

Revised: 9 Apr 2025

SAFETY DATA SHEET

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

- Product Name: Avalksan Gold CF (Chlorine Free)
- Product classification: Mixture
- CAS Number: 79-10-7
- UN No.: 1824
- UFI: FQD2-UK0D-Y306-0AXS

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

- Use of the substance/mixture: Non-foaming detergent, Cleaning agent, For Industrial use, For professional use
- Use advised against: No specific uses advised against are identified.

1.3 Details of the supplier of the safety data sheet

- Name of Supplier: CARBON CHEMICALS GROUP LTD
- Address of Supplier: RAHEENS EAST, RINGASKIDDY
CORK, IRELAND, P43 R772
- Telephone: +353 21 4378988
- Responsible Person: Sds@carbon.ie
- Email: Sds@carbon.ie

1.4 Emergency telephone number

- Emergency Telephone: The National Poisons Information Centre (NPIC)
Public: +353 (0) 1 809 2166 (7 days a week, 8am- 10pm)
Healthcare professionals: +353 (0) 1 809 2566 (24 h service)
See also section 4 "First aid measures"
Company Number: +353 21 4378988 (5 days a week 8am - 5pm)

SECTION 2: Hazards identification**2.1 Classification of the substance or mixture****2.1.1 GHS hazard categories****2.1.1.1 Physical and chemical hazards**

Corrosive to metals: Met. Corr. 1

2.1.1.2 Environmental hazards

Not classified

2.1.1.3 Health hazards

Skin corrosion/irritation: Skin Corr. 1A

2.2 Label elements

SECTION 2: Hazards identification (....)**GHS05**

- Signal Word: Danger

2.2.1 Hazard statements

H314 - Causes severe skin burns and eye damage.

H290 - May be corrosive to metals.

2.2.2 Precautionary statements

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

P260 - Do not breathe dust/fume/gas/mist/vapours/spray.

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.

P280 - Wear protective gloves/protective clothing/eye protection/face protection.

P310 - Immediately call a POISON CENTER or doctor/physician.

P234 - Keep only in original packaging.

2.3 Other hazards

- Contains: Sodium hydroxide, acrylic acid
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SECTION 3: Composition/information on ingredients**3.2 Mixtures****3.2.1 sodium hydroxide; caustic soda**

CAS Number: 1310-73-2

EC Number: 215-185-5

Concentration: >30 %

Specific Concentration Limits: Skin Corr. 1A; H314: $C \geq 5\%$
Skin Corr. 1B; H314: $2\% \leq C < 5\%$
Skin Irrit. 2; H315: $0,5\% \leq C < 2\%$
Eye Irrit. 2; H319: $0,5\% \leq C < 2\%$

M factor: Not applicable

Acute toxicity estimate: Not applicable

Categories: Skin Corr. 1A, Eye Dam. 1

REACH Registration Number: 01-2119457892-27-0000

Symbols: GHS05

H Statements: H314

3.2.2 acrylic acid; prop-2-enoic acid

SECTION 3: Composition/information on ingredients (....)

CAS Number: 79-10-7
EC Number: 201-177-9
Concentration: < 1 %
Specific Concentration Limits: STOT SE 3; H335: C ≥ 1 %
M factor: Not available
Acute toxicity estimate: Not available
Categories: Flam. Liq. 3; Acute Tox. 4; Acute Tox. 4; Acute Tox. 4; Skin Corr. 1A; Aquatic Acute
REACH Registration Number: 01-2119452449-31-0000
Symbols: GHS02, GHS05, GHS07, GHS09
H Statements: H226, H332, H312, H302, H314, H400

3.2.3 Deionised Water

CAS Number: 7732-18-5
EC Number: 231-791-2
Concentration: >15%
Specific Concentration Limits: None assigned
M factor: Not applicable
Acute toxicity estimate: Not applicable
Categories: Not applicable
REACH Registration Number: Not applicable
Symbols: Not applicable
H Statements: Not applicable

