Test Type: Chromosome aberration test in vitro Test system: Chinese hamster ovary cells Metabolic activation: with and without metabolic activation Method: OECD Test Guideline 473 Result: positive

Test Type: in vivo assay Species: Drosophila melanogaster

Application Route: Oral Method: OECD Test Guideline 477 Result: negative

Test Type: Micronucleus test Species: Mouse Cell type: Bone marrow Application Route: Oral

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Method: OECD Test Guideline 474 Result: negative

## Carcinogenicity

Suspected of causing cancer.

- IARC: 2B Group 2B: Possibly carcinogenic to humans (2,6-dimethylaniline)
- NTP: No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
- OSHA: No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.

## **Reproductive toxicity**

No data available

#### Specific target organ toxicity - single exposure

May cause respiratory irritation. - Respiratory system Remarks: Classified according to Regulation (EU) 1272/2008, Annex VI (Table 3.1/3.2)

**Specific target organ toxicity - repeated exposure** No data available

**Aspiration hazard** No data available

#### **11.2 Additional Information**

Repeated dose toxicity - Rat - male and female - Oral - 12 Days - NOAEL (No observed adverse effect level) - 160 mg/kg - LOAEL (Lowest observed adverse effect level) - 310 mg/kg

#### RTECS: ZE9275000

Absorption into the body leads to the formation of methemoglobin which in sufficient concentration causes cyanosis. Onset may be delayed 2 to 4 hours or longer., Damage to the eyes., Nausea, Dizziness, Headache, Blood disorders, To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

After absorption:

Nausea Vomiting Dizziness euphoria Changes in the blood count Methaemoglobinaemia with headache, cardiac arrhythmia, drop in blood pressure, dyspnoea, and spasms, key symptom: cyanosis (blue colouration of the blood).

Damage to:

Liver Kidney

Effect potentiated by: ethanol

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Under given conditions, contact with nitrites or nitric acid can lead to the formation of nitrosamines, which have shown themselves to be carcinogenic in animal experiments.

Other dangerous properties can not be excluded.

Handle in accordance with good industrial hygiene and safety practice.

Stomach - Irregularities - Based on Human Evidence

Stomach - Irregularities - Based on Human Evidence

## SECTION 12. ECOLOGICAL INFORMATION

#### Ecotoxicity

## Components:

2,6-dimethylaniline:	
Toxicity to fish :	LC50 (Oryzias latipes (Orange-red killifish)): > 98 mg/l End point: mortality Exposure time: 96 h Test Type: semi-static test Analytical monitoring: yes Method: OECD Test Guideline 203 GLP: yes
Toxicity to daphnia and : other aquatic inverte- brates	EC50 (Daphnia magna (Water flea)): 20 mg/l End point: Immobilization Exposure time: 48 h Test Type: static test Analytical monitoring: yes Method: OECD Test Guideline 202 GLP: yes
Toxicity to algae/aquatic : plants	ErC50 (Pseudokirchneriella subcapitata): > 100 mg/l Exposure time: 72 h Test Type: static test Analytical monitoring: yes Method: OECD Test Guideline 201 GLP: yes
Toxicity to daphnia and : other aquatic inverte- brates (Chronic toxicity)	NOEC (Daphnia magna (Water flea)): 2.23 mg/l End point: reproduction rate Exposure time: 21 d Test Type: semi-static test Analytical monitoring: yes Method: OECD Test Guideline 211

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		GLP: yes
Toxicity to microorgan- isms	:	EC50 (activated sludge): ca. 550 mg/l Exposure time: 0.5 h Test Type: static test Method: OECD Test Guideline 209
Ecotoxicology Assessme	nt	
		Toxic to aquatic life with long lasting effects.
Persistence and degrada	ab	ility
No data available		
Bioaccumulative potenti	ial	
Components:		
2,6-dimethylaniline:		
Bioaccumulation	:	Species: Cyprinodontidae Bioconcentration factor (BCF): 2.8 Exposure time: 48 h Concentration: 137.5 mg/l
Partition coefficient: n- octanol/water	:	log Pow: 1.96 (77 °F / 25 °C) pH: 6.8 Remarks: Bioaccumulation is not expected.
<b>Mobility in soil</b> No data available		
Other adverse effects		
Product:		
Ozone-Depletion Potential	:	Regulation: 40 CFR Protection of Environment; Part 82 Protection of Stratospheric Ozone - CAA Section 602 Class I Substances Remarks: This product neither contains, nor was manufactured with a Class I or Class II ODS as de- fined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).
Components:		
2,6-dimethylaniline:		
Additional ecological in-	:	Discharge into the environment must be avoided.

