

Printing date 11.04.2023 Version number 8.0 (replaces version 7.0) Revision: 11.04.2023

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

- · 1.1 Product identifier
- · Trade name: Aquagent® Coulometric AK, anolyte for coulometric Karl Fischer titration
- · Article number: AQ0032
- · Registration number

A registration number is not available for this substance because the substance or its uses are exempted from registration, the annual tonnage does not require registration or the registration is planned for a later date.

- 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



Flam. Lig. 2 H225 Highly flammable liquid and vapour.



Carc. 2 H351 Suspected of causing cancer. Repr. 1B H360D May damage the unborn child.

STOT RE 1 H372 Causes damage to the central nervous system, the kidneys, the liver and the

respiratory system through prolonged or repeated exposure.

(Contd. on page 2)



Version number 8.0 (replaces version 7.0) Printing date 11.04.2023 Revision: 11.04.2023

Trade name: Aquagent® Coulometric AK, anolyte for coulometric Karl Fischer titration

(Contd. of page 1)



Skin Corr. 1C H314 Causes severe skin burns and eye damage.

Eye Dam. 1 H318 Causes serious eye damage.



Acute Tox. 4 H302 Harmful if swallowed.

- · 2.2 Label elements
- · Labelling according to Regulation (EC) No 1272/2008

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

· Hazard pictograms









GHS02 GHS05 GHS07

- · Signal word Danger
- · Hazard-determining components of labelling:

ethanediol

trifluoroethanol

trichloromethane

imidazole

Hazard statements

H225 Highly flammable liquid and vapour.

H302 Harmful if swallowed.

H314 Causes severe skin burns and eye damage.H351 Suspected of causing cancer.

H360D May damage the unborn child.

H372 Causes damage to the central nervous system, the kidneys, the liver and the respiratory system through prolonged or repeated exposure.

Precautionary statements

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition

sources. No smoking.

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.

P370+P378 In case of fire: Use CO2, powder or water spray to extinguish.

P405 Store locked up.

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

international regulations.

· Additional information:

For use in industrial installations only.

- · 2.3 Other hazards
- · Results of PBT and vPvB assessment
- · PBT: Not applicable.

(Contd. on page 3)



Printing date 11.04.2023 Version number 8.0 (replaces version 7.0) Revision: 11.04.2023

Trade name: Aquagent® Coulometric AK, anolyte for coulometric Karl Fischer titration

(Contd. of page 2)

· vPvB: Not applicable.

SECTION 3: Composition/information on ingredients

· 3.2 Mixtures

· Description: Mixture of substances listed below with nonhazardous additions.

· Dangerous components:

CAS: 107-21-1 ethanediol 25-50% EINECS: 203-473-3 Acute Tox. 4, H302 Reg.nr.: 01-2119456816-28-XXXX CAS: 67-66-3 trichloromethane 25-50% Acute Tox. 3, H331; Carc. 2, H351; Repr. 2, H361d; STOT RE 1, H372; Acute Tox. 4, H302; Skin EINECS: 200-663-8 Reg.nr.: 01-2119486657-20-Irrit. 2, H315; Eye Irrit. 2, H319 XXXX CAS: 75-89-8 10-25% trifluoroethanol EINECS: 200-913-6 Flam. Liq. 3, H226; Acute Tox. 3, H301; STOT Reg.nr.: 01-2119488763-23-RE 2, H373; Eye Dam. 1, H318; Acute Tox. 4, XXXX H312; Acute Tox. 4, H332; Skin Irrit. 2, H315 CAS: 288-32-4 imidazole 5-10% EINECS: 206-019-2 Repr. 1B, H360D;
 Skin Corr. 1C, H314;
 Acute Reg.nr.: 01-2119485825-24-Tox. 4, H302 XXXX CAS: 7553-56-2 iodine ≥2.5-<5% EINECS: 231-442-4 STOT RE 1, H372; Aquatic Acute 1, H400; Acute Tox. 4, H302; Acute Tox. 4, H312; Acute Tox. Reg.nr.: 01-2119485285-30-4, H332; Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT SE XXXX

3, H335

· 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.

