

Ref. 2.1/REG\_EU/EN

**SUPERFLOC C-495HMW**

SAFETY DATA SHEET according to Regulation (EC) No. 1907/2006

Revision Date: 21.02.2019

Previous date: 13.02.2015

Print Date: 07.06.2019

## SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

### 1.1 Product identifier

**Commercial Product Name**  
**SUPERFLOC C-495HMW**

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

**Use of the Substance/Mixture**

Flocculating agent

**Recommended restrictions on use**

-

### 1.3 Details of the supplier of the safety data sheet

Kemira Oyj  
P.O. Box 33000101 HELSINKI FINLAND  
Telephone +358108611, Telefax. +358108621124  
ProductSafety.FI.Helsinki@kemira.com

### 1.4 Emergency telephone number

Carechem 24 International: +44 (0) 1235 239 670

## SECTION 2: HAZARDS IDENTIFICATION

### 2.1 Classification of the substance or mixture

**Classification according to Regulation (EU) 1272/2008 (CLP)**

Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.;

### 2.2 Label elements

**Labelling (REGULATION (EC) No 1272/2008)**

**Hazard statements**

:

EUH210

Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.

Safety data sheet available on request.

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### 2.3 Other hazards

**Advice;** Forms slippery/greasy layers with water.

**Potential environmental effects;** 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

Chemical nature of the mixture	Cationic polyacrylamide.		
CAS/EU number/REACH Registration Number	Chemical name of the substance	Concentration	Classification according to Regulation (EU) 1272/2008(CLP)
124-04-9 204-673-3 01-2119457561-38	Adipic acid	0 - 5 %	Eye Irrit. Category 2,H319
77-92-9 201-069-1 01-2119457026-42	Citric acid	0 - 9,9 %	Eye Irrit. Category 2,H319

The total combined concentration of Adipic acid and Citric acid does not exceed 9.9%.

### Further information

For the full text of the H-Statements mentioned in this Section, see Section 16.

## SECTION 4: FIRST AID MEASURES

### 4.1 Description of first aid measures

#### General advice

Show this safety data sheet to the doctor in attendance.

#### Inhalation

Remove to fresh air. If breathing is difficult, give oxygen. If symptoms persist, call a physician.

#### Skin contact

Wash off immediately with soap and plenty of water.

#### Eye contact

Rinse immediately with plenty of water for at least 15 minutes.

#### Ingestion

Call a physician or poison control centre immediately. Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person.

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

Symptoms : No information available.

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

Treatment : Symptomatic treatment.

### SECTION 5: FIREFIGHTING MEASURES

#### 5.1 Extinguishing media

Extinguishing media : Water spray  
Carbon dioxide (CO<sub>2</sub>)  
Dry chemical

Unsuitable : none  
extinguishing media

#### 5.2 Special hazards arising from the substance or mixture

Dust may form explosive mixture in air.

#### 5.3 Advice for firefighters

Wear self-contained breathing apparatus and protective suit.

#### 5.4 Specific methods

Avoid dust accumulation.

### SECTION 6: ACCIDENTAL RELEASE MEASURES

#### 6.1 Personal precautions, protective equipment and emergency procedures

For personal protection see section 8.

#### 6.2 Environmental precautions

Try to prevent the material from entering drains or water courses.

#### 6.3 Methods and materials for containment and cleaning up

Sweep up or vacuum up spillage and collect in suitable container for disposal. Flush with plenty of water.  
Prevent product from entering drains.

#### 6.4 Reference to other sections

For personal protection see section 8.

### SECTION 7: HANDLING AND STORAGE

#### 7.1 Precautions for safe handling

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Handle in accordance with good industrial hygiene and safety practice. The product is hygroscopic.  
Protect from moisture.  
Avoid dust formation.

### 7.2 Conditions for safe storage, including any incompatibilities

Store at room temperature in the original container. Protect from moisture.

Materials for packaging

Unsuitable material: To avoid product degradation and equipment corrosion, do not use iron, copper or aluminium containers or equipment.

Materials to avoid:

Strong oxidizing agents

Storage stability:

Storage temperature 4 - 27 °C

Other data Stable under recommended storage conditions.

Other data

Reason:  
integrity

### 7.3 Specific end use(s)

Not listed

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1 Control parameters

#### 8.1.1 Limit values in other countries

**Finland:**

**Adipic acid**

, 2009, HTP (8h) = 5 mg/m<sup>3</sup>

FI OEL, 2009-07-01, HTP-arvot 8h = 5 mg/m<sup>3</sup>

**Belgium:**

**Adipic acid**

BE OEL, 2006-03-23, TLV 8 hr = 5 mg/m<sup>3</sup>

**Czech Republic:**

**Citric acid**

CZ OEL, 2012-03-26, TWA = 4 mg/m<sup>3</sup>, Total dust, : Dust with predominantly irritant effect

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### Denmark:

