SAFETY DATA SHEET

According to REACH Regulation (EC) No 1907/2006, as amended by UK REACH Regulations SI 2019/758

CCC 66% (CCC750)

Version	Revision Date:	SDS Number:	Date of last issue: 06.11.2020
1.11	03.01.2023	150000103591	Date of first issue: 03.12.2015
PRD		SDSGB / EN / 0060	

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

1.1 Product identifier

Trade name	:	UpRite 750 (CCC750)
Product code	:	P5102349

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

Use of the Sub-stance/Mixture	:	Plant growth regulator
Recommended restrictions on use	:	None known.

1.3 Details of the supplier of the safety data sheet

Company	:	Eastman Chemical Middelburg BV Herculesweg 35 4338 PL Middelburg
Telephone	:	+31118678000
E-mail address of person responsible for the SDS	:	Visit our website at www.EASTMAN.com or email emnmsds@eastman.com

1.4 Emergency telephone number

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008) as amended by GB-CLP Regulation, UK SI 2019/720, and UK SI 2020/1567)

Corrosive to Metals, Category 1	H290: May be corrosive to metals.
Acute toxicity, Category 4	H302: Harmful if swallowed.
Acute toxicity, Category 4	H312: Harmful in contact with skin.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008) as amended by GB-CLP Regulation, UK SI 2019/720, and UK SI 2020/1567)

Hazard pictograms :

Signal word : Warning

Hazard statements :
H302 Harmful if swallowed.
H312 Harmful in contact with skin.
H290 May be corrosive to metals.

Precautionary statements :

Prevention:

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

Response:

P301 + P312 IF SWALLOWED: Call a POISON CENTER or doctor/ physician if you feel unwell.
P302 + P352 IF ON SKIN: Wash with plenty of soap and water.
P390 Absorb spillage to prevent material damage.

Disposal:

P501 Dispose of contents/ container to an approved waste disposal plant.

Additional Labelling

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

2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Components

Chemical name	CAS-No. EC-No. Index-No. Registration number	Classification	Concentration (% w/w)
Chloromequat chloride	999-81-5 213-666-4 007-003-00-6	Met. Corr. 1; H290 Acute Tox. 4; H302 Acute Tox. 4; H312 Aquatic Chronic 3; H412	>= 50 - < 70

For explanation of abbreviations see section 16.

Eastman is committed to the safety, health and environment of our employees, our customers, and the communities we operate within. As part of this commitment, Eastman's Safety Data Sheets (SDS) are prepared in accordance with all applicable national and local regulations. The compositions of our documents reflect these requirements which include, but are not limited to, requirements under the Globally Harmonized System of Classification and Labeling (GHS). These compositions commonly involve the use of ranges versus specific analytical values. If you require a composition that is more specific , please refer to the Certificate of Analysis, sales specification, or contact your Customer Service Representative.

SECTION 4: First aid measures

4.1 Description of first aid measures

If inhaled	:	Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention if symptoms occur.
In case of skin contact	:	Wash off immediately with plenty of water for at least 15 minutes. Take off all contaminated clothing immediately. Get medical attention immediately if irritation persists.
In case of eye contact	:	Rinse immediately with plenty of water for at least 15 minutes. Get medical attention if symptoms occur.
If swallowed	:	Seek medical advice.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms	:	Irregular cardiac activity sweating Nausea Diarrhea Vomiting
Risks	:	Harmful if swallowed or in contact with skin.

4.3 Indication of any immediate medical attention and special treatment needed

Treatment	:	Treat symptomatically.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media	:	Water spray Carbon dioxide (CO2)

Alcohol-resistant foam

Unsuitable extinguishing media : High volume water jet

5.2 Special hazards arising from the substance or mixture

Specific hazards during fire-fighting : Thermal decomposition can lead to release of irritating gases and vapours.

Hazardous combustion products : Carbon monoxide
Nitrogen oxides (NOx)

5.3 Advice for firefighters

Special protective equipment for firefighters : Wear an approved positive pressure self-contained breathing apparatus in addition to standard fire fighting gear.

Further information : None known.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : Use personal protective equipment.
Local authorities should be advised if significant spillages cannot be contained.

6.2 Environmental precautions

Environmental precautions : Do not contaminate water.

6.3 Methods and material for containment and cleaning up

Methods for cleaning up : Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local / national regulations (see section 13).

6.4 Reference to other sections

For personal protection see section 8., For disposal considerations see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling : Avoid contact with skin, eyes and clothing.
Do not taste or swallow.
Wash thoroughly after handling.

Advice on protection against fire and explosion : None known.

Hygiene measures : Handle in accordance with good industrial hygiene and safety practice.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers : Keep containers tightly closed in a dry, cool and well-ventilated place.

7.3 Specific end use(s)

Specific use(s) : Plant growth regulator

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Contains no substances with occupational exposure limit values.

8.2 Exposure controls

Engineering measures

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Personal protective equipment

Eye/face protection : Safety glasses

Hand protection

Remarks : Neoprene gloves Rubber gloves The data about break through time/strength of material are standard values! The exact break through time/strength of material has to be obtained from the producer of the protective glove.

