SAFETY DATA SHEET



1. Identification

Product identifier N-Methylaniline

Other means of identification

N-12563

Recommended use For Laboratory Use Only

Recommended restrictions None known.

Manufacturer/Importer/Supplier/Distributor information

Manufacturer

Chem Service, Inc. Company name **Address** 660 Tower Lane

West Chester, PA 19380

United States

Toll Free 800-452-9994 **Telephone** 610-692-3026 Direct

www.chemservice.com

Website E-mail info@chemservice.com

Chemtrec US 800-424-9300 **Emergency phone number**

Chemtrec outside US +1 703-527-3887

2. Hazard(s) identification

Physical hazards Flammable liquids Category 4 Health hazards Acute toxicity, oral Category 3 Acute toxicity, dermal Category 3 Acute toxicity, inhalation Category 3 Specific target organ toxicity, repeated Category 2

exposure

Environmental hazards Hazardous to the aquatic environment, acute Category 1

hazard

Hazardous to the aquatic environment, Category 1

long-term hazard

OSHA defined hazards Not classified.

Label elements







Signal word Danger

Hazard statement Combustible liquid. Toxic if swallowed. Toxic in contact with skin. Toxic if inhaled. May cause

damage to organs through prolonged or repeated exposure. Very toxic to aquatic life. Very toxic to

aquatic life with long lasting effects.

Precautionary statement

Prevention Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Use only outdoors or in a

> well-ventilated area. Do not breathe mist or vapor. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Avoid release to the environment. Wear protective

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

Response If swallowed: Immediately call a poison center/doctor. If on skin: Wash with plenty of water. If inhaled: Remove person to fresh air and keep comfortable for breathing. Call a poison

center/doctor. Specific treatment (see this label). Rinse mouth. Take off immediately all contaminated clothing and wash it before reuse. In case of fire: Use appropriate media to

extinguish. Collect spillage.

Storage Store in a well-ventilated place. Keep container tightly closed. Store in a well-ventilated place.

Keep cool. Store locked up.

Disposal Dispose of contents/container in accordance with local/regional/national/international regulations.

Hazard(s) not otherwise classified (HNOC)

None known.

Material name: N-Methylaniline SDS US

13993 Version #: 01 Issue date: 01-28-2015

3. Composition/information on ingredients

Substances

Chemical name	Common name and synonyms	CAS number	%
N-Methylaniline		100-61-8	100

^{*}Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. First-aid measures

Inhalation Remove victim to fresh air and keep at rest in a position comfortable for breathing. Oxygen or

artificial respiration if needed. Do not use mouth-to-mouth method if victim inhaled the substance. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other

proper respiratory medical device. Call a POISON CENTER or doctor/physician.

Skin contact

Take off immediately all contaminated clothing. Wash off with soap and plenty of water. Call a

POISON CENTER or doctor/physician if you feel unwell. Get medical attention if irritation develops

and persists.

Eye contact Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if

present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.

Ingestion

Call a physician or poison control center immediately. Rinse mouth. Do not induce vomiting without advice from poison control center. If vomiting occurs, keep head low so that stomach content

doesn't get into the lungs. Do not use mouth-to-mouth method if victim ingested the substance. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other

proper respiratory medical device.

Most important symptoms/effects, acute and delayed

Direct contact with eyes may cause temporary irritation. Prolonged exposure may cause chronic effects.

Indication of immediate medical attention and special

medical attention and special treatment needed

Provide general supportive measures and treat symptomatically. In case of shortness of breath, give oxygen. Keep victim warm. Keep victim under observation. Symptoms may be delayed.

General information

Take off immediately all contaminated clothing. In the case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Wash contaminated clothing before reuse.

5. Fire-fighting measures

Suitable extinguishing media

Unsuitable extinguishing media

Specific hazards arising from the chemical

Special protective equipment

and precautions for firefighters Fire-fighting

equipment/instructions

Specific methods

General fire hazards

Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).

Do not use water jet as an extinguisher, as this will spread the fire.

The product is combustible, and heating may generate vapors which may form explosive vapor/air mixtures. During fire, gases hazardous to health may be formed.

Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

In case of fire and/or explosion do not breathe fumes. Move containers from fire area if you can do so without risk.

Use standard firefighting procedures and consider the hazards of other involved materials.

Combustible liquid.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures Immediately evacuate personnel to safe areas. Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep out of low areas. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Wear appropriate protective equipment and clothing during clean-up. Do not breathe mist or vapor. Fully encapsulating, vapor protective clothing should be worn for spills and leaks with no fire. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

Material name: N-Methylaniline SDS US

13993 Version #: 01 Issue date: 01-28-2015

Methods and materials for containment and cleaning up

Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil, etc.) away from spilled material. The product is immiscible with water and will spread on the water surface.

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Use water spray to reduce vapors or divert vapor cloud drift. Prevent entry into waterways, sewer, basements or confined areas. Following product recovery, flush area with water.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.

Environmental precautions

Avoid release to the environment. Contact local authorities in case of spillage to drain/aquatic environment. Prevent further leakage or spillage if safe to do so. Do not contaminate water. Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling

Keep away from open flames, hot surfaces and sources of ignition. Do not breathe mist or vapor. Do not taste or swallow. Avoid contact with skin. Avoid contact with eyes. Avoid prolonged exposure. Avoid contact with clothing. Use only outdoors or in a well-ventilated area. Wear appropriate personal protective equipment. Observe good industrial hygiene practices. When using, do not eat, drink or smoke. Wash hands thoroughly after handling. Wash contaminated clothing before reuse. Avoid release to the environment. Do not empty into drains.

Conditions for safe storage, including any incompatibilities

Store locked up. Keep away from heat, sparks and open flame. Store in original tightly closed container. Store in a cool, dry place out of direct sunlight. Store in a well-ventilated place. Store away from incompatible materials (see Section 10 of the SDS). Keep in an area equipped with sprinklers.

V-1--

8. Exposure controls/personal protection

Occupational exposure limits

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Material	Type	Value	
N-Methylaniline (CAS 100-61-8)	PEL	9 mg/m3	
*		2 ppm	
US. ACGIH Threshold Limit Val	ues		
Material	Туре	Value	
N-Methylaniline (CAS 100-61-8)	TWA	0.5 ppm	
US. NIOSH: Pocket Guide to Ch	emical Hazards		
Material	Туре	Value	
N-Methylaniline (CAS 100-61-8)	TWA	2 mg/m3	
		0.5 ppm	

Biological limit values

No biological exposure limits noted for the ingredient(s).

Exposure guidelines

US - California OELs: Skin designation

N-Methylaniline (CAS 100-61-8)

Can be absorbed through the skin.

US - Minnesota Haz Subs: Skin designation applies

N-Methylaniline (CAS 100-61-8) Skin designation applies.

US - Tennesse OELs: Skin designation

N-Methylaniline (CAS 100-61-8)

Can be absorbed through the skin.

US ACGIH Threshold Limit Values: Skin designation

N-Methylaniline (CAS 100-61-8) Can be absorbed through the skin.

US NIOSH Pocket Guide to Chemical Hazards: Skin designation

N-Methylaniline (CAS 100-61-8) Can be absorbed through the skin.

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

N-Methylaniline (CAS 100-61-8)

Can be absorbed through the skin.

Appropriate engineering controls

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Material name: N-Methylaniline SDS US

Individual protection measures, such as personal protective equipment

Eye/face protection Wear eye/face protection. Wear safety glasses with side shields (or goggles).

Skin protection

Hand protection Wear protective gloves.

Other Wear appropriate chemical resistant clothing.

If engineering controls do not maintain airborne concentrations below recommended exposure Respiratory protection

limits (where applicable) or to an acceptable level (in countries where exposure limits have not

been established), an approved respirator must be worn.

Thermal hazards Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations

When using, do not eat, drink or smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely

wash work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties

Appearance

Liquid. Physical state Liquid **Form**

Color Colorless to yellow Odor Not available. Not available. Odor threshold Not available. pН -70.6 °F (-57 °C) Melting point/freezing point Initial boiling point and boiling 385.25 °F (196.25 °C)

range

Flash point 175.0 °F (79.4 °C) Closed Cup

Evaporation rate Not available. Not available. Flammability (solid, gas) Upper/lower flammability or explosive limits Not available.

