

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

#### 1.1. Product identifier

Product form : Mixture  
Trade name : MRS Agar  
Product code : NCM0190  
Type of product : Food Safety -- [Food Safety]  
Part Number(s) : NCM0190|700004601|700004602

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

##### 1.2.1. Relevant identified uses

Use of the substance/mixture : Laboratory chemicals  
Scientific research and development

##### 1.2.2. Uses advised against

No additional information available

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

Neogen Corporation  
620 Leshar Place  
48912 Lansing – Michigan  
United States of America  
T 800.234.5333  
[sds@neogen.com](mailto:sds@neogen.com) - <https://www.neogen.com/>

#### 1.4. Emergency telephone number

Emergency number : 24 hours:  
Medical: 1-800-498-5743 (U.S. and Canada) or 1-651-523-0318 (international)  
Spill/CHEMTREC: 1-800-424-9300 (U.S. and Canada) or 1-703-527-3887 (international)

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

##### Classification according to GB CLP (SI 2019:720 as amended)

Not classified

##### Adverse physicochemical, human health and environmental effects

No additional information available

#### 2.2. Label elements

##### Labelling according to GB CLP (SI 2019:720 as amended)

EUH-statements (GHS UK) : EUH210 - Safety data sheet available on request.

#### 2.3. Other hazards

##### Results of PBT and vPvB assessment

| Component  |   |
|--|---|
| Substance(s) not meeting the PBT criteria of UK REACH regulation, in accordance with Annex XIII  | Sodium acetate (127-09-3), Citric acid (5949-29-1), Sorbitan, mono-(9Z)-9-octadecenoate, poly(oxy-1,2-ethanediyl) derivs. (9005-65-6) |
| Substance(s) not meeting the vPvB criteria of UK REACH regulation, in accordance with Annex XIII | Sodium acetate (127-09-3), Citric acid (5949-29-1), Sorbitan, mono-(9Z)-9-octadecenoate, poly(oxy-1,2-ethanediyl) derivs. (9005-65-6) |

##### Results of Endocrine Disruptor assessment

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### Component

Substance(s) not considered as endocrine disrupting. They are not included in the list established in accordance with Article 59(1) of UK REACH for having endocrine disrupting properties, nor identified as having endocrine disrupting properties in accordance with the criteria set out in GB BPR and GB PPP

Sodium acetate(127-09-3), Citric acid(5949-29-1), Sorbitan, mono-(9Z)-9-octadecenoate, poly(oxy-1,2-ethanediyl) derivs.(9005-65-6)

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

Not applicable

### 3.2. Mixtures

| Name  | Product identifier                      | %      | Classification according to GB CLP (SI 2019:720 as amended) |
|---|---|--------|---|
| Sodium acetate substance with workplace exposure limit(s)             | CAS-No.: 127-09-3<br>EC-No.: 204-823-8  | 5 – 10 | Not classified  |
| Citric acid   | CAS-No.: 5949-29-1<br>EC-No.: 201-069-1 | 1 – 5  | Eye Irrit. 2, H319  |
| Sorbitan, mono-(9Z)-9-octadecenoate, poly(oxy-1,2-ethanediyl) derivs. | CAS-No.: 9005-65-6                      | 1 – 5  | Aquatic Chronic 3, H412                                     |

Full text of H- and EUH-statements: see section 16

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

No additional information available

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

No additional information available

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

No additional information available

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

No additional information available

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

No additional information available

### 5.3. Advice for firefighters

No additional information available

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### SECTION 6: Accidental release measures

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

##### 6.1.1. For non-emergency personnel

No additional information available

##### 6.1.2. For emergency responders

No additional information available

#### 6.2. Environmental precautions

No additional information available

#### 6.3. Methods and material for containment and cleaning up

No additional information available

#### 6.4. Reference to other sections

No additional information available

### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

No additional information available

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

Storage temperature : 2 – 30 °C

#### 7.3. Specific end use(s)

No additional information available

### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

##### 8.1.1 National occupational exposure and biological limit values

| Sodium acetate (127-09-3)                     |   |
|---|---|
| United Kingdom - Occupational Exposure Limits |   |
| WEL TWA (OEL TWA)                             | 10 mg/m <sup>3</sup><br>4 mg/m <sup>3</sup> |