SECTION 4: First aid measures**4.1 Description of first aid measures**

- General information: Provide general first aid, rest, warmth and fresh air., Seek medical attention for all burns and eye injuries, regardless how minor they may seem., First aid personnel must be aware of own risk during rescue

4.1.1 Inhalation

IF INHALED: Remove person to fresh air and keep comfortable for breathing.
Keep warm and at rest
Seek medical advice (show the label where possible).
If breathing is difficult, oxygen should be given by a trained person

4.1.2 Ingestion

Immediately rinse mouth and drink plenty of water
Provide general first aid, rest, warmth and fresh air.
Never give anything by mouth to an unconscious person
Seek immediate medical attention
Do NOT induce vomiting.

4.1.3 Contact with skin

Remove affected person from source of contamination.

SECTION 4: First aid measures (....)

Remove contaminated clothing.
Wash the skin immediately with soap and water.
Apply sterile protective bandage.
Get medical attention if symptoms persist.

4.1.4 Contact with eyes

Do not rub eye.
Remove contact lenses if present and easy to do so.
Immediately flush eyes with plenty of water for at least 15 minutes, lifting lower and upper eyelids occasionally.
Avoid contaminating unaffected eye.
Seek medical attention.

4.2 Most important symptoms and effects, both acute and delayed

- General information: The severity of the symptoms described will vary dependant of the concentration and the length of exposure.

4.2.1 Inhalation

There may be shortness of breath with a burning sensation in the throat.
Corrosive to respiratory system.
Inhalation of mist or vapour may cause respiratory irritation

4.2.2 Ingestion

Do NOT ingest.
Exposure to liquid product may cause moderate to severe irritation to inner linings of mouth, esophagus and gastrointestinal tract.
May cause chemical burns in mouth and throat.

4.2.3 Contact with skin

Corrosive
Can cause redness, pain, and severe skin burns.
Concentrated solutions cause deep ulcers and discolour skin.

4.2.4 Contact with eyes

Extreme irritation of eyes and mucous membranes, including burning and tearing.
Can cause damage to the eyes

4.3 Indication of any immediate medical attention and special treatment needed

- Basic first aid, decontamination, symptomatic treatment.
- Treat with a corticoid metered aerosol depending on the amount inhaled.

SECTION 5: Firefighting measures

5.1 Extinguishing media

- Suitable extinguishing media: Use fire-extinguishing media appropriate for surrounding materials., Carbon dioxide (CO₂), foam, extinguishing powder, in cases of larger fires, water spray should be used.
- Unsuitable extinguishing media: No unsuitable extinguishing media identified.

5.2 Special hazards arising from the substance or mixture

SECTION 5: Firefighting measures (....)

- Hazardous combustion products: Hazardous decomposition products formed under fire conditions., During fire, gases hazardous to health may be formed
- Unusual fire & explosion hazards: Flammable hydrogen can form when the product contacts metals.
- Specific hazards: If heated, corrosive vapours may be formed., Promotes combustion of combustible products or materials.

5.3 Advice for firefighters

- Special fire fighting procedures: Containers close to fire should be removed immediately or cooled with water if safe to do so
, Do not stay in the fire zone without self contained breathing apparatus, In order to avoid contact with the skin and eyes, keep a safe distance and wear suitable protective clothing, Avoid breathing fire vapours.
 - Protective equipment for firefighters: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode., Clothing for firefighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.
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SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

- For non-emergency personnel: Keep unnecessary personnel away., Ensure adequate ventilation, Wear appropriate protective equipment and clothing during clean-up, For personal protection, see section 8 of the SDS., Evacuate and ventilate area., Eliminate all sources of ignition., Do not touch or walk through spilled material.
- For emergency responders: Follow safe handling advice and personal protective equipment recommendations for normal use of product

6.2 Environmental precautions

- Do not discharge into drains, water courses or onto the ground.
- Spillages or uncontrolled discharges into watercourses must be IMMEDIATELY alerted to the Environmental Agency or other appropriate regulatory body.

