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

1.1. Product identifier

Product name: SIGRUN CCC 720

Product type: Soluble concentrate (SL) containing 720 g/L (65.2% w/w) chlormequat chloride

MAPP number: [to be assigned — currently shown as XXXXX on artwork]

UFI: [to be assigned — see Section 16]

Immediate originator product: Stefes CCC 720 (STEFES GmbH, product code 700659, SDS v1.0, 25/08/2022)

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

Use of substance / mixture: Plant Protection Product — Plant Growth Regulator. For professional use in winter and spring wheat, winter and spring barley, oats, rye and triticale. This product must be sold and used only in England, Scotland and Wales.

Uses advised against: Any use not specified on the product label.

1.3. Details of the supplier of the safety data sheet

Marketing Company & Authorisation Holder:
Sigrun Agriculture DMCC
Unit No: 243, DMCC Business Centre, Level No 8,
Jewellery & Gemplex 2, Dubai, United Arab Emirates
Tel: +971 (0)58 511 5029
Email: sales@sigrunag.com
Web: sigrunag.com

1.4. Emergency telephone number

Company 24h emergency line: +971 (0)58 511 5029

UK medical emergency: NHS 111 (England, Scotland, Wales) / 999 in life-threatening emergency. UK National Poisons Information Service (health professionals only): 0344 892 0111.

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification under GB CLP:
Met. Corr. 1: H290
Acute Tox. 3 (Oral): H301
Acute Tox. 4 (Dermal): H312
Aquatic Chronic 3: H412

*** CLASSIFICATION NOTE:** *This classification is applied consistently with the Sigrun CCC 750 range and reflects the stricter Acute Tox. 3 (Oral) classification per CLP Article 5(3) using reliable human LD50 data (50-200 mg/kg). The immediate Stefes CCC 720 originator SDS applies Acute Tox. 4 (Oral) H302 based on rat LD50 600 mg/kg. Sigrun has chosen the stricter approach to keep the classification consistent across the SIGRUN CCC 720 and SIGRUN CCC 750 products and to match the signal word / pictograms already on the SIGRUN CCC 720 label artwork (Danger + GHS05 + GHS06).*

Most important adverse effects: May be corrosive to metals. Toxic if swallowed. Harmful in contact with skin. Harmful to aquatic life with long lasting effects.

2.2. Label elements

Signal word: Danger

Hazard pictograms:
GHS05: Corrosion
GHS06: Skull and crossbones

Hazard statements:
H290: May be corrosive to metals.
H301: Toxic if swallowed.
H312: Harmful in contact with skin.

H412: Harmful to aquatic life with long lasting effects.

Precautionary statements — general:
P101: If medical advice is needed, have product container or label at hand.
P102: Keep out of reach of children.
P103: Read carefully and follow all instructions.

Precautionary statements — prevention:
P234: Keep only in original packaging.
P264: Wash contaminated body parts thoroughly after handling.
P280: Wear protective gloves and clothing.

Precautionary statements — response:
P312: Call a POISON CENTER or physician if you feel unwell.
P301+P310: IF SWALLOWED: Immediately call a POISON CENTER or physician.
P303+P352: IF ON SKIN (or hair): Wash with plenty of soap and water.
P330: Rinse mouth.
P361: Take off immediately all contaminated clothing.
P363: Wash contaminated clothing before reuse.
P390: Absorb spillage to prevent material damage.

Precautionary statements — storage:
P405: Store locked up.

Precautionary statements — disposal:
P501: Dispose of contents/container to a licensed hazardous-waste disposal contractor or collection site except for empty clean containers which can be disposed of as non-hazardous waste.

Supplemental:
EUH401: To avoid risks to human health and the environment, comply with the instructions for use.

2.3. Other hazards

PBT / vPvB: This mixture does not contain a substance fulfilling PBT or vPvB criteria.

Endocrine disruptors: The product does not contain a substance above legal limits identified as having endocrine-disrupting properties per Regulation (EU) 2017/2100 or (EU) 2018/605.

