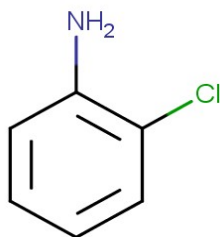


1. General Statement

O-chloroaniline is a clear amber color liquid with an amine odor. Occurs in both alpha and beta forms. It is slightly soluble in water and freely soluble in ether and alcohol.

2. Chemical identity

Name : Ortho chloroaniline
CAS number(s) : 95-51-2
EC number : 202-426-4
Molecular formula : C₆H₆ClN
Structure :



3. Uses and Benefits

O-Chloroaniline is mainly used as a dye intermediate, a standard for colorimetric apparatus, and in the manufacture of petroleum solvents and fungicides.

4. Physical / chemical properties

Property	Value
Physical state :	Liquid
Colour :	Colourless to amber. On exposure to air: turns brown.
Odour :	Amine-like
pH :	No data available
Freezing point	-2 °C
Boiling point :	Not applicable (decomposes)
Flash point :	105 °C
Density :	1213 kg/m ³
Solubility in Water:	Water: 0.56 g/100ml

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5. Health Effects

Effect Assessment	Result
Acute toxicity (Oral / inhalation / dermal)	Toxic if swallowed,in contact with skin or if inhaled.
Irritation / corrosion Skin / eye/ respiratory tract	Causes serious eye irritation.
Respiratory or skin sensitisation	No
Toxicity after repeated exposure Oral / inhalation / dermal	May cause damage to organs through prolonged or repeated exposure.
Genotoxicity / Mutagenicity	Suspected of causing genetic defects.
Carcinogenicity	No
Toxicity for reproduction	No

6. Environmental Effects

Effect Assessment	Result
Aquatic toxicity	Yes
Fate and behavior	Result
Persistence and degradability	Non degradable in the soil. Inhibition of nitrification. Not readily biodegradable in water.
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).

7. Exposure

Human health

The substance suspected of causing genetic defects also may cause damage to organs through prolonged or repeated exposure and eye irritation.

The most likely route of human exposure (workers) is through skin.In industrial settings, ingestion is not an anticipated route of exposure.

The probability of exposure to workers is expected to be low because this product is manufactured in an enclosed controlled environment and is transported in well sealed containers. Workers may be exposed during (un)loading, mixing, sampling, analysis or maintenance operations and particularly in case of batch processes.The exposure must be kept as minimum as possible by the use of appropriate risk management measures as suitable collective and personal protective equipment, good industrial hygiene practices and risk communication through appropriate training of workers.effects after ingestion human may cause Methemoglobinemia,Blue/grey discolouration of the skin, Headache, Nausea, Dry/sore

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throat, Feeling of weakness, Dizziness, Disturbances of consciousness, Disturbances of heart rate.

Careless handling or accidental spillage of the chemical could result in exposure to potentially hazardous levels of chemicals.

Industrial workers should ensure that they follow the advice found in the extended safety data sheet (SDS).

Environment

Substance is very toxic to aquatic life with long lasting effects. Care should be taken to avoid releases of these products to sewage, drainage systems and water bodies. Spillage shall be quickly collected in the event of an accidental release. More information about release measures and accidental release measures are available in the extended safety data sheet.

8. Risk Management Recommendations

Human health measures

Organizational	A basic standard of occupational hygiene is recommended. Ensure operatives are well informed of the hazards and trained to minimise exposures.Ensure regular inspection and maintenance of equipment and machines.Handle and store according to the indications of the Safety Data Sheet.	
Protection	Eye protection:	Safety glasses
	Skin and body protection:	Wear suitableProtective clothing (EN 14605 or EN 13034)
	Respiratory protection:	Wear an appropriate mask. Self-contained breathing apparatus,Full face mask with filter type A at conc. in air > exposure limit
Engineering controls	Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.Ensure good ventilation of the work station.	
Environment protective measures		
Product must not be released into water without pre-treatment.		

9. First-aid measures

First-aid measures after inhalation : Remove the victim into fresh air. Immediately consult a doctor/medical service.

First-aid measures after skin contact : Wash immediately with lots of water. Do not apply (chemical) neutralizing agents without medical advice. Consult a doctor/medical service.

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First-aid measures after eye contact : Rinse with water. Remove contact lenses, if present and easy to do. Continue rinsing. Do not apply (chemical) neutralizing agents without medical advice.

First-aid measures after ingestion : Rinse mouth with water. Victim is fully conscious: immediately induce vomiting. Do not apply (chemical) neutralizing agents without medical advice. Immediately consult a doctor/medical service. Call Poison Information Centre. Ingestion of large quantities: immediately to hospital. Take the container/vomit to the doctor/hospital.