Skin and body protection : Wear suitable protective clothing.

Respiratory protection : Use respiratory protection unless adequate local exhaust ventilation is provided or exposure assessment demonstrates that exposures are within recommended exposure guidelines.

Protective measures : Ensure that eye flushing systems and safety showers are located close to the working place.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance	:	liquid
Colour	:	light yellow
Odour	:	slight
Odour Threshold	:	not determined
pH	:	4 Concentration: 1 g/l

Melting point/range	:	225 °C Active ingredient
Boiling point/boiling range	:	Decomposition: Stable up to the melting point. Active ingredient
Flash point	:	Not applicable
Evaporation rate	:	not determined
Upper explosion limit / Upper flammability limit	:	not determined
Lower explosion limit / Lower flammability limit	:	not determined
Vapour pressure	:	< 0.00001 hPa (25 °C) Active ingredient
Relative vapour density	:	not determined
Relative density	:	1.144
Density	:	1.144 g/cm3
Solubility(ies)		
Water solubility	:	> 886 g/l Active ingredient
Partition coefficient: n-octanol/water	:	Pow: 0.001 log Pow: < -3
Auto-ignition temperature	:	not determined
Decomposition temperature	:	Not applicable
Viscosity		
Viscosity, dynamic	:	not determined
Viscosity, kinematic	:	not determined
Explosive properties	:	Not explosive Active ingredient
Oxidizing properties	:	Not classified Active ingredient

9.2 Other information

Metal corrosion rate	:	Corrosive to metals

SECTION 10: Stability and reactivity

10.1 Reactivity

None reasonably foreseeable.

10.2 Chemical stability

Stable under normal conditions.

10.3 Possibility of hazardous reactions

Hazardous reactions : Hazardous decomposition products formed under fire conditions.

10.4 Conditions to avoid

Conditions to avoid : None known.

10.5 Incompatible materials

Materials to avoid : Metals

10.6 Hazardous decomposition products

Carbon dioxide (CO2)
Carbon monoxide
Nitrogen oxides (NOx)
Hydrogen chloride gas

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Harmful if swallowed or in contact with skin.

Product:

Acute oral toxicity : LD50 Oral (Rat): 520 mg/kg
Remarks: Harmful if swallowed.

Acute inhalation toxicity : LC50 (Rat): > 5.2 mg/l
Exposure time: 4 h
Test atmosphere: vapour
Assessment: The substance or mixture has no acute inhalation toxicity

Acute dermal toxicity : LD50 Dermal (Rabbit): 1,250 mg/kg
Remarks: Harmful in contact with skin.

Components:

Chloromequat chloride:

Acute oral toxicity : LD50 Oral (Rat): 520 mg/kg

Acute inhalation toxicity	:	LC50 (Rat): > 5.2 mg/l Exposure time: 4 h Test atmosphere: vapour Assessment: The substance or mixture has no acute inhalation toxicity
Acute dermal toxicity	:	LD50 Dermal (Rabbit): 1,250 mg/kg LD50 Dermal (Rat): > 2,000 mg/kg

Skin corrosion/irritation

Not classified based on available information.

Product:

Species	:	Rabbit
Exposure time	:	24 h
Result	:	No skin irritation

Components:

Chloromequat chloride:

Species	:	Rabbit
Exposure time	:	24 h
Result	:	No skin irritation

Serious eye damage/eye irritation

Not classified based on available information.

Product:

Species	:	Rabbit
Result	:	No eye irritation

Components:

Chloromequat chloride:

Species	:	Rabbit
Result	:	No eye irritation

Respiratory or skin sensitisation

Skin sensitisation

Not classified based on available information.

Respiratory sensitisation

Not classified based on available information.

Product:

Result	:	Did not cause sensitization on laboratory animals.

Components:

Chloromequat chloride:

Result : Did not cause sensitization on laboratory animals.

Germ cell mutagenicity

Not classified based on available information.

Product:

Germ cell mutagenicity- Assessment : Did not show mutagenic effects in animal experiments.

Components:

Chloromequat chloride:

Germ cell mutagenicity- Assessment : Did not show mutagenic effects in animal experiments.

Carcinogenicity

Not classified based on available information.

Product:

Remarks : This information is not available.

Carcinogenicity - Assessment : Did not show carcinogenic effects in animal experiments.

Components:

Chloromequat chloride:

Carcinogenicity - Assessment : Did not show carcinogenic effects in animal experiments.

Reproductive toxicity

Not classified based on available information.

Product:

Effects on fertility : Remarks: No data available

Reproductive toxicity - Assessment : No toxicity to reproduction
Did not show teratogenic effects in animal experiments.

Components:

Chloromequat chloride:

Reproductive toxicity - Assessment : No toxicity to reproduction
Did not show teratogenic effects in animal experiments.

STOT - single exposure

Not classified based on available information.

Product:

Remarks : No data available

STOT - repeated exposure

Not classified based on available information.

Product:

Remarks : No data available

Aspiration toxicity

Not classified based on available information.

Product:

No data available

Experience with human exposure

Product:

Inhalation : Remarks: None known.
Skin contact : Remarks: Harmful in contact with skin.
Eye contact : Remarks: None known.
Ingestion : Remarks: Harmful if swallowed.

