TCI EUROPE N.V.

SAFETY DATA SHEET

According to 1907/2006/EC, Article 31

Revision number: 1 **Revision date:** 10/02/2018

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifiers

Product name: 2-Chloroaniline
Product code: C0111

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

Identified uses: Reagents.

1.3 Details of the supplier of the safety data sheet

Supplier:

TCI EUROPE N.V.
Boerenveldseweg 6
Haven 1063
B-2070 Zwijndrecht
Telephone: +32(0)3 735 07 00
E-mail: sales-eu@tcichemicals.com

1.4 Emergency telephone number: +32(0)70 245 245

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Acute toxicity (Oral)	Category 4
Acute toxicity (Dermal)	Category 3
Acute toxicity (Inhalation)	Category 4
Serious eye damage/eye irritation	Category 2
Germ cell mutagenicity	Category 2
Reproductive toxicity	Category 2
Specific target organ toxicity - Single exposure [Category 1]	Liver, Blood system, Heart, Kidney, Central nervous system
Specific target organ toxicity - Repeated exposure [Category 1]	Blood system
Specific target organ toxicity - Repeated exposure [Category 2]	Central nervous system
Acute aquatic hazard	Category 1
Long-term aquatic hazard	Category 1

2.2 Label elements

Pictograms or hazard symbols

Signal word Danger

Hazard statements

H311-Toxic in contact with skin.
H302+H332-Harmful if swallowed or if inhaled.
H319-Causes serious eye irritation.
H341-Suspected of causing genetic defects.
H361fd-Suspected of damaging fertility. Suspected of damaging the unborn child.
H370-Causes damage to organs : Liver Blood system Heart Kidney Central nervous system
H372-Causes damage to organs through prolonged or repeated exposure : Blood system
H373-May cause damage to organs through prolonged or repeated exposure : Central nervous system
H400-Very toxic to aquatic life.
H410-Very toxic to aquatic life with long lasting effects.

Precautionary statements

P260-Do not breathe mist, vapours or spray.
P280-Wear protective gloves, protective clothing, face protection.
P302+P352+P312+P361+P364-IF ON SKIN: Wash with plenty of soap and water. Call a POISON CENTER or doctor if you feel unwell. Take off immediately all contaminated clothing and wash it before reuse.
P304+P340+P312-IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor if you feel unwell.
P305+P351+P338+P337+P313-IF IN EYES: Rinse cautiously with water for several minutes. Remove

contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice or attention.
P308+P311-If exposed or concerned: Call a POISON CENTER or doctor.

2.3 Other hazards

Results of PBT and vPvB assessment

PBT: Not applicable

vPvB: Not applicable

SECTION 3: Composition/information on ingredients

3.1 Substances

Components: 2-Chloroaniline

Percent: >98.0%(GC)

CAS RN: 95-51-2

EC-No: 202-426-4

Chemical Formula: C_6H_6ClN

SECTION 4: First aid measures

4.1 Description of first aid measures

Inhalation: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician.

Skin contact: Remove/Take off immediately all contaminated clothing. Gently wash with plenty of soap and water. Call a POISON CENTER or doctor/physician.

Eye contact: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Call a POISON CENTER or doctor/physician.

Ingestion: Call a POISON CENTER or doctor/physician. Rinse mouth.

Protection of first-aiders: A rescuer should wear personal protective equipment, such as rubber gloves and air-tight goggles.

4.2 Most important symptoms and effects, both acute and delayed

No data available

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: Dry chemical, foam, water spray, carbon dioxide.

Unsuitable extinguishing media: Solid streams of water

5.2 Special hazards arising from the substance or mixture Take care as it may decompose upon combustion or in high temperatures to generate poisonous fume. Carbon dioxide, Carbon monoxide, Nitrogen oxides (NOx), Hydrogen chloride

5.3 Advice for firefighters Fire-extinguishing work is done from the windward and the suitable fire-extinguishing method according to the surrounding situation is used. Uninvolved persons should evacuate to a safe place. In case of fire in the surroundings: Remove movable containers if safe to do so. When extinguishing fire, be sure to wear personal protective equipment

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures Use personal protective equipment. Keep people away from and upwind of spill/leak. Ensure adequate ventilation. Entry to non-involved personnel should be controlled around the leakage area by roping off, etc

6.2 Environmental precautions Be careful not to let it flow into rivers, etc., since adverse effects on the environment are concerned

6.3 Methods and materials for containment and cleaning up Absorb spilled material in a suitable absorbent (e.g. rag, dry sand, earth, saw-dust). In case of large amount of spillage, contain a spill by bunding. Adhered or collected material should be promptly disposed of, in accordance with appropriate laws and regulations.

6.4 Reference to other sections For disposal see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling
Handling is performed in a well ventilated place. Wear suitable protective equipment. Prevent generation of vapour or mist. Wash hands and face thoroughly after handling. Use a closed system if possible. Use a ventilation, local exhaust if vapour or aerosol will be generated. Avoid all contact!

7.2 Conditions for safe storage, including any incompatibilities
Keep container tightly closed. Store in a cool and dark place. Store under inert gas.
Store locked up. Store away from incompatible materials such as oxidizing agents.
Light-sensitive, Air-sensitive

7.3 Specific end use(s)
No further relevant information available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters
No data available

8.2 Exposure controls
Install a closed system or local exhaust. Also install safety shower and eye bath.

Respiratory protection:
Half or full facepiece respirator, self-contained breathing apparatus(SCBA), supplied air respirator, etc. Use respirators approved under appropriate government standards and follow local and national regulations.