Remove breathing equipment only after contaminated clothing have been completely removed. In case of irregular breathing or respiratory arrest provide artificial respiration.

· After inhalation:

Supply fresh air or oxygen; call for doctor.

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: Do not induce vomiting; call for medical help 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.



Printing date 11.04.2023 Version number 8.0 (replaces version 7.0) Revision: 11.04.2023

Trade name: Aquagent® Coulometric AK, anolyte for coulometric Karl Fischer titration

(Contd. of page 3)

SECTION 5: Firefighting measures

- · 5.1 Extinguishing media
- · Suitable extinguishing agents: CO2, sand, extinguishing powder. Do not use water.
- · For safety reasons unsuitable extinguishing agents: Water with full jet
- · 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.
- · Additional information

Dispose of fire debris and contaminated fire fighting water in accordance with official regulations. Collect contaminated fire fighting water separately. It must not enter the sewage system.

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: 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).

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

Do not flush with water or aqueous cleansing agents

· 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.

Open and handle receptacle with care.

Prevent formation of aerosols.

Do not eat, drink or smoke during use.

Wash hands after handling.

· Information about fire - and explosion protection:

Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

Keep respiratory protective device available.

- · 7.2 Conditions for safe storage, including any incompatibilities
- · Storage:
- · Requirements to be met by storerooms and receptacles: Store in a cool location.
- · Information about storage in one common storage facility: Not required.
- · Further information about storage conditions:

Keep container tightly sealed.

Store in cool, dry conditions in well sealed receptacles.

See product's label for recommended storage temperature.

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



Printing date 11.04.2023 Version number 8.0 (replaces version 7.0) Revision: 11.04.2023

Trade name: Aquagent® Coulometric AK, anolyte for coulometric Karl Fischer titration

(Contd. of page 4)

SECTION 8: Exposure controls/personal protection

- · 8.1 Control parameters
- · Ingredients with limit values that require monitoring at the workplace:

107-21-1 ethanediol

WEL Short-term value: 104** mg/m³, 40** ppm Long-term value: 10* 52** mg/m³, 20** ppm

Sk *particulate **vapour 67-66-3 trichloromethane

WEL Long-term value: 9.9 mg/m³, 2 ppm

Sk

7553-56-2 iodine

WEL Short-term value: 1.1 mg/m³, 0.1 ppm

- · Additional information: The lists valid during the making were used as basis.
- · 8.2 Exposure controls
- · Appropriate engineering controls No further data; see item 7.
- · Individual protection measures, such as 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.

Store protective clothing separately.

Avoid contact with the skin.

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.

· Hand protection



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 6)



Safety data sheet

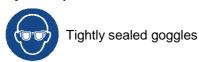
according to 1907/2006/EC, Article 31 Commission regulation (EU) 2020/878

Printing date 11.04.2023 Version number 8.0 (replaces version 7.0) Revision: 11.04.2023

Trade name: Aquagent® Coulometric AK, anolyte for coulometric Karl Fischer titration

(Contd. of page 5)

· Eye/face protection



SECTION 9: Physical and chemical properties

· 9.1 Information on basic physical and chemical properties

· General Information

Physical state
Colour:
Odour:
Odour threshold:
Melting point/freezing point:

Fluid
Yellowish
Characteristic
Not determined.
Undetermined.

· Boiling point or initial boiling point and

boiling range
Undetermined.
Flammability
Undetermined.
Highly flammable.

· Lower and upper explosion limit

Lower: Not determined.
Upper: Not determined.
Flash point: 10 °C

Flash point: 10 °C
 pH at 20 °C
 5.5-6

· Viscosity:

Kinematic viscosityDynamic:Not determined.Not determined.

· Solubility · water:

water: Not miscible or difficult to mix.

· Partition coefficient n-octanol/water (log

value) Not determined.Vapour pressure: Not determined.

Density and/or relative density

Density at 20 °C:
 Relative density
 Vapour density
 Not determined.
 Not determined.