6.3 Methods and material for containment and cleaning up

- Wear protective clothing as per section 8
- DO NOT touch spilled material!
- Ventilate and evacuate the area.
- Eliminate all sources of ignition.
- Stop leak if safe to do so.
- Cover drains.
- Absorb spillage with non-combustible, inert absorbent material.
- Ensure that waste and contaminated materials are collected and removed from the work area as soon as possible in a suitably labelled container.
- Use non - metallic tools/containers for clean up.

6.4 Reference to other sections

SECTION 6: Accidental release measures (....)

- See Section 1 for emergency contact. See Section 8 for personal protection equipment (PPE). See Section 13 for waste disposal
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SECTION 7: Handling and storage**7.1 Precautions for safe handling**

- Avoid inhalation of vapours and contact with skin and eyes.
- Wear protective clothing as per section 8
- Wear appropriate respirator when ventilation is inadequate.
- Do not return product to containers for reuse.
- Do not mix with any other products
- Keep away from static electricity
- Wash hands thoroughly after using this substance
- Keep away from food, drink and animal feedingstuffs
- If the full protective suit becomes contaminated, first take a shower with the suit on.

7.2 Conditions for safe storage, including any incompatibilities

- Storage precautions: Store in tightly closed original container in a dry, cool and well-ventilated place, Keep away from incompatible materials (see section 10)., Keep away from heat, sparks, direct sunlight and open flames., Take precautionary measures against static discharges., Do not use glass containers for spilled liquid, Do not use metal containers for spilled liquid, Bulk tanks should also be vented and suitable tank materials include certain types of rubber lined mild steel, PVC or PVC lined GRP, polyethylene and PTFE., Avoid contact with metals such as aluminum, zinc, nickel, copper and copper alloys.
- Storage class (TRGS 510): 8 B, Non- combustible corrosive substances

7.3 Specific end use(s)

- Specific end use(s): The identified uses for this product are detailed in Section 1.2
 - Usage description: Use only according to directions
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SECTION 8: Exposure controls/personal protection**8.1 Control parameters****8.1.1 sodium hydroxide; caustic soda**

CAS Number: 1310-73-2

WEL (short term- 15 min): 2 mg/m³

DNEL (Industry; inhalational, long term local effects): (irritation respiratory tract) 1 mg/m³

DNEL (Industry, dermal, acute effects, local effects): High hazard (no threshold derived)

DNEL (Industry; dermal, long term local effects): High hazard (no threshold derived)

DNEL (Industry, eyes, local effect): High hazard (no threshold derived)

8.1.2 acrylic acid; prop-2-enoic acid

CAS Number: 79-10-7

SECTION 8: Exposure controls/personal protection (....)

WEL (short term- 15 min): 59 mg/m³

WEL (long term- 8 hr): 29 mg/m³

DNEL (Industry; inhalational, long term local effects): (Irritation respiratory tract) 30 mg/m³

DNEL (Industry, inhalational, Acute/short term exposure, local effects): (Irritation respiratory tract) 30 mg/m³

DNEL (Industry, inhalation, acute effects, systemic effects): (Irritation respiratory tract) 30 mg/m³

DNEL (Industry, inhalation, long term, systemic effects): (Irritation respiratory tract) 30 mg/m³

DNEL (Industry, dermal, acute effects, local effects): High hazard (no threshold derived)

DNEL (Industry; dermal, long term local effects): High hazard (no threshold derived)

DNEL (Industry, eyes, local effect): Medium hazard (no threshold derived)

