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Tel: +91 98200 41841 Email: info@ottokemi.com Web: www.ottokemi.com

### **MATERIAL SAFETY DATA SHEET (MSDS)**

**SECTION 1: Product identifiers** 

Product Name: m-Chloroaniline, 98%

Product Code: C 1985 CAS No: 108-42-9

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

Use: Industrial. For professional use only.

1.3. Details of the supplier of the safety data sheet

Company identification OTTO CHEMIE PVT LTD

No 603, 6th Floor, Tardeo AC Market, 87, Tardeo Road, Tardeo, Mumbai, Maharashtra 400034, India (BHARAT)

1.4. Emergency telephone number

Phone no.: + 91 98200 41841 (10:00 am - 06:00 pm)

#### **SECTION 2: Hazards identification**

2.1 Classification of the substance or mixture

Acute toxicity, (Category 3) Acute toxicity, (Category 2) Acute toxicity, (Category 3) Eye irritation, (Category 2)

Skin sensitization, (Sub-category

Specific target organ toxicity

repeated exposure, (Category 2),

Endocrine system

Short-term (acute) aquatic hazard, (Category 1)

Long-term (chronic) aquatic

hazard, (Category 1) 2.2 Label elements

Labelling according Regulation (EC) No 1272/2008

Pictogram Signal Word

Hazard Statements H301 + H311 H317

H319 H330 H373

H410

**Precautionary Statements** 

P273 P280

P302 + P352 + P312

P304 + P340 + P310

P305 + P351 + P338

H301: Toxic if swallowed.

H330: Fatal if inhaled.

H311: Toxic in contact with skin. H319: Causes serious eye irritation.

H317: May cause an allergic skin reaction.

H373: May cause damage to organs through prolonged or repeated exposure if swallowed

H400: Very toxic to aquatic life.

H410: Very toxic to aquatic life with long

lasting effects.

Toxic if swallowed or in contact with skin. May cause an allergic skin reaction.

Causes serious eye irritation.

Fatal if inhaled.

May cause damage to organs (Endocrine system) through

prolonged or repeated exposure if swallowed. Very toxic to aquatic life with long lasting effects.

Avoid release to the environment.

Wear protective gloves/ protective clothing/ eye protection/ face

protection.

IF ON SKIN: Wash with plenty of water. Call a POISON CENTER/

doctor if you feel unwell.

IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/ doctor. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue

rinsina.

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P314

Get medical advice/ attention if you feel unwell.

Supplemental Hazard

Statements

Reduced Labeling (<= 125 ml)

Pictogram

Signal Word

**Hazard Statements** 

H330

H317 H301 + H311

**Precautionary Statements** 

P302 + P352 + P312

P304 + P340 + P310

Supplemental Hazard Statements

2.3 Other hazards

Danger

none

Fatal if inhaled.

May cause an allergic skin reaction. Toxic if swallowed or in contact with skin.

IF ON SKIN: Wash with plenty of water. Call a POISON CENTER/

doctor if you feel unwell.

IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/ doctor.

one.

none

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.

Ecological 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. Toxicological 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.

### SECTION 3: Composition/information on ingredients

3.1 Substances

Formula : C6H6CIN

Molecular weight : 127,57 g/mol

CAS-No. : 108-42-9

EC-No. : 203-581-0

Component	Classification	Concentration
3-chloroaniline		
CAS-No 108-42-9 EC-No. 203-581-0	Acute Tox. 3; Acute Tox. 2; Acute Tox. 3; Eye Irrit. 2; Skin Sens. 1B; STOT RE 2; Aquatic Acute 1; Aquatic Chronic 1; H301, H330, H311, H319, H317, H373, H400, H410 M-Factor - Aquatic Acute: 10 M-Factor - Aquatic Chronic: 1	<= 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

General advice

First aiders need to protect themselves. Show this material safety data sheet to the doctor in attendance.

If inhaled

After inhalation: fresh air. Immediately call in physician. If breathing stops: immediately apply artificial respiration, if necessary also oxygen.

In case of skin contact

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

In case of eye contact

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

If swallowed

If swallowed: give water to drink (two glasses at most). Seek medical advice immediately. In exceptional cases only, if medical care is not available within one hour, induce vomiting (only in persons who are wide awake and fully conscious), administer activated charcoal (20 - 40 g in a 10% slurry) and consult a doctor as quickly as possible.

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

### **SECTION 5: Firefighting measures**

5.1 Extinguishing media

Suitable extinguishing media

Water Foam Carbon dioxide (CO2) Dry powder

Unsuitable extinguishing media

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

5.2 Special hazards arising from the substance or mixture

Carbon oxides

Nitrogen oxides (NOx)

Hydrogen chloride gas

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 vapours possible in the event of fire.

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The life science business of Merck operates as MilliporeSigma in the US and Canada

5.3 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.

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: Do not breathe vapors, aerosols. Avoid substance contact. Ensure adequate ventilation. 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 carefully with liquid-absorbent material (e.g.

Chemizorb®). Dispose of properly. Clean up affected area.

6.4 Reference to other sections

For disposal see section 13.

## **SECTION 7: Handling and storage**

7.1 Precautions for safe handling

Advice on safe handling

Work under hood. Do not inhale substance/mixture. Avoid generation of vapours/aerosols.

Hygiene measures

Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance.

For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities

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Storage conditions

Tightly closed. Keep in a well-ventilated place. Keep locked up or in an area accessible only to qualified or authorized persons.