Flammability limit - lower

(%)

Flammability limit - upper

Not available.

Explosive limit - lower (%) Not available. Not available. Explosive limit - upper (%) 0.06 kPa at 25 °C Vapor pressure

Vapor density 3.7

Relative density Not available.

Solubility(ies)

Solubility (water) Insoluble 1.7 Partition coefficient

(n-octanol/water)

Not available. **Auto-ignition temperature** Not available. **Decomposition temperature** Not available. **Viscosity**

Other information

Density 0.9889 g/cm3 estimated

Dynamic viscosity 1.77 mPa.s 2.57 mPa.s

86 °F (30 °C) **Dynamic viscosity**

temperature

59 °F (15 °C)

Flammability class Combustible IIIA estimated Kinematic viscosity 1.79 mm²/s estimated

C7-H9-N Molecular formula 107.15 g/mol Molecular weight

Percent volatile 100 %

0.99 at 20 °C Specific gravity VOC (Weight %) 100 %

10. Stability and reactivity

Reactivity The product is stable and non-reactive under normal conditions of use, storage and transport.

Material is stable under normal conditions. **Chemical stability** Possibility of hazardous Hazardous polymerization does not occur.

reactions

Avoid heat, sparks, open flames and other ignition sources. Avoid temperatures exceeding the Conditions to avoid

flash point. Contact with incompatible materials.

Incompatible materials Strong acids. Strong oxidizing agents.

Hazardous decomposition

products

No hazardous decomposition products are known.

11. Toxicological information

Information on likely routes of exposure

Toxic if swallowed Ingestion

Inhalation Toxic by inhalation. May cause damage to organs by inhalation.

Skin contact Toxic in contact with skin.

Eye contact Direct contact with eyes may cause temporary irritation. Symptoms related to the Direct contact with eyes may cause temporary irritation.

physical, chemical and toxicological characteristics

Information on toxicological effects

Acute toxicity Toxic by inhalation. Toxic if swallowed. Toxic in contact with skin. Expected to be a low hazard for

usual industrial or commercial handling by trained personnel.

Product **Species Test Results**

N-Methylaniline (CAS 100-61-8)

Acute Oral

LD50 Rat 716 mg/kg

* Estimates for product may be based on additional component data not shown.

Skin corrosion/irritation Prolonged skin contact may cause temporary irritation. Direct contact with eyes may cause temporary irritation. Serious eye damage/eye

irritation

Respiratory or skin sensitization

Respiratory sensitization Not available.

Skin sensitization This product is not expected to cause skin sensitization.

No data available to indicate product or any components present at greater than 0.1% are Germ cell mutagenicity

mutagenic or genotoxic.

Carcinogenicity This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

Reproductive toxicity This product is not expected to cause reproductive or developmental effects.

Specific target organ toxicity -

single exposure

Not classified.

Specific target organ toxicity -

repeated exposure

May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard Not available.

Chronic effects Prolonged inhalation may be harmful. May cause damage to organs through prolonged or

repeated exposure.

12. Ecological information

Ecotoxicity Very toxic to aquatic life with long lasting effects. Accumulation in aquatic organisms is expected.

Material name: N-Methylaniline SDS US **Product Species Test Results**

N-Methylaniline (CAS 100-61-8)

Aquatic

Fish LC50 Fathead minnow (Pimephales promelas) 100 mg/l, 96 hours

* Estimates for product may be based on additional component data not shown.

No data is available on the degradability of this product. Persistence and degradability

Bioaccumulative potential Not available. Partition coefficient n-octanol / water (log Kow)

Mobility in soil No data available.

Other adverse effects No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation

potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Disposal instructions Collect and reclaim or dispose in sealed containers at licensed waste disposal site. This material

> and its container must be disposed of as hazardous waste. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international

regulations.

Local disposal regulations Dispose in accordance with all applicable regulations.