PNEC (Fresh water): 3 µg/l

PNEC (Intermittent, freshwater): 1.3 µg/l

PNEC (Marine water): 300 ng/l

PNEC (Intermittent, marine water): Not available

PNEC (Sewage, treatment plant): 900 µg/l

PNEC (Sediment; fresh water): 23.64 µg/kg dw

PNEC (Sediment; marine water): 23.64 µg/kg dw

8.2 Exposure controls

- Personal Protective Equipment:

**Boots****Gloves****Suit****Visor****Goggles**

- Engineering controls:
- Respiratory protection:

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. (EN 143)., Use respirators and components tested and approved under appropriate government standards such as CEN (EU), Consult manufacturer for specific advice

- Hand protection:

Where hand contact with the product may occur the use of gloves approved to relevant standards (e.g. Europe: EN374) is recommended, Selection of the glove material depends on consideration of the penetration times, rates of diffusion and degradation, and concentration specific to the workplace. (EU Directive 89/686/EEC)., Suggested material: Butyl-rubber., (Suitable materials for longer, direct contact), Break through time: >480 minutes, Minimum layer thickness: 0.5 mm., Suggested material: Nitrile, (Suitable materials for short-term contact or splashes), Minimum layer thickness: 0.38 mm., Gloves must be inspected prior to use., Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product.

SECTION 8: Exposure controls/personal protection (....)

- Eye protection: Use equipment for eye protection tested and approved under appropriate government standards such as EN 166(EU)., Goggles/face shield are recommended.
 - Body protection: Wear appropriate clothing to prevent any possibility of skin contact. Suggested PPE: chemical resistant full-length overalls and boots.
 - Hygiene measures: Wash hands at the end of each work shift and before eating, smoking and using the toilet, Do not eat, drink, or smoke while using this product, P361+P364 - Take off immediately all contaminated clothing and wash it before reuse., Avoid contact with eyes, skin and clothing.
 - Process conditions: Provide eyewash station., Use engineering controls to reduce air contamination to permissible exposure level., Take precautionary measures against static discharge.
 - Environmental exposure controls: Prevent product from entering environment and drains, Inform the responsible authorities in case of entry into waterways or drains
 - Provide adequate ventilation, including appropriate local extraction, to ensure that the defined occupational exposure limit is not exceeded.
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SECTION 9: Physical and chemical properties**9.1 Information on basic physical and chemical properties**

- Physical state: Liquid
- Colour: Light, brown, clear
- Odour: Odourless
- Melting point/Range: (30%) 1.0 °C
- Boiling Point/Range: (30%) 118.0 °C
- Flashpoint: Not relevant for inorganic substances.
- Flammability: Non-flammable
- pH: 14
- Solubility in water: 100 g at 25 C
- Density: 1.33 @ 15.5°C (30%)
- Vapour Pressure: Not available
- Vapour Density: Not available
- Viscosity: 79mPas (@ 20 °C)
- Evaporation Rate: Not available
- Partition Coefficient (n-Octanol/Water): Not applicable, Inorganic compound
- Oxidising Properties: Not oxidising
- Explosive Properties: Non-explosive

9.2 Other information

- None
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SECTION 10: Stability and reactivity

SECTION 10: Stability and reactivity (....)

10.1 Reactivity

- May be corrosive to metals.
- Reacts violently with acid
- Reacts violently with metals (e.g.) Aluminium, Magnesium, Zinc under generation of hydrogen.
- Reactions may occur with strong oxidising agents.

10.2 Chemical stability

- Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

- Hazardous reactions: For information on hazardous reaction see section 10.1.
- Hazardous polymerisation: Not information available

10.4 Conditions to avoid

- Extremes of temperature and direct sunlight.
- Avoid heat, flames and other sources of ignition.

