

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 07.06.2021

Version number 5.0

Revision: 02.06.2021

SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1 Product identifier**

- Trade name:** Mixture T.B.N.: chlorobenzene/acetic acid, 2:1 v/v, according to ASTM D2896, for analysis, ExpertQ®

- Article number:** ME0515

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

No further relevant information available.

- Application of the substance / the preparation:** Laboratory reagent

1.3 Details of the supplier of the safety data sheet**Manufacturer/Supplier:**

Scharlab, S.L.

C/Gato Pérez, 33. Pol.Ind. Mas d'en Cisa

08181 Sentmenat (Barcelona) SPAIN

Tel: (+34) 93 745 64 00 - FAX: (+34) 93 715 27 65

email: scharlab@scharlab.com

Internet Web Site: www.scharlab.com

Regional representation:

Scharlab, S.L.

C/Gato Pérez, 33. Pol.Ind. Mas d'en Cisa

08181 Sentmenat (Barcelona) SPAIN

Tel: (+34) 93 745 64 00 - FAX: (+34) 93 715 27 65

email: scharlab@scharlab.com

Internet Web Site: www.scharlab.com

- Further information obtainable from:** technical department

1.4 Emergency telephone number:

Toxicological Information National Institute of Toxicology and Forensic Sciences: + 34 91 562 04 20. The information will be provided (24h/365 days)

Please contact the regional Scharlab distributor/dealer in your country

During normal opening times: Scharlab, S.L. (+34) 93 715 18 11

SECTION 2: Hazards identification**2.1 Classification of the substance or mixture**

- Classification according to Regulation (EC) No 1272/2008**



GHS05 corrosion

Skin Corr. 1B

H314 Causes severe skin burns and eye damage.

Eye Dam. 1

H318 Causes serious eye damage.



GHS09 environment

Aquatic Chronic 2 H411 Toxic to aquatic life with long lasting effects.



GHS07

Acute Tox. 4

H332 Harmful if inhaled.

2.2 Label elements

- Labelling according to Regulation (EC) No 1272/2008**

The product is classified and labelled according to the CLP regulation.

(Contd. on page 2)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 07.06.2021

Version number 5.0

Revision: 02.06.2021

Trade name: Mixture T.B.N.: chlorobenzene/acetic acid, 2:1 v/v, according to ASTM D2896, for analysis, ExpertQ®

(Contd. of page 1)

• Hazard pictograms



GHS05 GHS07 GHS09

• Signal word

Danger

• Hazard-determining components of labelling:

chlorobenzene

acetic acid

• Hazard statements

H332 Harmful if inhaled.

H314 Causes severe skin burns and eye damage.

H411 Toxic to aquatic life with long lasting effects.

• Precautionary statements

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].

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/doctor.

P321 Specific treatment (see on this label).

P405 Store locked up.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

• 2.3 Other hazards

• Results of PBT and vPvB assessment

• **PBT:** Not applicable.

• **vPvB:** Not applicable.

SECTION 3: Composition/information on ingredients

• 3.2 Chemical characterisation: Mixtures

• **Description:** Mixture of substances listed below with nonhazardous additions.

• Dangerous components:

CAS: 108-90-7	chlorobenzene	50-100%
EINECS: 203-628-5	⚠ Flam. Liq. 3, H226; ⚠ Aquatic Chronic 2, H411;	
Reg.nr.: 01-2119432722-45-XXXX	⚠ Acute Tox. 4, H332; Skin Irrit. 2, H315	
CAS: 64-19-7	acetic acid	25-50%
EINECS: 200-580-7	⚠ Flam. Liq. 3, H226; ⚠ Skin Corr. 1A, H314; ⚠ Acute	
Reg.nr.: 01-2119475328-30-XXXX	Tox. 4, H312	

• **Additional information:** For the wording of the listed hazard phrases refer to section 16.

SECTION 4: First aid measures

• 4.1 Description of first aid measures

• General information:

Immediately remove any clothing soiled by the product.

