Material Safety Data Sheet

N-METHYLANILINE FOR SYNTHESIS 98% (RXSOL-60-6605-116)

1. Product and Company Identifaction

Porduct Name	N-METHYLANILINE FOR SYNTHESIS 98%
Part Number	RXSOL-60-6605-116

Company Details:

RX MARINE INTERNATIONAL
105, A wing , BSEL , TECH PARK.
VASHI ,NEW BOMBAY 400703 INDIA

Branch : Kandla, Mumbai , Chennai, Vizag, Kolkata, UAE , OMAN , CANADA and KENYA

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2. Composition / informationon ingredients

Product name	Cas No	EC No	Weight	Formula
N-Methylaniline for synthesis	100-61-8	202-870-9	107,16 g/mol	C_7H_9N

3. Hazards Identification

Signal Word	Danger
Hazard Statements	H301 + H311 + H331 Toxic if swallowed, in contact with skin or if inhaled. H319 Causes serious eye irritation. H373 May cause damage to organs (Liver, spleen, Bone marrow) through prolonged or repeated exposure if swallowed. H410 Very toxic to aquatic life with long lasting effects.
Precautionary statements	P273 Avoid release to the environment. P280 Wear protective gloves/ protective clothing/ eye protection/ face protection. P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor. P302 + P352 + P312 IF ON SKIN: Wash with plenty of water.Call a POISON CENTER/ doctor if you feel unwell. P304 + P340 + P311 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/ doctor. P314 Get medical advice/ attention if you feel unwell.
Classification of the substance or mixture	No data available
Supplemental Hazard Statements	No data available
Other hazards	This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

4. First Aid Measures

General advice	Show this material safety data sheet to the doctor in attendance
If inhaled	fresh air.
Eye Contact	After eye contact: rinse out with plenty of water. Remove contact lenses.
Swallowed	After swallowing immediately make victim drink water (two glasses at most). Consult a physician.
Skin Contact	In case of skin contact Take off immediately all contaminated clothing. Rinse skin with water/ shower.
Inhalation	No data available
Ingestion	No data available

Most important symptoms and effects, both acute and delaye	The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11
Indication of any immediate medical attention and special treatment needed	No data available

5. Fire-fighting Measures

Flammability	No data available
Suitable extinguishing media	Foam Carbon dioxide (CO2) Dry powder
Unsuitable extinguishing media	For this substance/mixture no limitations of extinguishing agents are given
Special hazards arising from the substance or mixture	Carbon oxides Nitrogen oxides (NOx) Combustible. Fire may cause evolution of nitrogen oxides Vapors are heavier than air and may spread along floors. Forms explosive mixtures with air on intense heating. Development of hazardous combustion gases or vapours possible in the event of fire
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
Hazardous combustion products	No data available
Advice for firefighters	Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.
Protective Equipment	No data available
Specific Hazards Arising from the Chemical	No data available

6. Accidental Release Measures

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.
Spillage	No data available
Personal Protection	No data available
Enviromental Precaution	Do not let product enter drains. Risk of explosion.
Methods and materials for containment and cleaning	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.
Reference to other sections	For disposal see section 13.

7. Handling and Storage

Advice on protection against fire and explosion	Keep away from open flames, hot surfaces and sources of ignition.Take precautionary measures against static discharge.
Incompatible materials	No data available
Hygiene measures	No data available
Advice on safe handling	Work under hood. Do not inhale substance/mixture. Avoid generation of vapours/aerosols.
Conditions for safe storage including any incompatibilities	No data available
Storage conditions	Protected from light. Tightly closed. Keep in a well-ventilated place. Keep locked up or in an area accessible only to qualified or authorized persons.Tightly closed. Keep in a wellventilated place. Keep locked up or in an area accessible only to qualified or authorized persons. Recommended storage temperature see product label.
Storage class	Storage class (TRGS 510) 6.1C Combustible, acute toxic Cat.3 / toxic compounds or compounds which causing chronic effects
Specific end use(s)	Apart from the uses mentioned in section 1.2 no other specific uses are stipulated
Advice on general occupational hygiene	No data available

8. Exposure controls and personal protection

Exposure controls	Personal protective equipment
Engineering Control	No data available
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
Body Protection	Protective Clothing
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 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). Splash contact Material: Nitrile rubber Minimum layer thickness: 0,11 mm Break through time: 480 min Material tested:KCL 741 Dermatril® L
Respiratory protection	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
Other Protection Measure	No data available

9. Physical and chemical properties

Physical state	Liquid
Colour	Yellow
Odour	Weak characteristic odour
Odor Threshold	No data available
pH	7,6 at 1 g/l
Melting Point	-57 °C
Boiling Point	192 - 197 °C at 1.013 hPa
Flash Point	85 °C - closed cup
Evaporation Rate	No data available
Flammability (solid, gas)	No data available
Explosive limits	No data Available
Upper/lower flammability or explosive limits	No data available
Autoignition temperature	No data available
Decomposition temperature	No data available
Vapour pressure	No data available
Viscosity	No data available
Density	0,989 g/cm3 at 20 °C
Relative Density	No data available
Specific Gravity	No data available
Partition coefficient	Log Pow 0,81
Explosive properties	No data available
Solubility	ca.30 g/l
Ignition temperature	No data available
Particle characteristics	No data available