· 9.2 Other information

· Appearance:

· Form: Fluid

Important information on protection of health

and environment, and on safety.Auto-ignition temperature: Product is not selfigniting.

• Explosive properties: Product is not explosive. However, formation of

explosive air/vapour mixtures are possible.

· Solvent content:

· Organic solvents: 17.8 %

· Change in condition

· Evaporation rate Not determined.

· Information with regard to physical hazard classes

Explosives Void
Flammable gases Void
Aerosols Void
Oxidising gases Void

(Contd. on page 7)



Printing date 11.04.2023 Version number 8.0 (replaces version 7.0) Revision: 11.04.2023

Trade name: Aquagent® Coulometric AK, anolyte for coulometric Karl Fischer titration

(Contd. of page 6)

· Gases under pressure	Void
· Flammable liquids	Highly flammable liquid and vapour.
· Flammable solids	Void
· Self-reactive substances and mixtures	Void
· Pyrophoric liquids	Void
· Pyrophoric solids	Void

Self-heating substances and mixtures
 Substances and mixtures, which emit flammable gases in contact with water
 Oxidising liquids
 Oxidising solids
 Organic peroxides
 Corrosive to metals

· Desensitised explosives Void

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 hazard classes as defined in Regulation (EC) No 1272/2008
- · Acute toxicity Harmful if swallowed.
- · LD/LC50 values relevant for classification:

67-66-3 trichloromethane

Oral LD50 908 mg/kg (rat)
Dermal LD50 3,890 mg/kg (rabbit)

Inhalative LC50/4 h 9.2 mg/l (rat)

75-89-8 trifluoroethanol

Oral LD50 240 mg/kg (rat)
Dermal LD50 1,680 mg/kg (rat)

- · Skin corrosion/irritation Causes severe skin burns and eye damage.
- · Serious eye damage/irritation Causes serious eye damage.
- · Carcinogenicity Suspected of causing cancer.
- · Reproductive toxicity May damage the unborn child.
- · STOT-repeated exposure

Causes damage to the central nervous system, the kidneys, the liver and the respiratory system through prolonged or repeated exposure.

- · 11.2 Information on other hazards
- · Endocrine disrupting properties

None of the ingredients is listed.

(Contd. on page 8)



Printing date 11.04.2023 Version number 8.0 (replaces version 7.0) Revision: 11.04.2023

Trade name: Aquagent® Coulometric AK, anolyte for coulometric Karl Fischer titration

(Contd. of page 7)

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.
- · 12.5 Results of PBT and vPvB assessment
- · PBT: Not applicable.
- · vPvB: Not applicable.
- · 12.6 Endocrine disrupting properties

The product does not contain substances with endocrine disrupting properties.

- · 12.7 Other adverse effects
- · Additional ecological information:
- · General notes:

Water hazard class 3 (German Regulation) (Self-assessment): extremely hazardous for water Do not allow product to reach ground water, water course or sewage system, even in small quantities.

Danger to drinking water if even extremely small quantities leak into the ground.

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.

UN2924

- · Uncleaned packaging:
- · Recommendation: Disposal must be made according to official regulations.

SECTION 14: Transport information

- · 14.1 UN number or ID number
- · ADR, IMDG, IATA
- · 14.2 UN proper shipping name

· ADR

· IMDG, IATA

- · 14.3 Transport hazard class(es)
- · ADR

· Class

· Label





3 Flammable liquids.

(trifluoroethanol, imidazole)

(trifluoroethanol, imidazole)

2924 FLAMMABLE LIQUID, CORROSIVE, N.O.S.

FLAMMABLE LIQUID, CORROSIVE, N.O.S.

3+8

(Contd. on page 9)



Safety data sheet

according to 1907/2006/EC, Article 31 Commission regulation (EU) 2020/878

Printing date 11.04.2023 Version number 8.0 (replaces version 7.0) Revision: 11.04.2023

Trade name: Aquagent® Coulometric AK, anolyte for coulometric Karl Fischer titration

(Contd. of page 8)

· IMDG





· Class 3 Flammable liquids.

