An ISO 9001: 2015 & GMP Certified Company Office: No 603, 6th Floor, Tardeo AC Market, 87, Tardeo Road, Tardeo, Mumbai, Maharashtra 400034, India (BHARAT)

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

MATERIAL SAFETY DATA SHEET (MSDS)

SECTION 1: Product identifiers

Product Name 4-Aminophenol, 98%

Product Code A 1998 CAS No: 123-30-8

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 4) Acute toxicity, (Category 4) Skin sensitization, (Category 1) Germ cell mutagenicity,

(Category 2). Specific target organ toxicity -

repeated exposure, (Category 2),

Kidney

Short-term (acute) aquatic

hazard, (Category 1) Long-term (chronic) aquatic

hazard, (Category 1)

H302: Harmful if swallowed. H332: Harmful if inhaled.

H317: May cause an allergic skin reaction.

H341: Suspected of causing genetic

defects.

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

H400: Very toxic to aquatic life.

H410Very toxic to aquatic life with long lasting effects

2.2 Label elements

Labelling according Regulation (EC) No 1272/2008

Pictogram Signal Word

Hazard Statements

H302 + H332 H317

H341 H373

Precautionary Statements

P273 P280 protection. P301 + P312

P302 + P352

P304 + P340 + P312

P308 + P313 Supplemental Hazard

Statements Reduced Labeling (<= 125 ml)

Pictogram

Warning

Harmful if swallowed or if inhaled. May cause an allergic skin reaction.

Suspected of causing genetic defects.

May cause damage to organs (Kidney) through prolonged or repeated exposure.

Very toxic to aquatic life with long lasting effects.

Avoid release to the environment.

Wear protective gloves/ protective clothing/ eye protection/ face

IF SWALLOWED: Call a POISON CENTER/ doctor if you feel

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 if you feel unwell.

IF exposed or concerned: Get medical advice/ attention.

none

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Signal Word Warning

Hazard Statements
H317 May cause an allergic skin reaction.
H341 Suspected of causing genetic defects.

Statements

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

protection.

P302 + P352 IF ON SKIN: Wash with plenty of water.

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

Supplemental Hazard non

Statements

2.3 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. 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 : C6H7NO : 109,13 g/mol : 123-30-8 : 204-616-

Component	Classification	Concentration
4-aminophenol		
CAS-No. 123-30-8	Acute Tox. 4; Skin Sens. 1; Muta. 2;	<= 100 %
EC-No. 204-616-2	STOT RE 2; Aquatic Acute 1; Aquatic	
	Chronic 1; H302, H332, H317, H341,	
	H373, H400, H410 M-Factor - Aquatic	
	Acute: 10 M-Factor - Aquatic Chronic: 1	

SECTION 4: First aid measures

4.1 Description of first-aid measures

General advice

Show this material safety data sheet to the doctor in attendance.

lf 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. 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 water (two glasses at most). Consult a physician.

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

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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)

Combustible.

Fire may cause evolution of:

nitrogen oxides

Development of hazardous combustion gases or vapours possible in the event of fire.

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: Avoid inhalation of dusts. 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 dry. Dispose of properly. Clean up affected area. Avoid generation of dusts.

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.

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

Storage conditions

Tightly closed. Dry. Keep in a well-ventilated 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

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

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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
Body Protection
protective clothing

Respiratory protection
Recommended Filter type: Filter A-(P3)

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 solid
b) Color colorless

c) Odor
d) Melting
point/freezing point
e) Initial boiling point
and boiling range

f) Flammability (solid, gas)

g) Upper/lower flammability or explosive limits h) Flash point

i) Autoignition

temperature

j) Decomposition temperaturek) pHl) 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

Surface tension 61,13 mN/m at 1 at 20 °C

- OECD Test Guideline 115 Dissociation constant 7,97 at 25 °C solid colorless phenol-like

Melting point/ range: 189,6 - 190,2 °C

284 °C at 1.013 hPa

No data available

No data available

Not applicable > 400 °C

- Regulation (EC) No. 440/2008, Annex, A.16

No data available

No data available

Viscosity, kinematic: No data available Viscosity, dynamic: No data available

1.000 g/l at 25 °C - soluble

log Pow: ca.-0,09 at 25 °C - Bioaccumulation is not expected.

No data available No data available

1,287 at 20 °C - OECD Test Guideline 109

No data available

No data available

none

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SECTION 10: Stability and reactivity

10.1 Reactivity

The following applies in general to flammable organic substances and mixtures: in correspondingly fine distribution, when whirled up a dust explosion potential may generally be assumed.

10.2 Chemical stability

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

10.3 Possibility of hazardous reactions

No data available

10.4 Conditions to avoid no information available 10.5 Incompatible materials Strong oxidizing agents

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.

SECTION 12: Ecological information

12.1 Toxicity Toxicity to fish

flow-through test LC50 - Oryzias latipes (Orange-red killifish) - 0,82

mg/l - 96 h

(OECD Test Guideline 203)

Toxicity to daphnia semi-static test EC50 - Daphnia magna (Water flea) - 0,089 mg/l -

48 h

(OECD Test Guideline 202)

and other aquatic invertebrates
Toxicity to algae

Toxicity to bacteria

static test ErC50 - Pseudokirchneriella subcapitata (algae) - 0,25

mg/l - 72 h

(OECD Test Guideline 201)

static test EC50 - activated sludge - 29,9 mg/l - 3 h

(OECD Test Guideline 209)

Toxicity to

fish(Chronic toxicity) flow-through test NOEC - Oryzias latipes (Orange-red killifish) -

0,049 mg/l - 41 d

(OECD Test Guideline 210)

Toxicity to daphnia flow-through test NOEC - Daphnia magna (Water flea) - 0,206 mg/l

- 21 d

(OECD Test Guideline 202)

and other aquatic invertebrates(Chronic

toxicity)

12.2 Persistence and degradability

Biodegradability

aerobic - Exposure time 28 d

Result: 6 % - Not readily biodegradable.

(OECD Test Guideline 301C)

12.3 Bioaccumulative potential

Bioaccumulation

Cyprinus carpio (Carp) - 56 d - 0,00015 mg/l(4-aminophenol)

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Bioconcentration factor (BCF): 15 - 46 (OECD Test Guideline 305C)

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

Forms toxic mixtures in water, dilution measures notwithstanding.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

No data available

SECTION 14: Transport information

14.1 UN number

ADR/RID: 2512 IMDG: 2512

IIVIDG. 2512

IMDG: 6.1

IMDG: III

IMDG Marine pollutant: no

IATA: 2512

IATA: 6.1

IATA: III

IATA: no

14.2 UN proper shipping name
ADR/RID: AMINOPHENOLS

IMDG: AMINOPHENOLS IATA: Aminophenols

14.3 Transport hazard class(es)

ADR/RID: 6.1

14.4 Packaging group

ADR/RID: III

14.5 Environmental hazards

ADR/RID: no

14.6 Special precautions for user

Tunnel restriction code: (E)

Further information : No data available

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.

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

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SACTION 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.