#### Adipic acid

DK OEL, 2007-08-01, GV = 5 mg/m<sup>3</sup>

### Spain:

#### Adipic acid

ES VLA, 2011-03-03, VLA-ED = 5 mg/m<sup>3</sup>

### Ireland:

#### Adipic acid

IE OEL, 2007-08-17, OELV - 8 hrs (TWA) = 5 mg/m<sup>3</sup>, : All types of asbestos fibre, as listed in Directive 2003/18/EC and implemented by S.I. No. 386 of 2006

### Lithuania:

#### Adipic acid

LT OEL, 2011-09-01, IPRD = 4 mg/m<sup>3</sup>

#### Sodium chloride

LT OEL, 2001-12-13, IPRD = 5 mg/m<sup>3</sup>

### Latvia:

#### Adipic acid

LV OEL, 2007-05-18, AER 8 st = 4 mg/m<sup>3</sup>

#### Sodium chloride

LV OEL, 2007-05-18, AER 8 st = 5 mg/m<sup>3</sup>

### Poland:

#### Adipic acid

PL OEL, 2002-11-29, TWA = 5 mg/m<sup>3</sup>, Dust

PL OEL, 2002-11-29, STEL = 10 mg/m<sup>3</sup>, Dust

PL OEL, 2014-06-23, NDS = 5 mg/m<sup>3</sup>, inhalable fraction, Inhalable fraction: Inhalable fraction - the fraction of aerosol penetrating through the nose and mouth, which after deposit in the respiratory tract poses a threat to health.

PL OEL, 2014-06-23, NDSch = 10 mg/m<sup>3</sup>, inhalable fraction, Inhalable fraction: Inhalable fraction - the fraction of aerosol penetrating through the nose and mouth, which after deposit in the respiratory tract poses a threat to health.

### Portugal:

#### Adipic acid

PT OEL, 2007-03-26, VLE-MP = 5 mg/m<sup>3</sup>, irritação do TRS: irritation of the upper respiratory tract

### Slovakia:

#### Acrylamide-chloride salt of trimethylammonio-ethyl acrylate copolymer

SK OEL, 2006-06-01, TWA = 5 mg/m<sup>3</sup>, total compact aerosols

PNEC : No data available

## 8.2 Exposure controls

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#### 8.2.1 Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands and face before breaks and immediately after handling the product. Do not breathe vapours/dust. Avoid contact with skin and eyes. Ensure that eyewash stations and safety showers are close to the workstation location. Ensure adequate ventilation.

#### 8.2.2 Individual protection measures, such as personal protective equipment

##### Hand protection

Glove material: Nitrile rubber, Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time. Protective gloves complying with EN 374.

##### Eye protection

Safety glasses with side-shields  
(EN 166)

##### Skin and body protection

Avoid contact with skin.

##### Respiratory protection

Use the indicated respiratory protection if the occupational exposure limit is exceeded.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

#### General Information (appearance, odour)

Physical state	solid, crystalline, powder
Colour	off-white
Odour	odourless
Odour Threshold	Not relevant

#### Important health safety and environmental information

pH	3 - 5 ( 0,5 %) (as aqueous solution)
Melting point/range	No data available
Boiling point/boiling range	Not applicable
Flash point	Not applicable
Evaporation rate	Not applicable

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<b>Flammability (solid, gas) :</b>	Not applicable
	No data available
<b>Explosive properties:</b>	
<b>Lower explosion limit</b>	No data available
<b>Upper explosion limit</b>	No data available
<b>Vapour pressure</b>	Not applicable
<b>Relative vapour density</b>	Not applicable
<b>Bulk density</b>	750 kg/m <sup>3</sup>
<b>Solubility(ies):</b>	
<b>Water solubility</b>	Limited by viscosity.
<b>Partition coefficient: n-octanol/water</b>	Not applicable
<b>Auto-ignition temperature</b>	> 150 °C
<b>Thermal decomposition</b>	> 150 °C
<b>Oxidizing</b>	The substance or mixture is not classified as oxidizing.
<b>Saturation in air (% vol.)</b>	Not applicable
<b>Volatile organic content (VOC)</b>	Not applicable

### 9.2 Other data

<b>Surface tension</b>	Not applicable
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## SECTION 10: STABILITY AND REACTIVITY

### 10.1 Reactivity

No data available

### 10.2 Chemical stability

Stable

### 10.3 Possibility of hazardous reactions

Hazardous reactions : Hazardous polymerisation does not occur.

### 10.4 Conditions to avoid

Conditions to avoid : Stable under recommended storage conditions.  
Avoid contact with alkaline materials which will degrade the polymer.

### 10.5 Incompatible materials

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Materials to avoid : Strong oxidizing agents

#### 10.6 Hazardous decomposition products

Hazardous decomposition products : Ammonia  
hydrogen chloride (HCl)  
Carbon oxides (COx)  
Nitrogen oxides (NOx)

Thermal decomposition : >150 °C

## SECTION 11: TOXICOLOGICAL INFORMATION

### 11.1 Information on toxicological effects

#### Acute toxicity

LD50/Oral/Rat: > 5 000 mg/kg  
LC50/Inhalation/4 h/Rat: > 20,0 mg/l  
LD50/Dermal/Rabbit: > 2 000 mg/kg

#### Irritation and corrosion

Skin:  
No skin irritation

Eyes:  
No eye irritation

#### Sensitisation

Not sensitizing.