SECTION 3: Composition / information on ingredients

3.2. Mixtures

Chemical nature: Crop protection product, plant growth regulator, soluble concentrate (SL)

Hazardous ingredients:

Chemical name	CAS-No.	EC / Index No.	Classification (applied by Sigrun)	% w/w
CHLORMEQUAT CHLORIDE (ISO); 2-chloroethyltrimethylammonium chloride	999-81-5	EC 213-666-4 / Index 007-003-00-6	Acute Tox. 3 (Oral): H301; Acute Tox. 4 (Dermal): H312; Aquatic Chronic 3: H412	65.2%

Note on divergent classification: The harmonised classification in Annex VI of Regulation (EC) No 1272/2008 (Index 007-003-00-6) is Acute Tox. 4 (Oral, H302) + Acute Tox. 4 (Dermal, H312). Sigrun applies the stricter Acute Tox. 3 (Oral, H301) under CLP Article 5(3) on the basis of human LD50 data (50-200 mg/kg). The Stefes CCC 720 originator SDS applies the harmonised Acute Tox. 4 (Oral, H302) classification. Sigrun has chosen the stricter classification to align with SIGRUN CCC 750 and with the current SIGRUN CCC 720 label.

SECTION 4: First aid measures

4.1. Description of first aid measures

General advice: Never give liquids or induce vomiting if the patient is unconscious or having convulsions. Avoid contact with skin, eyes and clothing. Remove contaminated clothing and shoes and dispose of safely. In case of doubt, discomfort, ongoing symptoms or if the patient feels unwell, seek medical advice and present the packaging, label and/or SDS.

If inhaled: Remove person from the hazard area and to fresh air. Ensure unimpeded breathing. Seek medical advice if the patient feels unwell.

Skin contact: Remove all contaminated clothing and shoes. Wash off with plenty of water and soap. Seek medical advice.

Eye contact: Rinse immediately, carefully and continuously with water for at least 15 minutes with the eyelids held wide open. Remove contact lenses if present. Seek medical advice immediately.

Ingestion: Do NOT induce vomiting. Rinse mouth. Contact a doctor or poison-control centre immediately.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms: Toxic if swallowed. Chlormequat chloride is a quaternary ammonium compound; ingestion may cause nausea, vomiting, sweating, salivation, diarrhoea, cardiac disorders, visual disturbances and, at high dose, unconsciousness. The substance may reversibly affect the nervous system, but there are no indications of permanent nerve cell damage.

4.3. Indication of any immediate medical attention and special treatment needed

Treatment: Treat according to symptoms. Where a large quantity has been ingested, gastric lavage should be considered only within the first two hours. Administration of activated charcoal and sodium sulphate is always recommended. Oxygen or, if necessary, artificial respiration. No specific antidote is known.

SECTION 5: Fire-fighting measures

5.1. Extinguishing media

Suitable extinguishing media: Co-ordinate fire-fighting measures to the fire surroundings. Water spray, foam, dry powder, carbon dioxide (CO_2).

Unsuitable extinguishing media: Full water jet.

5.2. Special hazards arising from the substance or mixture

Specific hazards: Non-flammable. In case of fire, hazardous decomposition products may be released.

Hazardous combustion products: Carbon monoxide, carbon dioxide, hydrogen chloride, halogenated compounds, nitrogen oxides.

5.3. Advice for fire-fighters

Protection during fire-fighting: Wear self-contained breathing apparatus and chemical-protective clothing. Full protection suit.

Further information: Suppress gases / vapours / mists with water spray jet. Collect contaminated fire-extinguishing water separately. Do not allow to enter drains or surface water.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions: Provide adequate ventilation. Do not breathe gas/fumes/vapour/spray. Avoid contact with skin, eyes and clothes. Use personal protection equipment.

6.2. Environmental precautions

Environmental precautions: Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

6.3. Methods and material for containment and cleaning up

Cleaning up: Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents). Treat the recovered material as prescribed in the section on waste disposal.