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 ambient conditions (room temperature)
Possibilityof hazardous reactions	Violent reactions possible with: Oxidizing agents Strong acids Acid chlorides Acid anhydrides

Conditions to avoid	Strong heating
Incompatible materials	Various plastics, Copper, copper compounds
Hazardous decomposition products	In the event of fire: see section 5

11. Toxicological information

Acute toxicity	Acute toxicity estimate Oral - 100,1 mg/kg (Expert judgment) Acute toxicity estimate Oral - Expert judgment - 100,1 mg/kg Symptoms Nausea, Vomiting Oral: Rapid absorption. Acute toxicity estimate Inhalation - Expert judgment - 4 h - 3,1 mg/l - vapor Acute toxicity estimate Dermal - Expert judgment - 300,1 mg/kg
Skin corrosion/irritation	Skin - Rabbit No skin irritation - 4 h (External MSDS
Serious eye damage/irritation	Eyes - Chicken eye Causes serious eye irritation. - 10 s (OECD Test Guideline 438)
Respiratory or skin sensitization	Local lymph node assay (LLNA) - Mouse negative (OECD Test Guideline 429)
Carcinogenicity	No data available
Germ cell mutagenicity	Test Type Ames test Test system: Escherichia coli/Salmonella typhimurium Metabolic activation: with and without metabolic activation Result: negative Remarks: (ECHA) Test Type Mutagenicity (mammal cell test): chromosome aberration. Test system: Chinese hamster lung cells Metabolic activation: with and without metabolic activation Result: positive Remarks: (ECHA) Test Type: Micronucleus test Species: Mouse Cell type: Red blood cells (erythrocytes) Application Route Oral Method: OECD Test Guideline 475 Result: positiv
Reproductive toxicity	Possible risk of congenital malformation in the fetus. Exposure to excessive amounts of iodine during pregnancy is capable of producing fetal hypothyroidism. Iodine-containing drugs have been associated with fetal goiter
Specific target organ toxicity - single exposure	No data available
Additional Information	The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher. Cough, Shortness of breath, Headache, Nausea, Vomiting, 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. To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated. Systemic effects: After absorption confusion Dizziness somnolence Methaemoglobinemia Coma Absorption can result in damage to: Liver Kidney Central nervous system Effect potentiated by: ethanol Danger of cumulative effects. The following applies to aromatic amines in general: systemic effect: methaemoglobinaemia with headache, cardiac dysrhythmia, drop in blood pressure, dyspnoea, and spasms, principal symptom: cyanosis (blue discolouration of the blood). Handle in accordance with good industrial hygiene and safety practice.

12. Ecological information

Persistence and degradability	Biodegradability aerobic - Exposure time 28 d Result: 92 % - Inherently biodegradable. (ECHA)
Toxicity to fish	No data available
Toxicity to daphnia and other aquatic invertebrates	LC50 - Daphnia magna (Water flea) - 0,15 mg/l - 48 h (ECOTOX Database)
Toxicity	No data available
Toxicity to bacteria	EC50 - activated sludge - 1,5 mg/l - 30 min (ISO 8192)
Toxicity to algae	No data available
Bioaccumulation potential	Bioaccumulation Cyprinodontidae - 48 h - 250 µg/l(N-Methylaniline) Bioconcentration factor (BCF): 2,6
Mobility in soil	No data availalble
Results of PBT and vPvB assessment	This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.
Endocrine disrupting properties	The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher
Other adverse effects	No data available

13. Disposal considerations

Product	No data available

Contaminated packaging	No data available
Waste treatment Method	No data available

14. Transport information

UN number	ADR/RID:2294	IMDG:2294	IATA:2294
UN proper shipping name	ADR/RID:N-METHYLANILINE	IMDG:N-METHYLANILINE	IATA:N-METHYLANILINE
Transport hazard class(es)	ADR/RID:6.1	IMDG:6.1	IATA:6.1
Packaging group	ADR/RID:lll	IMDG:lll	IATA:lll
Environmental hazards	ADR/RID:Yes	IMDG Marine pollutant:Yes	IATA:No
Special precautions for user	Tunnel restriction code (E)		
Further information	No data available		

15. Regulatory information

Safety, health and environmental regulations/legislation specific for the substance or mixture	This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006.
Other regulations	Observe work restrictions regarding maternity protection in accordance to Dir 92/85/EEC or stricter national regulations where applicable. Take note of Dir 94/33/EC on the protection of young people at work.
Chemical Safety Assessment	A Chemical Safety Assessment was not carried out for this substance.

16. Other information

Other Information	The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and weassume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if RX Marine International has been advised of the possibility of such damages.