

MATERIAL SAFETY DATA SHEET
4-CHLORO-N-METHYLANILINE 97 %

Section 1 – Chemical Product and Company Identification

MSDS Name: 4-CHLORO-N-METHYLANILINE
Catalog Numbers: 99.7
Synonyms:
Company Identification: Tau-Chem, Ltd.
 Nobelova 34, P.O. Box 29
 836 05 Bratislava, Slovak Republic
 Phone: +421 2 44 452 252 Fax: +421 2 44 457 645

Relevant identified uses of substance or mixture and uses advised against
 Identified uses Laboratory chemicals, Manufacture of substances

POISON CENTER: National Toxicological Information Centre
 Limbová 5, 833 05 Bratislava, Slovakia

Emergency Numbers: Phone: +421 2 54 774 166 Fax: +421 2 54 774 605

Section 2 – Hazards Identification

Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008


Flammable liquids (Category 3)
 Serious eye damage (Category 1)
 Specific target organ toxicity – single exposure (Category 3)
 Chronic aquatic toxicity (Category 3)

According to European Directive 67/548/EEC as amended.

Flammable. Irritating to eyes and respiratory system.

Labeling according to Regulation (EC) No 1272/2008 [CLP]

Label elements

Pictogram	
Signal word	Danger
Hazard statement(s)	
H226	Flammable liquid and vapour.
H318	Causes serious eye damage.
H335	May cause respiratory irritation.
H412	Harmful to aquatic life with long lasting effects.
Precautionary statement(s)	
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P273	Avoid release to the environment.

P280	Wear protective gloves/ eye protection/ face protection.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P501	Dispose of contents/container in accordance with local/regional/national/international regulation.

Hazard symbol(s)

According to European Directive 67/548/EEC as amended



Hazard symbol(s)

F	Highly flammable.
Xi	Irritant.
R-phrases(s)	
R10	Flammable.
R36/37	Irritating to eyes and respiratory system.
S-phrases(s)	
S16	Keep away from sources of ignition – No smoking.
S26	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice
S37/39	Wear suitable gloves and eye/face protection.
Other hazards	None.

Section 3 – Composition, Information on Ingredients

CAS#	Chemical Name:	%	EINECS#
932-96-7	4-CHLORO-N-METHYLANILINE	97	213-262-8
Classification	Flam. Liq. 3; Eye Dam. 1; STOT SE 3; Aquatic Chronic 3; H226, H318, H335, H412 Xi, R10 - R36/37		

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

Section 4 – First Aid Measures

General advice:	Consult a physician. Show this safety data sheet to the doctor in attendance.
If inhaled:	If breathed in, move person into fresh air. If not breathing give artificial respiration. Consult a physician.
In case of skin contact:	Wash off with soap and plenty of water. Consult a physician.
In case eye contact:	Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
If swallowed:	Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

Section 5 – Fire Fighting Measures

Suitable extinguishing media:	For small (incipient) fires, use media such as “alcohol” foam, dry chemical, or carbon dioxide. For large fires, apply water from as far as possible. Use very large quantities (flooding) of water applied as a mist or spray; solid streams of water may be ineffective. Cool all affected containers with flooding quantities of water.
Special protective equipment for fire-fighters:	Wear self contained apparatus breathing apparatus for fire fighting if necessary.
Further information	Use water spray to cool unopened containers.

Section 6 – Accidental Release Measures

Personal precautions:	Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.
Environmental precautions:	Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.
Methods and materials for containment and cleaning up:	Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13).

Section 7 – Handling and Storage

Precautions for safe handling:	Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Keep away from sources of ignition – No smoking. Take measures to prevent the build up of electrostatic charge.
Conditions for safe storage:	Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Section 8 – Exposure Controls, Personal Protection

Personal protective equipment:	
Respiratory protection:	Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).
Skin protection	Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove’s outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Eyes/Face protection:	Tightly fitting safety goggles. Face shield (8-inch minimum). Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).
Body protection:	Complete suit protecting against chemicals, Flame retardant antistatic protective clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.
Hygiene measures:	Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Section 9 – Physical and Chemical Properties

Appearance

Form:	Liquid
Colour:	light yellow
Safety data:	
pH	Not available
Melting point:	Not available
Boiling Point:	239 °C - lit.
Flash Point:	52 °C - closed cup
Ignition temperature:	Not available
Explosion Limits: Lower:	Not available
Explosion Limits: Upper:	Not available
Solubility in water:	Not available
Specific density:	1,169 g/cm ³ at 25 °C
Refractive Index:	1.5840
Molecular Formula:	C ₇ H ₈ ClN
Molecular Weight:	141.60

Section 10 – Stability and Reactivity

Chemical Stability:	Stabile under recommended storage conditions.
Conditions to avoid:	Heat, flames and sparks.
Materials to avoid:	Strong oxidizing agents, acids, Acid chlorides, Acid anhydrides, Strong oxidizing agents, Carbon dioxide (CO ₂)
Hazardous Decomposition Products	Hazardous decomposition products formed under fire conditions. - Carbon oxides, nitrogen oxides (NO _x), Hydrogen chloride gas

Section 11 – Toxicological Information

Acute toxicity	No data available
Skin corrosion/irritation	No data available
Serious eye damage/eye irritation	No data available
Respiratory or skin sensitization	No data available
Germ cell mutagenicity	No data available

Carcinogenicity:

IARC: No component of this product presents at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

Reproductive toxicity:	No data available
Specific target organ toxicity – single exposure	Inhalation – May cause respiratory irritation.
Specific target organ toxicity – repeated exposure	No data available
Aspiration hazard	No data available
Potential health effect:	
Inhalation	May be harmful if inhaled. Causes respiratory tract irritation.
Ingestion	May be harmful if swallowed.
Skin	May be harmful if absorbed through skin. Causes skin irritation.
Eyes	Causes eye burns.

Signs and Symptoms of Exposure

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

Additional Information

RTECS: CX9857900

Section 12 – Ecological Information

Toxicity:	No data available
Persistence and degradability	No data available
Bioaccumulative potential	No data available
Mobility in soil	No data available
PBT and vPvB assessment	No data available
Other adverse effects	Harmful to aquatic life.

Section 13 – Disposal Considerations

Product	Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company.
Contaminated packaging	Dispose of as unused product.

Section 14 – Transport Information

	IATA	IMDG	RID/ADR
Shipping Name:	FLAMMABLE LIQUID, N.O.S.	FLAMMABLE LIQUID, N.O.S.	FLAMMABLE LIQUID, N.O.S.
Hazard Class:	3	3	3
UN Number:	1993	1993	1993

Packing Group:

III

III

III

EMS-No: F-E, S-E
Marine Polutant: No

Section 15 – Regulatory Information

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006

Section 16 – Other Information

Text of H-code(s) and R-phrase(s) mentioned in Section 3

Flam. Liq.	Flammable liquids
Eye Dam.	Serious eye damage
Aquatic Chronic	Chronic aquatic toxicity
STOT SE	Specific target organ toxicity – single exposure
H226	Flammable liquid and vapour.
H318	Causes serious eye damage.
H335	May cause respiratory irritation.
H412	Harmful to aquatic life with long lasting effects.
F	Highly flammable.
Xi	Irritant.
R10	Flammable.
R36/37	Irritating to eyes and respiratory system.

MSDS Creation Date: 07/03/2007

Revision #1: 06/09/2011

This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006.

Disclaimer:

The information contained herein is based on the present state of our knowledge. It characterizes the product with regard to the appropriate safety precautions. It does not represent a guarantee of the properties of the product. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.