formation



## SECTION 13. DISPOSAL CONSIDERATIONS

## **Disposal methods**

	Waste material must be disposed of in accordance with the national and local regulations. Leave chemi- cals in original containers. No mixing with other waste. Handle uncleaned containers like the product itself.
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## **SECTION 14. TRANSPORT INFORMATION**

#### **International Regulations**

IATA-DGR		
UN/ID No.	:	UN 1711
Proper shipping name	:	Xylidines, liquid
Class		6.1
Packing group	:	II
Labels	:	Division 6.1 - Toxic substances
Packing instruction (cargo aircraft)	:	662
Packing instruction (pas- senger aircraft)	:	654
IMDG-Code		
UN number	:	UN 1711
Proper shipping name	:	XYLIDINES, LIQUID
Class	:	6.1
Packing group	:	II
Labels	:	6.1
EmS Code		F-A, S-A
Marine pollutant	:	yes
		,

## Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

## National regulation

## 49 CFR Road

UN/ID/NA number Proper shipping name	-	UN 1711 Xylidines, liquid
Class Packing group Labels ERG Code Marine pollutant	:	6.1 II Division 6.1 - Toxic substances 153 no

Poison Inhalation Hazard : No

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## Special precautions for user

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

## SECTION 15. REGULATORY INFORMATION

## **CERCLA Reportable Quantity**

This material does not contain any components with a CERCLA RQ.

#### SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

## SARA 302 Extremely Hazardous Substances Threshold Planning Quantity

This material does not contain any components with a section 302 EHS TPQ.

SARA 311/312 Haz- ards	: Fire Hazard Acute Health Chronic Hea		
SARA 313	The following components are subject to reporting levels established by SARA Title III, Section 313:		
	2,6- dimethylanil	87-62-7 ine	>= 90 - <= 100 %

## **Clean Air Act**

This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B). This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 112 (40 CFR 61).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 111 SOCMI Intermediate or Final VOC's (40 CFR 60.489).

## **Clean Water Act**

This product does not contain any Hazardous Substances listed under the U.S. CleanWater Act, Section 311, Table 116.4A.

This product does not contain any Hazardous Chemicals listed under the U.S. Clean-Water Act, Section 311, Table 117.3.

This product does not contain any toxic pollutants listed under the U.S. Clean Water Act Section 307

This product does not contain any priority pollutants related to the U.S. Clean Water Act

## **US State Regulations**

## **Massachusetts Right To Know**

2,6-dimethylaniline

87-62-7

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## Pennsylvania Right To Know

2,6-dimethylaniline

87-62-7

## **Maine Chemicals of High Concern**

Product does not contain any listed chemicals

## **Vermont Chemicals of High Concern**

Product does not contain any listed chemicals

## Washington Chemicals of High Concern

Product does not contain any listed chemicals

## California Prop. 65

WARNING: This product can expose you to chemicals including 2,6-dimethylaniline, which is/are known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

## The ingredients of this product are reported in the following inventories:

TSCA

: All substances listed as active on the TSCA inventory

## TSCA list

No substances are subject to a Significant New Use Rule.

No substances are subject to TSCA 12(b) export notification requirements.

## **SECTION 16. OTHER INFORMATION**

## Full text of other abbreviations

ACGIH OSHA Z-1	USA. ACGIH Threshold Limit Values (TLV) USA. Occupational Exposure Limits (OSHA) - Table Z- 1 Limits for Air Contaminants
ACGIH / TWA OSHA Z-1 / TWA	8-hour, time-weighted average 8-hour time weighted average

AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DOT -Department of Transportation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; EHS - Extremely Hazardous Substance; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; HMIS - Hazardous Materials Identification System; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safe-

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ty and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; MSHA - Mine Safety and Health Administration; n.o.s. - Not Otherwise Specified; NFPA - National Fire Protection Association; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; RCRA - Resource Conservation and Recovery Act; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RQ - Reportable Quantity; SADT - Self-Accelerating Decomposition Temperature; SARA - Superfund Amendments and Reauthorization Act; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TECI - Thailand Existing Chemicals Inventory; TSCA -Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

The information is believed to be correct but is not exhaustive and will be used solely as a guideline, which is based on current knowledge of the chemical substance or mixture and is applicable to appropriate safety precautions for the product. 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. Copyright 2020 Sigma-Aldrich Co. LLC. License granted to make unlimited paper copies for internal use only.

Revision Date : 12/18/2024

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