· **Label** 3/8

· IATA





· Class 3 Flammable liquids.

· Label 3 (8)

· 14.4 Packing group

· ADR, IMDG, IATA

• 14.5 Environmental hazards: Not applicable.

• 14.6 Special precautions for user Warning: Flammable liquids.

Hazard identification number (Kemler code): 338
 EMS Number: F-E,S-C

· Segregation groups (SGG18) Alkalis

· Stowage Category

• Stowage Code SW2 Clear of living quarters.

· 14.7 Maritime transport in bulk according to

IMO instruments Not applicable.

· Transport/Additional information:

· ADR

Limited quantities (LQ)
 Transport category
 Tunnel restriction code

· UN "Model Regulation": UN 2924 FLAMMABLE LIQUID, CORROSIVE,

N.O.S. (TRIFLUOROETHANOL, IMIDAZOLE), 3

(8), II

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 N/A
- Seveso category P5c FLAMMABLE LIQUIDS
- · Qualifying quantity (tonnes) for the application of lower-tier requirements 5,000 t
- · Qualifying quantity (tonnes) for the application of upper-tier requirements 50,000 t
- · 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.

(Contd. on page 10)



Printing date 11.04.2023 Version number 8.0 (replaces version 7.0) Revision: 11.04.2023

Trade name: Aquagent® Coulometric AK, anolyte for coulometric Karl Fischer titration

(Contd. of page 9)

· Relevant phrases

- H226 Flammable liquid and vapour.
- H301 Toxic if swallowed.
- H302 Harmful if swallowed.
- H312 Harmful in contact with skin.
- H314 Causes severe skin burns and eye damage.
- H315 Causes skin irritation.
- H318 Causes serious eye damage.
- H319 Causes serious eye irritation.
- H331 Toxic if inhaled.
- H332 Harmful if inhaled.
- H335 May cause respiratory irritation.
- H351 Suspected of causing cancer.
- H360D May damage the unborn child.
- H361d Suspected of damaging the unborn child.
- H372 Causes damage to organs through prolonged or repeated exposure.
- H373 May cause damage to organs through prolonged or repeated exposure.
- H400 Very toxic to aquatic life.

· Department issuing SDS: Product Safety Department

- · Contact: msds@scharlab.com
- · Abbreviations and acronyms:

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. 2: Flammable liquids - Category 2

Flam. Liq. 3: Flammable liquids - Category 3

Acute Tox. 4: Acute toxicity – Category 4

Acute Tox. 3: Acute toxicity - Category 3

Skin Corr. 1C: Skin corrosion/irritation - Category 1C

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

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

Eye Irrit. 2: Serious eye damage/eye irritation – Category 2

Carc. 2: Carcinogenicity - Category 2

Repr. 1B: Reproductive toxicity – Category 1B

Repr. 2: Reproductive toxicity - Category 2

STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

STOT RE 1: Specific target organ toxicity (repeated exposure) – Category 1

STOT RE 2: Specific target organ toxicity (repeated exposure) - Category 2

Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard - Category 1

(Contd. on page 11)



Printing date 11.04.2023 Version number 8.0 (replaces version 7.0) Revision: 11.04.2023

Trade name: Aquagent® Coulometric AK, anolyte for coulometric Karl Fischer titration

(Contd. of page 10)

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 No special measures required.
- · Other operational conditions affecting worker exposure

Avoid contact with eyes.

Avoid contact with the skin.

Do not breathe gas/vapour/aerosol.

Take precautionary measures against static discharge.

Keep away from sources of ignition - No smoking.

- 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

Provide explosion-proof electrical equipment.

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.

Pregnant women should strictly avoid inhalation or skin contact.

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 No special measures required.
- · Disposal measures 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

The ECETOC TRA tool has been used to estimate workplace exposures unless otherwise stated.

- · Consumer Not relevant for this Exposure Scenario.
- · 4 Guidance for downstream users

Whether the downstream user uses the substance / the mixture within the scope of the Exposure Scenario can be determined by means of a technical assessment.