Hazardous waste code The waste code should be assigned in discussion between the user, the producer and the waste

disposal company.

Waste from residues / unused

products

Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see:

Disposal instructions).

Contaminated packaging Empty containers should be taken to an approved waste handling site for recycling or disposal.

Since emptied containers may retain product residue, follow label warnings even after container is

emptied.

14. Transport information

DOT

UN number UN proper shipping name N-Methylaniline

Transport hazard class(es)

6.1(PGIII)

Subsidiary risk 6.1 Label(s) Ш **Packing group**

Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

IB3, T4, TP1 Special provisions

153 Packaging exceptions 203 Packaging non bulk 241 Packaging bulk

IATA

LIN2294 UN number **UN proper shipping name** N-Methylaniline

Transport hazard class(es)

6.1(PGIII) Class

Subsidiary risk Ш **Packing group Environmental hazards** No. **ERG Code**

Special precautions for user

Read safety instructions, SDS and emergency procedures before handling.

Other information

Passenger and cargo

aircraft

Allowed

Allowed. Cargo aircraft only

IMDG

UN2294 **UN** number

UN proper shipping name

N-METHYLANILINE

Transport hazard class(es) Class

6.1(PGIII)

Subsidiary risk

Packing group **Environmental hazards**

Marine pollutant No. F-A. S-A

Ш

EmS

Special precautions for user Read safety instructions, SDS and emergency procedures before handling. Not available.

Transport in bulk according to

Annex II of MARPOL 73/78 and

the IBC Code

DOT



IATA; IMDG



15. Regulatory information

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication **US federal regulations**

Standard, 29 CFR 1910.1200.

All components are on the U.S. EPA TSCA Inventory List.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

SARA 304 Emergency release notification

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories Immediate Hazard - Yes

Delayed Hazard - Yes Fire Hazard - Yes Pressure Hazard - No Reactivity Hazard - No

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous Yes

chemical

SARA 313 (TRI reporting)

Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act

Not regulated.

(SDWA)

13993 Version #: 01 Issue date: 01-28-2015

US state regulations

US. Massachusetts RTK - Substance List

N-Methylaniline (CAS 100-61-8)

US. New Jersey Worker and Community Right-to-Know Act

Not regulated.

US. Pennsylvania RTK - Hazardous Substances

N-Methylaniline (CAS 100-61-8)

US. Rhode Island RTK

Not regulated.

US. California Proposition 65

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes

^{*}A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s) A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

Toxic Substances Control Act (TSCA) Inventory

16. Other information, including date of preparation or last revision

Issue date 01-28-2015

Version # 01

United States & Puerto Rico

Health: 1 NFPA ratings

> Flammability: 2 Instability: 0

Disclaimer

The above information is believed to be correct on the date it was last revised and must not be considered all inclusive. The information has been obtained only by a search of available literature and is only a guide for handling the chemicals. OSHA regulations require that if other hazards become evident, an upgraded SDS must be made available to the employee within three months. RESPONSIBILITY for updates lies with the employer and not with CHEM SERVICE, Inc.

Persons not specifically and properly trained should not handle this chemical or its container. This product is furnished FOR LABORATORY USE ONLY! Our products may NOT BE USED as drugs. cosmetics, agricultural or pesticide products, food additives or as household chemicals.

This Safety Data Sheet (SDS) is intended only for use with Chem Service, Inc. products and should not be relied on for use with materials from any other supplier even if the chemical name(s) on the product are identical! Whenever using an SDS for a solution or mixture the user should refer to the SDS for every component of the solution or mixture. Chem Service warrants that this SDS is based upon the most current information available to Chem Service at the time it was last revised. THIS WARRANTY IS EXCLUSIVE, AND CHEM SERVICE, INC. MAKES NO OTHER WARRANTY, EXPRESSED OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE. This SDS is provided gratis and CHEM SERVICE, INC. SHALL NOT BE LIABLE FOR ANY INCIDENTAL, CONSEQUENTIAL OR CONTINGENT DAMAGES.

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Material name: N-Methylaniline

Yes