6.4. Reference to other sections

Reference: See Sections 8 and 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions: If handled uncovered, local exhaust ventilation must be used. Do not breathe gas/fumes/vapour/spray. Do not eat, drink or smoke when using this product. Remove contaminated, saturated clothing immediately. Draw up and observe a skin-protection programme. Wash hands and face before breaks and after work and take a shower if necessary.

Fire and explosion protection: No special fire-protection measures necessary.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions: Keep container tightly closed. Unsuitable container/equipment material: metal. Protect from frost — protect from direct sunlight. Store in the original UN-approved 10 L cans.

Joint storage: Keep away from food, drink and animal feeding stuffs.

7.3. Specific end use(s)

Specific use(s): Plant protection product subject to Regulation (EC) No 1107/2009 as retained in GB law. Use in accordance with the product label and the Code of Practice for Using Plant Protection Products.

SECTION 8: Exposure controls / personal protection

8.1. Control parameters

Occupational exposure limits: To date, no national critical limit values exist for chlormequat chloride. Refer to the current edition of HSE Guidance Note EH40.

8.2. Exposure controls

Engineering measures: If handled uncovered, local exhaust ventilation must be used. Do not breathe gas/fumes/vapour/spray.

Eye/face protection: Wear eye protection / face protection (EN 166).

Hand protection: Chemical-resistant safety gloves (EN ISO 374-1) with CE marking including the four control digits. Recommended (Protection Index 6, breakthrough > 480 min): nitrile rubber (0.4 mm), chloroprene rubber (0.5 mm), butyl rubber (0.7 mm). Confirm suitability with the glove supplier.

Skin protection: Wear protective clothing.

Respiratory protection: In case of inadequate ventilation, wear respiratory protection.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state: Liquid

Colour: Off-white or pale yellow

Odour:	Characteristic (short-chain amines)
pH:	Approx. 7.1 at 20 °C
Melting/freezing point:	Not determined (store above 0 °C — protect from frost)
Boiling point:	Not determined
Flash point:	Not determined; no flash point observed up to boiling point
Flammability:	Not applicable (liquid); gas ignition > 410 °C
Explosive properties:	Not explosive
Oxidising properties:	Not oxidising
Vapour pressure:	Not determined
Density:	1.14 g/cm³ at 20 °C
Solubility in water:	Miscible
Partition coefficient log Pow (chlormequat):	−1.59
Viscosity (dynamic):	7.2 mPa·s at 40 °C
Viscosity (kinematic):	6,300 mm²/s at 40 °C

9.2. Other information

Solid content:	Not determined
Evaporation rate:	Not determined

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity: Corrosive to metals. See Section 10.5.

10.2. Chemical stability

Chemical stability: Stable under storage at normal ambient temperatures.

10.3. Possibility of hazardous reactions

Hazardous reactions: None known.

10.4. Conditions to avoid

Conditions to avoid: None under normal conditions. Protect from frost.

10.5. Incompatible materials

Materials to avoid: Metal (product is corrosive to metals — store in HDPE or other non-metallic containers only). Strong bases.

10.6. Hazardous decomposition products

Decomposition products: No known hazardous decomposition products under normal conditions. See Section 5.2 for combustion products.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Product-level acute toxicity (calculated per GHS Chapter 3.1):

Route	ATEmix (calculated)	Assessment
Oral	857.1 mg/kg	Acute Tox. 4 by ATEmix (Sigrun applies Acute Tox. 3 per CLP Article 5(3) — see Section 2.1)
Dermal	1,571.4 mg/kg	Acute Tox. 4

Component data (chlormequat chloride):

Route	Species	Type	Value	Notes
Oral	Human	LD50	50 – 200 mg/kg	Literature — basis for Acute Tox. 3 classification per CLP 5(3)
Oral	Rat	LD50	600 mg/kg	GESTIS — harmonised classification basis
Dermal	Rabbit	LD50	232 mg/kg	GESTIS — Acute Tox. 4 (Dermal)
Inhalation (4 h, aerosol)	Rat	LC50	> 5.2 mg/l	Not classified

Skin corrosion/irritation: Not classified — not irritating (rabbit).