##### 8.1.2. Recommended monitoring procedures

No additional information available

##### 8.1.3. Air contaminants formed

No additional information available

##### 8.1.4. DNEL and PNEC

No additional information available

##### 8.1.5. Control banding

No additional information available

#### 8.2. Exposure controls

##### 8.2.1. Appropriate engineering controls

No additional information available

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### 8.2.2. Personal protection equipment

#### 8.2.2.1. Eye and face protection

No additional information available

#### 8.2.2.2. Skin protection

No additional information available

#### 8.2.2.3. Respiratory protection

No additional information available

#### 8.2.2.4. Thermal hazards

No additional information available

### 8.2.3. Environmental exposure controls

No additional information available

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

|   |                     |
|---|---------------------|
| Physical state                                  | : Solid             |
| Appearance                                      | : Powder.           |
| Colour  | : Beige.            |
| Odour   | : Characteristic.   |
| Odour threshold                                 | : Not available     |
| pH  | : 5.6 – 5.8         |
| pH solution                                     | : Not available     |
| Melting point                                   | : Not available     |
| Freezing point                                  | : Not available     |
| Boiling point                                   | : Not available     |
| Flash point                                     | : Not applicable    |
| Flammability                                    | : Not available     |
| Explosive limits                                | : Not applicable    |
| Vapour pressure                                 | : Not available     |
| Vapour pressure at 50°C                         | : Not available     |
| Relative vapour density at 20°C                 | : Not applicable    |
| Relative density                                | : Not available     |
| Density   | : Not available     |
| Solubility                                      | : Soluble in water. |
| Partition coefficient n-octanol/water (Log Kow) | : Not available     |
| Auto-ignition temperature                       | : Not applicable    |
| Decomposition temperature                       | : Not available     |
| Viscosity, kinematic                            | : Not applicable    |
| Explosive properties                            | : Not available     |

### 9.2. Other information

No additional information available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

No additional information available

### 10.2. Chemical stability

No additional information available

### 10.3. Possibility of hazardous reactions

No additional information available

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### 10.4. Conditions to avoid

No additional information available

### 10.5. Incompatible materials

No additional information available

### 10.6. Hazardous decomposition products

No additional information available

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified (Based on available data, the classification criteria are not met)  
Acute toxicity (dermal) : Not classified (Based on available data, the classification criteria are not met)  
Acute toxicity (inhalation) : Not classified (Based on available data, the classification criteria are not met)

#### Sodium acetate (127-09-3)

|                       |   |
|-----------------------|---|
| LD50 oral rat         | 3250 mg/kg bodyweight (Rat, Male, Experimental value, Oral, 14 day(s))  |
| LD50 dermal rabbit    | > 20000 mg/kg bodyweight (Equivalent or similar to OECD 402, Rabbit, Female, Experimental value, Dermal)              |
| LC50 Inhalation - Rat | > 5.6 mg/l (Equivalent or similar to OECD 403, 4 h, Rat, Female, Experimental value, Inhalation (aerosol), 14 day(s)) |

#### Citric acid (5949-29-1)

|                 |  |
|-----------------|--|
| LD50 oral rat   | 5400 mg/kg Mouse, male and female; Test substance: Citric acid (OECD Test Guideline 401)   |
| LD50 dermal rat | > 2000 mg/kg bodyweight (OECD 402: Acute Dermal Toxicity, 24 h, Rat, Male / female, Experimental value, Anhydrous form, Dermal, 14 day(s)) |

Skin corrosion/irritation : Not classified (Based on available data, the classification criteria are not met)  
pH: 5.6 – 5.8

#### Sodium acetate (127-09-3)

|    |             |
|----|-------------|
| pH | 8.9 (0.8 %) |
|----|-------------|

#### Citric acid (5949-29-1)

|    |                  |
|----|------------------|
| pH | 1.8 (5 %, 25 °C) |
|----|------------------|

#### Sorbitan, mono-(9Z)-9-octadecenoate, poly(oxy-1,2-ethanediyl) derivs. (9005-65-6)

|    |             |
|----|-------------|
| pH | 5 – 7 (5 %) |
|----|-------------|

Serious eye damage/irritation : Not classified (Based on available data, the classification criteria are not met)  
pH: 5.6 – 5.8