#### Long term toxicity

Repeated dose toxicity

Remarks: No data available

Carcinogenicity

Based on available data, the classification criteria are not met.

Mutagenicity

Based on available data, the classification criteria are not met.



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**Reproductive toxicity**

Based on available data, the classification criteria are not met.

**STOT - single exposure**

The substance or mixture is not classified as specific target organ toxicant, single exposure.

**STOT - repeated exposure**

The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

**Aspiration toxicity**

No aspiration toxicity classification

**SECTION 12: ECOLOGICAL INFORMATION****12.1 Toxicity****Aquatic toxicity**

This material is not classified as dangerous for the environment. The effects on aquatic organisms are due to an external (non-systemic) mode of action and are significantly reduced (by a factor of 7-20) within 30 minutes due to the binding of the product to dissolved organic carbon and inorganic sorbents such as clays and silts. Ecotoxicological information provided is based on a structurally or compositionally similar product.

LC50/96 h/Branchydanio rerio (zebra fish)/Acute toxicity/OECD Test Guideline 203: > 1 - 10 mg/l  
EC50/48 h/Daphnia magna (Water flea)/Immobilization/OECD Test Guideline 202: > 10 - 100 mg/l  
/algae/Growth inhibition/OECD Test Guideline 201:  
Due to the cationicity of the polymer, test is not appropriate.

**Toxicity to other organisms**

Remarks: No data available

**12.2 Persistence and degradability**

Biological degradability:  
CO2 Evolution Test/OECD Test Guideline 301B:

The polymeric ingredient is not readily biodegradable, but degradable by hydrolysis.

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#### 12.3 Bioaccumulative potential

Bioaccumulation is unlikely. Because of the high molecular weight of the polymer diffusion through biological membranes is very small.

Partition coefficient: n-octanol/water: Not applicable

#### 12.4.Mobility in soil

##### Mobility

Water solubility: Limited by viscosity.

Surface tension: Not applicable

#### 12.5. Results of PBT and vPvB 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

No data available

### SECTION 13: DISPOSAL CONSIDERATIONS

#### 13.1 Waste treatment methods

##### Product

Recycling, recovery and reuse of materials is recommended if permitted by regulations.Can be landfilled or incinerated, when in compliance with local regulations.Dispose of as special waste in compliance with local and national regulations.

##### Contaminated packaging

Dirty package must be disposed of in the same way as the product itself.

### SECTION 14: TRANSPORT INFORMATION

#### 14.1 UN number

##### Land transport

Not classified as dangerous in the meaning of transport regulations.

##### Sea transport

Not classified as dangerous in the meaning of transport regulations.

##### Air transport

Not classified as dangerous in the meaning of transport regulations.

#### 14.7 Transport in bulk according to Annex II of MARPOL 73/78 and

Not applicable

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the IBC Code

### 14.8 Special precautions for user

None known.

## SECTION 15: REGULATORY INFORMATION

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

#### Notification status

- :
- : All components of this product are included in the European Inventory of Existing Chemical Substances (EINECS) or are not required to be listed on EINECS.
- : All components of this product are included in the Australian Inventory of Chemical Substances (AICS) or are not required to be listed on the Australian Inventory of Chemical Substances (AICS).
- : All components of this product are included in the Canada Domestic Substance List (DSL) or are not required to be listed on the Canada Domestic Substance List (DSL).
- : All components of this product are included on the Chinese inventory or are not required to be listed on the Chinese inventory.
- : All components of this product are included on the Japanese (ENCS) inventory or are not required to be listed on the Japanese (ENCS) inventory.
- : All components of this product are included in the Korean (ECL) inventory or are not required to be listed on the Korean (ECL) inventory.
- : All components of this product are included on the Philippine (PICCS) inventory or are not required to be listed on the Philippine (PICCS) inventory.
- : All components of this product are included in the United States TSCA Chemical Inventory or are not required to be listed on the United States TSCA Chemical Inventory.
- : All components of this product are NOT included on the New Zealand Inventory of Chemical Substances.
- : All components of this product are included on the Taiwan Toxic Chemical Substances Control Act Inventory.

### 15.2 Chemical safety assessment

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A Chemical Safety Assessment is not required for this mixture.

**SECTION 16: OTHER INFORMATION****Full text of H-Statements referred to under section 3.**

H319 Causes serious eye irritation.

H319 Causes serious eye irritation.

**Training advice**

Read the safety data sheet before using the product.

**Further information**

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.

**Sources of key data used to compile the Safety Data Sheet**

Regulations, databases, literature, own tests.

**Additions, Deletions, Revisions**

Relevant changes have been marked with vertical lines.