Hand protection:
Impervious gloves.

Eye protection:
Safety goggles. A face-shield, if the situation requires.

Skin and body protection:
Impervious protective clothing. Protective boots, if the situation requires.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state (20°C):	Liquid
Form:	Clear
Colour:	Colorless - Slightly pale yellow
Odour:	Amine-like
pH:	No data available
Melting point/freezing point:	-2°C
Boiling point/range:	209°C
Flash point:	104°C
Evaporation rate(Butyl Acetate=1):	No data available
Flammability(solid, gas):	No data available
Flammability or explosive limits:	
Lower:	2.4%
Upper:	14.2%
Vapour pressure:	50Pa/20°C
Vapour density:	4.41
Relative density:	1.22
Solubility(ies):	
[Water]	Very slightly soluble (0.5g/100mL, 20°C)
[Other solvents]	
Miscible:	Ether, Alcohols
Soluble:	Many organic solvents
Partition coefficient: n-octanol/water:	1.92
Autoignition temperature:	500°C
Decomposition temperature:	No data available
Dynamic Viscosity:	No data available
Kinematic viscosity:	No data available

9.2 Other safety information
No data available

SECTION 10: Stability and reactivity

10.1 Reactivity
No data available

10.2 Chemical stability
Stable under proper conditions.

10.3 Possibility of hazardous reactions
No special reactivity has been reported.

10.4 Conditions to avoid
No data available

10.5 Incompatible materials
Oxidizing agents, Acids

10.6 Hazardous decomposition products
Carbon dioxide, Carbon monoxide, Nitrogen oxides (NOx), Hydrogen chloride

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute Toxicity:	ihl-rat LC50:797 ppm/4H orl-mus LD50:256 mg/kg scu-rat LDLo:310 mg/kg skn-cat LD50:222 mg/kg
Skin corrosion/irritation:	No data available
Serious eye damage/irritation:	No data available
Respiratory or skin sensitization:	No data available
Germ cell mutagenicity:	mmo-asn 200 mg/L (-S9) dnr-esc 500 ug/L
Carcinogenicity:	
IARC =	No data available
NTP =	No data available
Reproductive toxicity:	No data available
STOT-single exposure:	No data available
STOT-repeated exposure:	No data available
Aspiration hazard:	No data available
RTECS Number:	BX0525000

SECTION 12: Ecological information

12.1 Toxicity

Fish:	48h LC50:6.3 ppm (Oryzias latipes) 96h LC50:7.3 mg/L (Oryzias latipes)
Crustacea:	48h EC50:2.0 mg/L (Daphnia magna)
Algae:	72h EC50:13 mg/L (Selenastrum capricornutum)

12.2 Persistence and degradability 2.7% (by BOD) , 0% (by TOC) , 4.7% (by GC) , 3.5% (by UV-VIS)

12.3 Bioaccumulative potential 5.4 - 9.0 (conc. 0.1 ppm) , 14 - 32 (conc. 0.01 ppm)

12.4 Mobility in soil

Log Pow:	1.92
Soil adsorption (Koc):	No data available
Henry's Law (PaM ^{3}/mol):	0.4

12.5 Results of PBT and vPvB assessment

PBT:	Not applicable
vPvB:	Not applicable

12.6 Other adverse effects No data available

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Recycle to process, if possible. Consult your local regional authorities. Observe all federal, state and local regulations when disposing of the substance.

SECTION 14: Transport information

14.1 UN number 2019

14.2 UN proper shipping name

ADR/RID	Chloroanilines, liquid
IMDG/IMO	Chloroanilines, liquid
ICAO/IATA	Chloroanilines, liquid

14.3 Transport hazard class(es)

ADR/RID	6.1: Toxic substance
IMDG/IMO	6.1: Toxic substance
ICAO/IATA	6.1: Toxic substance

14.4 Packaging group

ADR/RID	II
IMDG/IMO	II
ICAO/IATA	II

14.5 Environmental hazards

Marine pollutant Y

14.6 Special precautions for user No data available

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

Water Hazard Classes (WGK) :	Class 2 - Hazard to waters
Substance of Very High Concern (SVHC) according to the REACH Regulations (EC) No.1907/2006	Not listed

15.2 Chemical safety assessment A chemical safety assessment has not been carried out.

SECTION 16: Other information

Prepared by: TCI EUROPE N.V.
Issue date: 10/02/2018

This SDS was prepared sincerely on the basis of the information we could obtained, however, any warranty shall not be given regarding the data contained and the assessment of hazards and toxicity. Prior to use, please investigate not only the hazards and toxicity information but also the laws and regulations of the organization, area and country where the products are to be used, which shall be given the first priority.
The products are supposed to be used promptly after purchase in consideration of safety. Some new information or amendments may be added afterwards. If the products are to be used far behind the expected time of use or you have any questions, please feel free to contact us. The stated cautions are for normal handling only. In case of special handling, sufficient care should be taken, in addition to the safety measures suitable for the situation. All chemical products should be treated with the recognition of "having unknown hazards and toxicity", which differ greatly depending on the conditions and handling when in use and/or the conditions and duration of storage. The products must be handled only by those who are familiar with specialized knowledge and have experience or under the guidance of those specialists throughout use from opening to storage and disposal. Safe usage conditions shall be set up on each user's own responsibility.

End of Safety Data Sheet