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

(Contd. on page 3)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 07.06.2021

Version number 5.0

Revision: 02.06.2021

Trade name: Mixture T.B.N.: chlorobenzene/acetic acid, 2:1 v/v, according to ASTM D2896, for analysis, ExpertQ®

(Contd. of page 2)

- **After inhalation:**
Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.
In case of unconsciousness place patient stably in side position for transportation.
- **After skin contact:** Immediately wash with water and soap and rinse thoroughly.
- **After eye contact:**
Rinse opened eye for several minutes under running water. Then consult a doctor.
- **After swallowing:** Drink plenty of water and provide fresh air. Call for a doctor immediately.
- **4.2 Most important symptoms and effects, both acute and delayed**
No further relevant information available.
- **4.3 Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents:**
CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **5.2 Special hazards arising from the substance or mixture**
No further relevant information available.
- **5.3 Advice for firefighters**
- **Protective equipment:** Mouth respiratory protective device.

SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**
Wear protective equipment. Keep unprotected persons away.
- **6.2 Environmental precautions:**
Inform respective authorities in case of seepage into water course or sewage system.
Do not allow to enter sewers/ surface or ground water.
- **6.3 Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Use neutralising agent.
Dispose contaminated material as waste according to item 13.
Ensure adequate ventilation.
- **6.4 Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

SECTION 7: Handling and storage

- **7.1 Precautions for safe handling**
Ensure good ventilation/exhaustion at the workplace.
Prevent formation of aerosols.
- **Information about fire - and explosion protection:** No special measures required.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** Keep container tightly sealed.

(Contd. on page 4)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 07.06.2021

Version number 5.0

Revision: 02.06.2021

Trade name: Mixture T.B.N.: chlorobenzene/acetic acid, 2:1 v/v, according to ASTM D2896, for analysis, ExpertQ®

(Contd. of page 3)

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

SECTION 8: Exposure controls/personal protection

- **8.1 Control parameters**
- **Additional information about design of technical facilities:** No further data; see item 7.
- **Ingredients with limit values that require monitoring at the workplace:**

108-90-7 chlorobenzene

WEL Short-term value: 14 mg/m³, 3 ppm
Long-term value: 4.7 mg/m³, 1 ppm
Sk

64-19-7 acetic acid

WEL Short-term value: 50 mg/m³, 20 ppm
Long-term value: 25 mg/m³, 10 ppm

- **Ingredients with biological limit values:**

108-90-7 chlorobenzene

BMGV 5 mmol/mol creatinine
Medium: urin
Sampling time: Post shift
Parameter: 4-chlorocatechol

- **Additional information:** The lists valid during the making were used as basis.
- **8.2 Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing
Wash hands before breaks and at the end of work.
Avoid contact with the eyes and skin.
- **Respiratory protection:**
In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.
- **Protection of hands:**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

- **Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

- **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

(Contd. on page 5)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 07.06.2021

Version number 5.0

Revision: 02.06.2021

Trade name: Mixture T.B.N.: chlorobenzene/acetic acid, 2:1 v/v, according to ASTM D2896, for analysis, ExpertQ®

(Contd. of page 4)

Eye protection:

Tightly sealed goggles

SECTION 9: Physical and chemical properties**9.1 Information on basic physical and chemical properties****General Information****Appearance:****Form:**

Fluid

Colour:

Colourless

Odour:

Like aromatic solvents

Odour threshold:

Not determined.

pH-value at 20 °C:

<1

Change in condition**Melting point/freezing point:**

Undetermined.

Initial boiling point and boiling range: Undetermined.**Flash point:**

Not applicable.

Flammability (solid, gas):

Not applicable.

Ignition temperature:

485 °C

Decomposition temperature:

Not determined.

Auto-ignition temperature:

Product is not selfigniting.

Explosive properties:

Product does not present an explosion hazard.

Explosion limits:**Lower:**

1.3 Vol %

Upper:

17 Vol %

Vapour pressure at 20 °C:

16 hPa

Density at 20 °C:1.08 g/cm³**Relative density**

Not determined.

Vapour density

Not determined.

Evaporation rate

Not determined.

Solubility in / Miscibility with water:

Not miscible or difficult to mix.

Partition coefficient: n-octanol/water:

Not determined.

Viscosity:**Dynamic:**

Not determined.

Kinematic:

Not determined.

Solvent content:**Organic solvents:**

32.1 %

9.2 Other information

No further relevant information available.