10.5 Incompatible materials

- Reactive or incompatible with: Reacts violently with Acids and metals (e.g.) Aluminium, Magnesium, Zinc under generation of hydrogen., Strong oxidising substances., Avoid contact with glass

10.6 Hazardous decomposition products

- Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours.
 - Hydrogen.
-

SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

- Toxicological information on ingredients:

11.1.1 Acute toxicity

Additional labelling provisions: None assigned

LD₅₀ (oral) : No information available

LD₅₀ (dermal) : No information available

LC₅₀ (inhalation) : No information available

By comparison with analogous substances, it is concluded that it will be corrosive

11.1.2 Skin corrosion/irritation

Additional labelling provisions: None assigned

Causes severe skin burns and eye damage.

11.1.3 Serious eye damage/irritation

Causes severe irritation

11.1.4 Respiratory or skin sensitisation

SECTION 11: Toxicological information (....)

Additional labelling provisions: None assigned

The product is not classified as a respiratory hazard.

The product is not classified as a skin sensitisation hazard.

11.1.5 Germ cell mutagenicity

The product is not classified as a mutagen.

11.1.6 Carcinogenicity

The product is not classified as a carcinogen hazard.

11.1.7 Reproductive toxicity

The product is not classified as a reproductive hazard.

11.1.8 STOT (specific target organ toxicity) - single exposure

Target organs: No target organs specified.

Additional labelling provisions: None assigned

The product is not classified as a single exposure specific target organ toxin.

11.1.9 STOT (specific target organ toxicity) - repeated exposure

Target organs: No target organs specified.

Additional labelling provisions: None assigned

The product is not classified as a repeat exposure specific target organ toxin.

11.1.10 Aspiration hazard

The product is not classified as an aspiration hazard.

11.1.11 Endocrine disrupting properties

The product does not contain $\geq 0.1\%$ ingredients with endocrine-disrupting properties, or having ingredients with properties disrupting the functioning of the endocrine system, in the list established in accordance with the criteria set out in Art. 59 sec. 1 of Regulation 2017/2100/EU or Regulation 2018/605/EU.

11.2 Information on other hazards

- Routes of entry: Eyes, skin, ingestion or inhalation.

SECTION 12: Ecological information**12.1 Toxicity**

- Ecotoxicity: The product is not classified as environmentally hazardous., However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment., The product may affect the acidity (pH-factor) in water with risk of harmful effects to aquatic organisms.
- Acute Toxicity- Fish: No information available as testing has not been completed.
- Chronic Toxicity- Fish: No information available as testing has not been completed.

12.2 Persistence and degradability

SECTION 12: Ecological information (....)

- Degradability: The methods for determining the biological degradability are not applicable to inorganic substances.

12.3 Bioaccumulative potential

- Bioaccumulative factor: Accumulation in organisms is not to be expected.

12.4 Mobility in soil

- Mobility: Completely soluble in water

12.5 Results of PBT and vPvB assessment

- PBT/vPvB: This product does not contain any substances classified as PBT or vPvB.
- PMT/vPvM: This product does not contain any substances classified as PMT or vPvM.

12.6 Endocrine disrupting properties

- The product does not contain any substances with endocrine disrupting properties at a concentration above or equal to 0.1%.

12.7 Other adverse effects

- Hazardous to the ozone layer: This substance/mixture is not classified as hazardous to the ozone layer
- Toxic effect on fish, plankton and on sedentary organisms, also through shifting of pH value.
- Causes no biological oxygen consumption.
- No inhibition of activity of waste bacteria after neutralization.

SECTION 13: Disposal considerations

When handling waste, consideration should be made to the safety precautions applying to handling of the product.

Comply with local, national and international regulations for disposal.

13.1 Waste treatment methods

- Dispose of waste and residues in accordance with local authority requirements.
- Empty containers or liners may retain some product residues.
- Empty containers should be taken to an approved waste handling site for recycling or disposal.
- Empty containers retain product residue and can be hazardous.