Storage class

Storage class (TRGS 510): 6.1A: Combustible, acute toxic Cat. 1 and 2 / very toxic

hazardous materials

7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

#### SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Ingredients with workplace control parameters

8.2 Exposure controls

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 EN 16523-1 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell,

Internet: www.kcl.de).

Full contact

Material: butvl-rubber

Minimum layer thickness: 0,7 mm

Break through time: 480 min

Material tested:Butoject® (KCL 898)

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).

Splash contact

Material: Latex gloves

Minimum layer thickness: 0,6 mm Break through time: 60 min

Break through time: 60 mi Body Protection

protective clothing

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.

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 clear, liquid

b) Color light yellow c) Odor unpleasant

d) Melting point/range: -11 - -9 °C - lit.

point/freezing point

e) Initial boiling point 95 - 96 °C at 15 hPa - lit.

and boiling range

f) Flammability (solid, No data available

gas)

g) Úpper/lower No data available

flammability or

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explosive limits

118 °C - closed cup h) Flash point

i) Autoignition > 30 °C

at 960 hPadoes not ignite

temperature

j) Decomposition

temperature

k) pH

I) Viscosity

m) Water solubility

n) Partition coefficient:

n-octanol/water

o) Vapor pressure p) Density Relative density q) Relative vapor density

r) Particle characteristics

s) Explosive properties

t) Oxidizing properties

9.2 Other safety information Dissociation constant < 0,1 at 30 °C 8,02 at 27 °C

No data available

Viscosity, kinematic: No data available

Viscosity, dynamic: 19,41 mPa.s at 30 °C 20 g/l at 30 °C - completely soluble

log Pow: 0,77 at 30 °C - Bioaccumulation is not expected.

No data available 1,206 g/cm3 at 25 °C - lit.

No data available No data available

No data available

No data available

# **SECTION 10: Stability and reactivity**

10.1 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.

10.2 Chemical stability

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

10.3 Possibility of hazardous reactions

Violent reactions possible with:

Strong oxidizing agents

Acid anhydrides

acid halides

acids

10.4 Conditions to avoid

Strong heating.

10.5 Incompatible materials

No data available

10.6 Hazardous decomposition products

In the event of fire: see section 5

# **SECTION 11: Toxicological information**

11.1 Information on toxicological effects

Routes of Entry: Absorbed through skin. Dermal contact. Eye contact. Toxicity to Animals:

Oral LD50 Rat: 1500 mg/kg; Dermal LD50 Rabbit: 2000mg/kg

Inhalation LC50 Rat: > 50mg/L.

Chronic Effects on Humans: CARCINOGENIC EFFECTS: Classified None. by NTP, None. by OSHA, None. by NIOSH.

Other Toxic Effects on Humans: Hazardous in case of skin contact (irritant), of inhalation (lung irritant).

Special Remarks on Toxicity

to Animals: Not available.

Special Remarks on Chronic Effects on Humans: Not available. Special Remarks on other Toxic Effects on Humans: Not available.

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## **SECTION 12: Ecological information**

12.1 Toxicity

Toxicity to fish LC50 - Danio rerio (zebra fish) - 18,75 mg/l - 96 h

Remarks: (ECOTOX Database)

Toxicity to daphnia and other aquatic invertebrates

EC50 - Daphnia magna (Water flea) - 0,35 mg/l - 48 h

Remarks: (ECOTOX Database)

Toxicity to algae EC50 - Desmodesmus subspicatus (green algae) - 26 mg/l - 48 h

Remarks: (ECOTOX Database)

Toxicity to

fish(Chronic toxicity)

NOEC - Danio rerio (zebra fish) - 5,6 mg/l - 21 d

Remarks: (ECHA)

12.2 Persistence and degradability

Biodegradability Biotic/Aerobic - Exposure time 17 d

Remarks: (HSDB)

12.3 Bioaccumulative potential

No data available 12.4 Mobility in soil No data available

12.5 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.

12.6 Endocrine disrupting properties

Product: Assessment:

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.

12.7 Other adverse effects

Discharge into the environment must be avoided.

### **SECTION 13: Disposal considerations**

13.1 Waste treatment methods

No data available

# **SECTION 14: Transport information**

14.1 UN number

ADR/RID: 2019 IMDG: 2019 IATA: 2019

14.2 UN proper shipping name

ADR/RID: CHLOROANILINES, LIQUID IMDG: CHLOROANILINES, LIQUID IATA: Chloroanilines, liquid

14.3 Transport hazard class(es)

ADR/RID: 6.1 IMDG: 6.1 IATA: 6.1 14.4 Packaging group

ADR/RID: II IMDG: II IATA: II

14.5 Environmental hazards
ADR/RID: yes IMDG Marine pollutant: yes IATA: no

14.6 Special precautions for user Tunnel restriction code : (D/E) Further information : No data available

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#### **SECTION 15: Regulatory information**

15.1 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.

National legislation

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances. **H2 ACUTE TOXIC** 

E1 ENVIRONMENTAL HAZARDS

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.

15.2 Chemical Safety Assessment

For this product a chemical safety assessment was not carried out

### Section 16: Other Information

This safety data sheet should be used in conjunction with technical sheets. It does not replace them. The information given is based on our knowledge of this product, at the time of publication. It is given in good faith. The attention of the user is drawn to the possible risks incurred by using the product for any other purpose other than that for which it was intended. This does not in any way excuse the user from knowing and applying all the regulations governing his activity. It is the sole responsibility of the user to take all precautions required in handling the product. The aim of the mandatory regulations mentioned is to help the user to fulfill his obligations regarding the use of hazardous products.