Serious eye damage/irritation: Not classified — not irritating (rabbit).

Respiratory/skin sensitisation: Not sensitising (guinea pig).

Germ cell mutagenicity: Not classified — no genotoxic potential.

Carcinogenicity: Not classified — no carcinogenic effect in animal studies.

Reproductive toxicity: Not classified — no fertility-impairing effect in animal studies.

STOT — single exposure: Not classified.

STOT — repeated exposure: The substance may reversibly affect the nervous system, but there are no indications of permanent nerve cell damage.

Aspiration hazard: Not classified.

Other information: Abuse can lead to health-damaging effects.

SECTION 12: Ecological information

12.1. Toxicity

Assessment: Harmful to aquatic life with long lasting effects. The product has not been tested; assessment derived from the properties of the individual components.

Component data (chlormequat chloride):

Organism	Species	Endpoint	Value
Fish	Oncorhynchus mykiss (Rainbow trout)	LC50 (96 h)	> 100 mg/l
Aquatic invertebrates	Daphnia magna	EC50 (48 h)	16.7 mg/l
Aquatic plants (algae)	Pseudokirchneriella subcapitata	ErC50 (72 h)	> 100 mg/l

12.2. Persistence and degradability

Assessment: Chlormequat chloride: readily biodegradable (OECD criteria).

Organism	Species	Endpoint	Value

12.3. Bioaccumulative potential

Assessment: Chlormequat chloride: log Pow −1.59; no bioaccumulation expected.

12.4. Mobility in soil

Assessment: Chlormequat chloride: not tested at product level. Substance data indicate low potential for mobility.

12.5. Results of PBT and vPvB assessment

Assessment: The product does not contain a substance fulfilling PBT or vPvB criteria.

12.6. Endocrine disrupting properties

Assessment: No components identified as endocrine disruptors under Regulation (EU) 2017/2100 or (EU) 2018/605 at ≥ 0.1%.

12.7. Other adverse effects

Other effects: Do not allow to enter surface water, drains or soil/subsoil.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product: Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil. Dispose of waste according to applicable legislation (Hazardous Waste Regulations 2005 as amended).

Contaminated packaging: Non-contaminated packages may be recycled. Handle contaminated packages in the same way as the substance itself.

European Waste Code (indicative): 02 01 08* — agrochemical waste containing dangerous substances.

SECTION 14: Transport information

14.1. UN number

ADR / RID / IMDG / IATA / ADN: UN 1760

14.2. UN proper shipping name

Shipping name: CORROSIVE LIQUID, N.O.S. (Chlormequat chloride)

14.3. Transport hazard class(es)

Class: 8 — Corrosive substances

14.4. Packing group

Packing group: III

14.5. Environmental hazards

Environmentally hazardous: Yes (contains chlormequat chloride)

Marine pollutant (IMDG): No

14.6. Special precautions for user

ADR classification code: C9

ADR special provisions:	274
ADR limited quantities:	5 L
ADR excepted quantities:	E1
Hazard identification number (Kemler):	80
Tunnel restriction code (ADR):	E
IMDG EmS:	F-A, S-B
IATA PCA packing instruction:	852 (max 5 L)
IATA CAO packing instruction:	856 (max 60 L)
Warning:	Strongly corrosive.

14.7. Maritime transport in bulk according to IMO instruments

Bulk transport: Not applicable.