SECTION 14: Transport information



Corrosive

14.1 UN number or ID number

- IMDG UN No.: 1824
- IATA UN No.: 1824
- ADR UN No.: 1824

SECTION 14: Transport information (....)**14.2 UN proper shipping name**

- IMDG proper shipping name: SODIUM HYDROXIDE SOLUTION
- IATA proper shipping name: SODIUM HYDROXIDE SOLUTION
- ADR proper shipping name: SODIUM HYDROXIDE SOLUTION

14.3 Transport hazard class(es)

- IMDG Hazard Class: 8
- IATA Hazard class: 8
- Hazard no. (ADR): 80
- Tunnel Restriction Code (ADR); 2 (E)
- ADR Hazard Class: 8

14.4 Packing group

- IMDG Packing Group.: II
- IATA Packing Group: II
- ADR Packing Group: II

14.5 Environmental hazards

- IMDG Environmental hazard: No
- IATA Environmental hazard: No
- ADR Environmental hazard: No

14.6 Special precautions for user

- EMS (IMDG): F-A, S-B.
- Emergency action code (IATA): 8L
- Contains: Sodium hydroxide, acrylic acid
- The transport classification(s) provided herein are for informational purposes only within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

14.7 Maritime transport in bulk according to IMO instruments

- For transport approval see regulatory information
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SECTION 15: Regulatory information**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**

- This Safety Data Sheet is provided in compliance with REACH Regulation EC No. 1907/2006, 1272/2008, 2015/830 and 2020/878
- Refer to current CLP Regulations
- Refer to current ADR Regulations
- Refer to current IMDG Regulations
- Refer to current ICAO Regulations
- Refer to current IATA Regulations
- Workplace Exposure Limits Guidance Note EH40/2005.

SECTION 15: Regulatory information (....)

- 2021 Code of Practice for the Safety, Health and Welfare at Work (Chemical Agents) Regulations (2001-2021) and the Safety, Health and Welfare at Work (Carcinogens) Regulations (2001-2019)
- Technical Rules for Hazardous Substances (TRGS 510) Storage of Hazardous substances in non-stationary containers

15.2 Chemical safety assessment

- No chemical safety assessment has been carried out.

SECTION 16: Other information

Text not given with phrase codes where they are used elsewhere in this safety data sheet:-
H226: Flammable liquid and vapour. H302: Harmful if swallowed. H312: Harmful in contact with skin. H314: Causes severe skin burns and eye damage. H332: Harmful if inhaled. H400: Very toxic to aquatic life.

Abbreviations and acronyms used in the safety data sheet: ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road, IMDG: International Maritime Dangerous Goods., ICAO: Technical Instructions for the Safe Transport of Dangerous Goods by Air., CAS: Chemical Abstracts Service., ATE: Acute Toxicity Estimate., LC₅₀: Lethal Concentration to 50 % of a test population., LD₅₀: Lethal Dose to 50% of a test population (Median Lethal Dose)., EC₅₀: 50% of maximal Effective Concentration., PBT: Persistent, Bioaccumulative and Toxic substance. , vPvB: Very Persistent and Very Bioaccumulative., UFI: Unique Formula Identifier, EC number: European Community number, NOAEL: No Observed Adverse Effect Level, M- factor: Multiplying factor(s)., IATA: International Air Transport Association, WEL: Workplace Exposure Limit, TLC; Toxic Limit Concentration, EMS: Emergency Response Procedures for Ships Carrying Dangerous Goods, ERG: Emergency Response Guidance for Aircraft Incidents Involving Dangerous Goods, NOEL= No Observed Effect Level, OECD: The Organization for Economic Co-operation and Development, UFI: Unique Formula Identifier, DNEL= Derived no-effect level, LOAEC: Lowest Observed Adverse Effect Concentration, LOAEL: Lowest Observed Adverse Effect Level, NOAEC: No Observed Adverse Effect Concentration, NOAEL: No Observed Adverse Effect Level, PNEC: Predicted No Effect Concentration, PMT: Persistent, Mobile and Toxic substance or mixture, vPvM: Very persistent and very mobile substance or mixture

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