10. Fire-fighting measures

Extinguishing media

Suitable extinguishing media : Quick-acting ABC powder extinguisher. Quick-acting BC powder extinguisher. Quick-acting class B foam extinguisher. Quick-acting CO2 extinguisher. Class B foam (not alcohol-resistant).

Unsuitable extinguishing media : Water (quick-acting extinguisher, reel); risk of puddle expansion. Water; risk of puddle expansion.

Special hazards arising from the substance or mixture

Hazardous decomposition products in case of fire : On heating/burning: release of toxic and corrosive gases/vapours (hydrogen chloride, carbon monoxide - carbon dioxide).

Advice for firefighters

Precautionary measures fire : Exposure to fire/heat: keep upwind. Exposure to fire/heat: consider evacuation. Exposure to fire/heat: seal off low-lying areas. Exposure to fire/heat: have neighbourhood close doors and windows.

Firefighting instructions :Cool tanks/drums with water spray/remove them into safety. Dilute toxic gases with water spray. Take account of toxic/corrosive precipitation water. Take account of toxic fire-fighting water. Use water moderately and if possible collect or contain it.

11. Accidental release measures

Protective equipment :Gloves ,Face shield, Protective clothing. Large spills/in enclosed spaces: compressed air apparatus . Large spills/in enclosed spaces: gas-tight suit .

Environmental precautions: Prevent soil and water pollution. Prevent spreading in sewers.

For containment : Contain released product, pump into suitable containers. Plug the leak, cut off the supply.Dam up the liquid spill. Heat exposure: dilute toxic gas/vapour with water spray. Take account of toxic/corrosive precipitation water.

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12. Disposal consideration

Regional legislation (waste) : Disposal must be done according to official regulations.

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

Sewage disposal recommendations : Remove waste in accordance with local and/or national regulations. Hazardous waste shall not be mixed together with other waste. Different types of hazardous waste shall not be mixed together if this may entail a risk of pollution or create problems for the further management of the waste. Hazardous waste shall be managed responsibly. All entities that store, transport or handle hazardous waste shall take the necessary measures to prevent risks of pollution or damage to people or animals.

13. Handling and storage

Precautions for safe handling : Do not handle until all safety precautions have been read and understood. Avoid contact with skin, eyes and clothing. Keep away from naked flames/heat. In a finely divided state: use spark-/explosion proof appliances. Finely divided: keep away from ignition sources/sparks. Measure the concentration in the air regularly. Carry operations in the open/under local exhaust/ventilation or with respiratory protection. Comply with the legal requirements. Remove contaminated clothing immediately. Clean contaminated clothing. Thoroughly clean/dry the installation before use. Do not discharge the waste into the drain. Keep the container tightly closed.

Hygiene measures : Always wash hands after handling the product. Remove contaminated clothes. Wear personal protective equipment. Observe strict hygiene.

14. Classification and Labeling

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

Hazard pictograms (CLP)



Signal word (CLP)

: Danger

Hazard statements (CLP)

: H301+H311+H331 - Toxic if swallowed, in contact with skin or if inhaled.

H318 - Causes serious eye damage.

H341 - Suspected of causing genetic defects.

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

H410 - Very toxic to aquatic life with long lasting effects.

Precautionary statements (CLP)

: P201 - Obtain special instructions before use.

P202 - Do not handle until all safety precautions have been read and understood.

P260 - Do not breathe vapours, mist.

P264 - Wash hands thoroughly after handling.

P270 - Do not eat, drink or smoke when using this product.

P271 - Use only outdoors or in a well-ventilated area.

P273 - Avoid release to the environment.

P280 - Wear protective gloves, protective clothing.

P301+P310 - IF SWALLOWED: Immediately call a doctor, a POISON CENTER.

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

P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

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

P310 - Immediately call a doctor, a POISON CENTER.

P312 - Call doctor, a POISON CENTER if you feel unwell.

P321 - Specific treatment (see supplemental first aid instruction on this label).

P330 - Rinse mouth.

P361+P364 - Take off immediately all contaminated clothing and wash it before reuse.

15. Conclusion

O-chloroaniline is a clear amber liquid with an amine odor. The substance causes eye irritation and is suspected of causing genetic defects. Care should be taken to avoid releases of these products to sewage, drainage systems and water bodies. The exposure must be kept as minimum as possible by the use of appropriate risk management measures as suitable collective and personal protective equipment, good industrial hygiene practices and risk communication through appropriate training of workers.

16. Contact Information within company

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This GPS safety summary is intended to give general information about the health, safety and environmental and not intended to provide in-depth details. To obtain the most accurate and current information, consult the appropriate Safety Data Sheet (SDS) prior to use of the material named herein.

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