SECTION 15: Regulatory information

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

GB Plant Protection Products Regulation:	Regulation (EC) No 1107/2009 as retained in GB law. Sigrun CCC 720 requires MAPP approval before placing on the GB market — MAPP number to be assigned by HSE / CRD (currently shown as XXXXX on the artwork).
GB CLP:	Regulation (EC) No 1272/2008 as retained in GB law (UK SI 2019/720 and UK SI 2020/1567). Chlormequat chloride has a harmonised classification in Annex VI (Index 007-003-00-6): Acute Tox. 4 (Oral) H302; Acute Tox. 4 (Dermal) H312. This SDS applies the stricter Acute Tox. 3 (Oral) H301 per CLP Article 5(3) based on human LD50 data — consistent with the SIGRUN CCC 750 approach.
UK REACH:	Regulation (EC) No 1907/2006 as retained in UK law (UK SI 2019/758 and UK SI 2020/1577). Annex XVII list entry #3 (restrictions do not apply for the intended use of this product).
Seveso III / COMAH:	Directive 2012/18/EU — list entry H2 (Acute Tox. 3, Oral) if the Acute Tox. 3 classification is retained. May be subject to the COMAH Regulations 2015 if specific threshold tonnages are exceeded.
COSHH:	The Control of Substances Hazardous to Health Regulations 2002 (as amended) apply to use of this product at work.
Water hazard class (D):	3 — highly hazardous to water (per Stefes originator SDS).

15.2. Chemical Safety Assessment

CSA: No Chemical Safety Assessment has been carried out for the mixture.

SECTION 16: Other information

Revision

This revision:	Revision 1.0 — issued 19/08/2026. First issue.
Basis:	Compiled against the immediate originator Stefes CCC 720 SDS v1.0 (25/08/2022), with classification approach aligned with the SIGRUN CCC 750 SDS revision 3.0 (Acute Tox. 3 (Oral) H301 per CLP Article 5(3)).

Actions required before external issue

- MAPP number must be assigned by HSE/CRD before this SDS is issued externally. The current label artwork shows XXXXX as placeholder.

- UFI (Unique Formula Identifier) to be assigned via HSE Poison Centre Notification portal. UFI required under CLP Annex VIII for mixtures classified for health/physical hazards.
- Confirm final classification approach with regulatory sign-off: either retain Sigrun's Acute Tox. 3 (per CCC 750 approach) or revert to Stefes Acute Tox. 4. If reverting, label artwork and SDS Section 2 must be updated together.

Full text of H- and EUH-statements referenced in Sections 2 and 3

Statements:
H290: May be corrosive to metals.
H301: Toxic if swallowed.
H302: Harmful if swallowed. (Annex VI harmonised — noted for reference)
H312: Harmful in contact with skin.
H411: Toxic to aquatic life with long lasting effects. (Stefes classification — noted for reference)
H412: Harmful to aquatic life with long lasting effects.
EUH401: To avoid risks to human health and the environment, comply with the instructions for use.

Abbreviations

Abbreviations:
ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.
ATE: Acute Toxicity Estimate.
CLP: Classification, Labelling and Packaging Regulation (EC) No 1272/2008.
GHS: Globally Harmonized System of Classification and Labelling of Chemicals.
IMDG: International Maritime Dangerous Goods code.
LD50 / LC50: Lethal Dose / Lethal Concentration, 50%.
MAPP: Ministerially Approved Plant Protection product number.
Met. Corr. 1: Corrosive to metals, Category 1.
PBT / vPvB: Persistent, Bioaccumulative and Toxic / very Persistent and very Bioaccumulative.
REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals.
SL: Soluble concentrate.
UFI: Unique Formula Identifier.
WEL: Workplace Exposure Limit (HSE EH40).

Data sources

Sources: Classification and hazard data derived from the immediate originator STEFES CCC 720 Safety Data Sheet (STEFES GmbH, product code 700659, version 1.0, revised 25/08/2022, GB-en). Classification approach for Acute Tox. 3 (Oral) aligned with SIGRUN CCC 750 SDS revision 3.0 based on human LD50 data cited in the BASF 3C Chlormequat 750 SDS v4.0. Substance-level data for chlormequat chloride from Annex VI of Regulation (EC) No 1272/2008 and the REACH registration dossier.

Legal disclaimer

Disclaimer: The information provided in this Safety Data Sheet is correct to the best of Sigrun Agriculture DMCC's knowledge, information and belief at the date of its publication. The information given is designed only as guidance for safe handling, use, processing, storage, transportation, disposal and release, and is not to be considered a warranty or quality specification. Users should follow the product label and all applicable regulations.