GPS Safety Summary
2,4-dichloroaniline

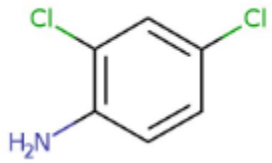
Reference number: AIL-GPS-062 Issue date: 07/04/2025 Version: 1.0 **CL-4: PUBLIC**

1. General Statement

2,4-dichloroaniline is a Crystalline liquid,red brown solid aromatic odour.combustible substances are poorly flammable.Very slightly soluble in water.Acute or chronic health hazards result from the substance.The substance is hazardous to the aquatic environment.

2. Chemical identity

Name :2,4-dichloroaniline
CAS number(s) :554-00-7
EC number :209-057-8
Molecular formula :C6H5Cl2N
Structure :



3. Uses and Benefits

2,4-dichloroaniline is used as an intermediate step in further manufacturing of another substance.Manufacture of bulk, large scale chemicals (including petroleum products).Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment conditions.Manufacture of fine chemicals.

4. Physical / chemical properties

Property	Value
Physical state :	Solid
Colour :	Off-white to brown-red
Odour :	Aromatic odour.
pH :	No data available
Melting point :	> 59 - < 62 °C
Boiling point :	242 °C
Flash point :	115 °C
Density :	1.57 g/cm3 Type: 'density' Temp.: 20 °C

Solubility in Water:	Water: 0.45 g/l

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	May cause an allergic skin reaction,Causes serious eye damage.
Respiratory or skin sensitisation	NA
Toxicity after repeated exposure Oral / inhalation / dermal	NA
Genotoxicity / Mutagenicity	NA
Carcinogenicity	NA
Toxicity for reproduction	NA

6. Environmental Effects

Effect Assessment	Result
Aquatic toxicity	Yes
Fate and behavior	**Result**
Persistence and degradability	Not readily biodegradable in water..
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).

7. Exposure

Human health

2,4-dichloroaniline is toxic if swallowed, is toxic in contact with skin, is toxic if inhaled, is very toxic to aquatic life with long lasting effects, is very toxic to aquatic life, causes serious eye damage, may cause damage to organs through prolonged or repeated exposure and may cause an allergic skin reaction.Local irritation, disturbance to the ability of the blood to transport oxygen (as a consequence of methemoglobin formation), damage to the blood.The exposure must be kept as minimum as possible by the use of appropriate risk management measures a suitable collective and personal protective equipment, good industrial hygiene practices and risk communication through appropriate training of workers.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
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:	Face shield (EN 166). In case of dust production: protective goggles (EN 166)
	Skin and body protection:	Protective clothing (EN 14605 or EN 13034). In case of dust production: head/neck protection. In case of dust production: dustproof clothing (EN 13982)
	Respiratory protection:	Dust production: dust mask with filter type P3. Combined gas/dust mask with filter type A/P3
Engineering controls	Engineering controls are used to remove a hazard or place a barrier between the worker and the hazard. Well-designed engineering controls can be highly effective in protecting workers and will typically be independent of worker interactions to provide this high level of protection.	
Environment protective measures		
Avoid release to the environment.		

9. First-aid measures

First-aid measures after inhalation: Remove the victim into fresh air.

First-aid measures after skin contact: Do not apply (chemical) neutralizing agents without medical advice. Remove clothing before washing.

First-aid measures after eye contact: Rinse immediately with plenty of water for 15 minutes. 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. Induce vomiting by giving a 0.9 % saline solution. Take the container/vomit to the doctor/hospital. Ingestion of large quantities: immediately to hospital. Doctor: administration of chemical antidote. Call Poison Information Centre (www.big.be/antigif.html).

10. Fire-fighting measures

Extinguishing media
Suitable extinguishing media**:**Quick-acting ABC powder extinguisher. Class A foam extinguisher. Water (quick-acting extinguisher, reel). Water. Class A foam.

Unsuitable extinguishing media **:**Quick-acting BC powder extinguisher. Quick-acting CO2 extinguisher.

Special hazards arising from the substance or mixture
Hazardous decomposition products in case of fire **:**On burning: release of toxic and corrosive gases/vapours (nitrous 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 fire-fighting water. Use water moderately and if possible collect or contain it.

11. Accidental release measures

Protective equipment : Gloves (EN 374). Face shield (EN 166). Protective clothing (EN 14605 or EN 13034). Dust cloud production: self-contained breathing apparatus (EN 136 + EN 137). Dust cloud production: dust-tight suit (EN 13982). Reactivity hazard: self-contained breathing apparatus (EN 136 + EN 137).Reactivity hazard: gas-tight suit (EN 943).

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

For containment : Contain released product, collect/pump into suitable containers. Plug the leak, cut off the supply.Dam up the solid spill. Knock down/dilute dust clouds with water spray. If reacting: dilute toxic gas/vapour with water spray. Take account of toxic/corrosive precipitation water. Powdered form: no compressed air for pumping over spills.

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 : Disposal must be done according to official regulations.

13. Handling and storage

Precautions for safe handling: Avoid raising dust. 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. Powdered form: no compressed air for pumping over. Keep the container tightly closed.

Hygiene measures: Observe strict hygiene.

14. Classification and Labeling

Hazard pictograms (GHS US) :

Signal word (GHS US) : Danger

Hazard statements (GHS US) : H301+H311+H331 - Toxic if swallowed, in contact with skin or if inhaled
H317 - May cause an allergic skin reaction
H318 - Causes serious eye damage

Precautionary statements (GHS US) : P261 - Avoid breathing dust, fume, gas, mist, spray, vapors.
P264 - Wash hands, forearms and face thoroughly after handling.
P270 - Do not eat, drink or smoke when using this product.
P271 - Use only outdoors or in a well-ventilated area.
P272 - Contaminated work clothing must not be allowed out of the workplace.
P280 - Wear protective gloves, protective clothing, eye protection, face protection.
P301+P310 - If swallowed: Immediately call a POISON CENTER, a doctor.
P302+P352 - If on skin: Wash with plenty of 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.
P310 - Immediately call a POISON CENTER, a doctor.
P311 - Call a POISON CENTER, a doctor.
P312 - Call a doctor, a POISON CENTER if you feel unwell.
P321 - Specific treatment (see supplemental first aid instruction on this label).
P322 - Specific treatment (see supplemental first aid instruction on this label)
P330 - Rinse mouth.
P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.
P361+P364 - Take off immediately all contaminated clothing and wash it before reuse.
P363 - Wash contaminated clothing before reuse.
P403+P233 - Store in a well-ventilated place. Keep container tightly closed.
P405 - Store locked up.
P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

15. Conclusion

2,4-dichloroaniline is a Crystalline liquid,red brown solid aromatic odour.combustible substances are poorly flammable.Very slightly soluble in water.Acute or chronic health hazards result from the substance.The substance is hazardous to the aquatic environment.The substance can react dangerously with:oxidizing agents,acids, acid anhydrides and acid chlorides.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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