(Contd. on page 6)

Safety data sheet according to 1907/2006/EC, Article 31

Printing date 07.06.2021

Version number 5.0

Revision: 02.06.2021

Trade name: Mixture T.B.N.: chlorobenzene/acetic acid, 2:1 v/v, according to ASTM D2896, for analysis, ExpertQ®

(Contd. of page 5)

SECTION 10: Stability and reactivity

- **10.1 Reactivity** No further relevant information available.
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:**
No decomposition if used according to specifications.
- **10.3 Possibility of hazardous reactions** No dangerous reactions known.
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:** No dangerous decomposition products known.

SECTION 11: Toxicological information

- **11.1 Information on toxicological effects**
- **Acute toxicity**
Harmful if inhaled.
- **LD/LC50 values relevant for classification:**

108-90-7 chlorobenzene
Oral LD50 2290 mg/kg (rat)
64-19-7 acetic acid
Oral LD50 3310 mg/kg (rat)
Dermal LD50 1060 mg/kg (rabbit)
- **Primary irritant effect:**
- **Skin corrosion/irritation**
Causes severe skin burns and eye damage.
- **Serious eye damage/irritation**
Causes serious eye damage.
- **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.
- **Additional toxicological information:**
- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**
- **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
- **Carcinogenicity** Based on available data, the classification criteria are not met.
- **Reproductive toxicity** Based on available data, the classification criteria are not met.
- **STOT-single exposure** Based on available data, the classification criteria are not met.
- **STOT-repeated exposure** Based on available data, the classification criteria are not met.
- **Aspiration hazard** Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

- **12.1 Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **12.2 Persistence and degradability** No further relevant information available.
- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.
- **Ecotoxicological effects:**
- **Remark:** Toxic for fish
- **Additional ecological information:**
- **General notes:**
Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water
Do not allow product to reach ground water, water course or sewage system.
Must not reach sewage water or drainage ditch undiluted or unneutralised.
Danger to drinking water if even small quantities leak into the ground.

(Contd. on page 7)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 07.06.2021

Version number 5.0

Revision: 02.06.2021

Trade name: Mixture T.B.N.: chlorobenzene/acetic acid, 2:1 v/v, according to ASTM D2896, for analysis, ExpertQ®

(Contd. of page 6)

Also poisonous for fish and plankton in water bodies.

Toxic for aquatic organisms




Rinse off of bigger amounts into drains or the aquatic environment may lead to decreased pH-values. A low pH-value harms aquatic organisms. In the dilution of the use-level the pH-value is considerably increased, so that after the use of the product the aqueous waste, emptied into drains, is only low water-dangerous.

- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **12.6 Other adverse effects** No further relevant information available.

SECTION 13: Disposal considerations

- **13.1 Waste treatment methods**
- **Recommendation**
Must not be disposed together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.

SECTION 14: Transport information

- | | |
|---|--|
| • 14.1 UN-Number | UN3265 |
| • ADR, IMDG, IATA | |
| • 14.2 UN proper shipping name | 3265 CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (ACETIC ACID, GLACIAL), ENVIRONMENTALLY HAZARDOUS |
| • ADR | CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (ACETIC ACID, GLACIAL), MARINE POLLUTANT |
| • IMDG | CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (ACETIC ACID, GLACIAL) |
| • IATA | CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (ACETIC ACID, GLACIAL) |
| • 14.3 Transport hazard class(es) | |
| • ADR, IMDG | |
|   | |
| • Class | 8 Corrosive substances. |
| • Label | 8 |
| • IATA | |
|  | |
| • Class | 8 Corrosive substances. |
| • Label | 8 |
| • 14.4 Packing group | |
| • ADR, IMDG, IATA | II |

(Contd. on page 8)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 07.06.2021

Version number 5.0

Revision: 02.06.2021

Trade name: Mixture T.B.N.: chlorobenzene/acetic acid, 2:1 v/v, according to ASTM D2896, for analysis, ExpertQ®

(Contd. of page 7)

- | | |
|--|---|
| <ul style="list-style-type: none"> • 14.5 Environmental hazards: • Marine pollutant: • Special marking (ADR): • 14.6 Special precautions for user • Hazard identification number (Kemler code): • EMS Number: • Segregation groups • Stowage Category • Stowage Code • 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code • Transport/Additional information: | <p>Product contains environmentally hazardous substances: chlorobenzene</p> <p>Yes</p> <p>Symbol (fish and tree)</p> <p>Symbol (fish and tree)</p> <p>Warning: Corrosive substances.</p> <p>80</p> <p>F-A,S-B</p> <p>Acids</p> <p>B</p> <p>SW2 Clear of living quarters.</p> <p>Not applicable.</p> |
|--|---|
-
- | | |
|--|---|
| <ul style="list-style-type: none"> • ADR • Limited quantities (LQ) • Transport category • Tunnel restriction code • UN "Model Regulation": | <p>1L</p> <p>2</p> <p>E</p> <p>UN 3265 CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (ACETIC ACID, GLACIAL), 8, II, ENVIRONMENTALLY HAZARDOUS</p> |
|--|---|

SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Directive 2012/18/EU**
- **Named dangerous substances - ANNEX I** None of the ingredients is listed.
- **Seveso category** E2 Hazardous to the Aquatic Environment
- **Qualifying quantity (tonnes) for the application of lower-tier requirements** 200 t
- **Qualifying quantity (tonnes) for the application of upper-tier requirements** 500 t
- **REGULATION (EC) No 1907/2006 ANNEX XVII** Conditions of restriction: 3
- **DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment – Annex II**
- None of the ingredients is listed.
- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Relevant phrases**
- H226 Flammable liquid and vapour.
- H312 Harmful in contact with skin.
- H314 Causes severe skin burns and eye damage.
- H315 Causes skin irritation.
- H332 Harmful if inhaled.
- H411 Toxic to aquatic life with long lasting effects.
- **Classification according to Regulation (EC) No 1272/2008**
- The classification of the mixture is generally based on the calculation method using substance data according to Regulation (EC) No 1272/2008.

(Contd. on page 9)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 07.06.2021

Version number 5.0

Revision: 02.06.2021

Trade name: Mixture T.B.N.: chlorobenzene/acetic acid, 2:1 v/v, according to ASTM D2896, for analysis, ExpertQ®

(Contd. of page 8)

• Department issuing SDS: product safety department**• Contact:** msds@scharlab.com**• Abbreviations and acronyms:**

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

ICAO: International Civil Aviation Organisation

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Flam. Liq. 3: Flammable liquids – Category 3

Acute Tox. 4: Acute toxicity – Category 4

Skin Corr. 1A: Skin corrosion/irritation – Category 1A

Skin Corr. 1B: Skin corrosion/irritation – Category 1B

Skin Irrit. 2: Skin corrosion/irritation – Category 2

Eye Dam. 1: Serious eye damage/eye irritation – Category 1

Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2

(Contd. on page 10)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 07.06.2021

Version number 5.0

Revision: 02.06.2021

Trade name: Mixture T.B.N.: chlorobenzene/acetic acid, 2:1 v/v, according to ASTM D2896, for analysis, ExpertQ®

(Contd. of page 9)

Annex: Exposure scenario

- **Description of the activities / processes covered in the Exposure Scenario**

See section 1 of the annex to the Safety Data Sheet.

- **2 - Conditions of use**

- **Duration and frequency** 5 workdays/week.

- **Physical parameters**

- **Physical state** Fluid

- **Concentration of the substance in the mixture** The substance is main component.

- **Other operational conditions**

- **Other operational conditions affecting environmental exposure** Use only on hard ground.

- **Other operational conditions affecting worker exposure**

Avoid contact with eyes.

Avoid contact with the skin.

Do not breathe gas/vapour/aerosol.

- **Other operational conditions affecting consumer exposure** No special measures required.

- **Other operational conditions affecting consumer exposure during the use of the product**

Not applicable.

- **Risk management measures**

- **Worker protection**

- **Organisational protective measures** No special measures required.

- **Technical protective measures**

Use product only in enclosed systems.

Ensure that suitable extractors are available on processing machines

- **Personal protective measures**

Do not inhale gases / fumes / aerosols.

Avoid contact with the skin.

Avoid contact with the eyes.

Tightly sealed goggles

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

- **Measures for consumer protection** Ensure adequate labelling.

- **Environmental protection measures**

- **Water**

Generally, prior to the introduction of wastewater into wastewater treatment plants a neutralisation is required.

Do not allow to reach sewage system.

- **Soil** Prevent contamination of soil.

- **Disposal measures**

Disposal must be made according to official regulations.

Ensure that waste is collected and contained.

- **Disposal procedures**

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

- **Waste type** Partially emptied and uncleaned packaging

- **3 - Exposure estimation**

- **Consumer** Not relevant for this Exposure Scenario.

- **4 - Guidance for downstream users** No further relevant information available.