SECTION 12: Ecological information

12.1 Toxicity

Product:

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): > 100 mg/l
Exposure time: 96 h
Remarks: Information refers to the main ingredient.

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia (water flea)): 31.7 mg/l
Exposure time: 48 h
Remarks: Information refers to the main ingredient.

Toxicity to microorganisms : IC50 (Bacteria): 43 mg/l
Exposure time: 3 h

Components:

Chloromequat chloride:

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): > 100 mg/l
Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia (water flea)): 31.7 mg/l
Exposure time: 48 h

Toxicity to algae/aquatic : ErC50 (Lemna gibba (gibbous duckweed)): 28 mg/l

plants		Exposure time: 7 d ErC10 (Lemna gibba (gibbous duckweed)): 0.6 mg/l Exposure time: 7 d NOEC (Lemna gibba (gibbous duckweed)): 0.1 mg/l
Toxicity to microorganisms	:	IC50 (Bacteria): 43 mg/l Exposure time: 3 h
Toxicity to fish (Chronic toxicity)	:	NOEC: 43.1 mg/l Exposure time: 21 d Species: Oncorhynchus mykiss (rainbow trout)
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)	:	NOEC: 2.4 mg/l Exposure time: 21 d Species: Daphnia magna (Water flea)

12.2 Persistence and degradability

Product:

Biodegradability	:	Result: Readily biodegradable.

Components:

Chloromequat chloride:

Biodegradability	:	Result: Readily biodegradable.

12.3 Bioaccumulative potential

No data available

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

Product:

Assessment	:	This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6 Other adverse effects

Product:

Endocrine disrupting potential	:	The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product	:	Dispose of in accordance with local regulations.
Contaminated packaging	:	Empty containers should be taken to an approved waste handling site for recycling or disposal.

SECTION 14: Transport information

14.1 UN number

ADR	:	UN 1760
IMDG	:	UN 1760
IATA	:	UN 1760

14.2 UN proper shipping name

ADR	:	CORROSIVE LIQUID, N.O.S. (Chlormequat chloride)
IMDG	:	CORROSIVE LIQUID, N.O.S. (Chlormequat chloride)
IATA	:	Corrosive liquid, n.o.s. (Chlormequat chloride)

14.3 Transport hazard class(es)

ADR	:	8
IMDG	:	8
IATA	:	8

14.4 Packing group

ADR

Packing group	:	III
Classification Code	:	C9
Hazard Identification Number	:	80
Labels	:	8
Tunnel restriction code	:	(E)

IMDG

Packing group	:	III
Labels	:	8
EmS Code	:	F-A, S-B

IATA (Cargo)

Packing instruction (cargo aircraft)	:	856

Packing instruction (LQ)	:	Y841
Packing group	:	III
Labels	:	Corrosive

IATA (Passenger)

Packing instruction (passenger aircraft)	:	852
Packing instruction (LQ)	:	Y841
Packing group	:	III
Labels	:	Corrosive

14.5 Environmental hazards

ADR

Environmentally hazardous	:	no

IMDG

Marine pollutant	:	no

14.6 Special precautions for user

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable for product as supplied.

SECTION 15: Regulatory information

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

Relevant EU provisions transposed through retained EU law

Regulation (EC) No 1005/2009 on substances that deplete the ozone layer	:	Not applicable
GB Export and import of hazardous chemicals - Prior Informed Consent (PIC) Regulation	:	Not applicable
Control of Major Accident Hazards Regulations 2015 (COMAH)		Not applicable
Volatile organic compounds	:	Directive 2010/75/EU of 24 November 2010 on industrial emissions (integrated pollution prevention and control) Not applicable

The components of this product are reported in the following inventories:

TCSI	:	On the inventory, or in compliance with the inventory
TSCA	:	All substances listed as active on the TSCA inventory
AIIC	:	Not in compliance with the inventory
DSL	:	All components of this product are on the Canadian DSL

ENCS	:	Not listed
ISHL	:	On the inventory, or in compliance with the inventory
KECI	:	On the inventory, or in compliance with the inventory
PICCS	:	Not listed
IECSC	:	On the inventory, or in compliance with the inventory
NZIoC	:	On the inventory, or in compliance with the inventory

15.2 Chemical safety assessment
None.

SECTION 16: Other information

Full text of H-Statements

H290	:	May be corrosive to metals.
H302	:	Harmful if swallowed.
H312	:	Harmful in contact with skin.
H412	:	Harmful to aquatic life with long lasting effects.

Full text of other abbreviations

Acute Tox.	:	Acute toxicity
Aquatic Chronic	:	Long-term (chronic) aquatic hazard
Met. Corr.	:	Corrosive to Metals

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - Agreement concerning the International Carriage of Dangerous Goods by Road; AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA - European Chemicals Agency; EC-Number - European Community number; ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of

Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; SVHC - Substance of very high concern; TCSI - Taiwan Chemical Substance Inventory; TECI - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

Further information

Classification of the mixture:		**Classification procedure:**
Acute Tox. 4	H302	On basis of test data.

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

GB / EN