#### Sodium acetate (127-09-3)

|    |             |
|----|-------------|
| pH | 8.9 (0.8 %) |
|----|-------------|

#### Citric acid (5949-29-1)

|    |                  |
|----|------------------|
| pH | 1.8 (5 %, 25 °C) |
|----|------------------|

#### Sorbitan, mono-(9Z)-9-octadecenoate, poly(oxy-1,2-ethanediyl) derivs. (9005-65-6)

|    |             |
|----|-------------|
| pH | 5 – 7 (5 %) |
|----|-------------|

Respiratory or skin sensitisation : Not classified (Based on available data, the classification criteria are not met)  
Germ cell mutagenicity : Not classified (Based on available data, the classification criteria are not met)  
Carcinogenicity : Not classified (Based on available data, the classification criteria are not met)  
Reproductive toxicity : Not classified (Based on available data, the classification criteria are not met)

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| <b>Sodium acetate (127-09-3)</b>   |   |
|--|---|
| NOAEL (animal/female, F1)  | ≥ 2500 mg/kg bodyweight Animal: rat, Animal sex: female                             |
| STOT-single exposure   | : Not classified (Based on available data, the classification criteria are not met) |
| <b>Citric acid (5949-29-1)</b>   |   |
| STOT-single exposure   | Not classified (Based on available data, the classification criteria are not met)   |
| STOT-repeated exposure   | : Not classified (Based on available data, the classification criteria are not met) |
| Aspiration hazard  | : Not classified (Based on available data, the classification criteria are not met) |
| <b>Sodium acetate (127-09-3)</b>   |   |
| Viscosity, kinematic   | Not applicable (solid)  |
| <b>Citric acid (5949-29-1)</b>   |   |
| Viscosity, kinematic   | Not applicable (solid)  |
| <b>Sorbitan, mono-(9Z)-9-octadecenoate, poly(oxy-1,2-ethanediyl) derivs. (9005-65-6)</b> |   |
| Viscosity, kinematic   | 462.963 – 46648.148 mm <sup>2</sup> /s  |

### Other information

No additional information available

## SECTION 12: Ecological information

### 12.1. Toxicity

Hazardous to the aquatic environment, short-term (acute) : Not classified (Based on available data, the classification criteria are not met)

Hazardous to the aquatic environment, long-term (chronic) : Not classified (Based on available data, the classification criteria are not met)

| <b>Sodium acetate (127-09-3)</b>   |   |
|--|---|
| LC50 - Fish [1]  | > 100 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Danio rerio, Semi-static system, Fresh water, Experimental value, Nominal concentration) |
| EC50 - Crustacea [1]   | > 919 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, GLP)          |
| EC50 72h - Algae [1]   | > 1000 mg/l Test organisms (species): Skeletonema costatum  |
| EC50 96h - Algae [1]   | 4700000 mg/l Source: ECOSAR   |
| ErC50 algae  | > 1000 mg/l (ISO 10253, 72 h, Skeletonema costatum, Salt water, Experimental value, Nominal concentration)                                      |
| <b>Citric acid (5949-29-1)</b>   |   |
| LC50 - Fish [1]  | 440 – 760 mg/l (Leuciscus idus melanotus, mortality; 48 h) (static test; OECD Test Guideline 203)   |
| EC50 - Crustacea [1]   | 1535 mg/l (24 h, Daphnia magna, Static system, Fresh water, Experimental value, Anhydrous form)   |
| EC50 96h - Algae [1]   | 1690000 mg/l Source: Ecological Structure Activity Relationships  |
| <b>Sorbitan, mono-(9Z)-9-octadecenoate, poly(oxy-1,2-ethanediyl) derivs. (9005-65-6)</b> |   |
| LC50 - Fish [1]  | 817.89 mg/l Source: ECOSAR  |
| EC50 96h - Algae [1]   | 62.072 mg/l Source: ECOSAR  |

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### 12.2. Persistence and degradability

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|                               |                        |
|-------------------------------|------------------------|
| Persistence and degradability | Not rapidly degradable |
|-------------------------------|------------------------|

#### Sodium acetate (127-09-3)

|                               |                                 |
|-------------------------------|---------------------------------|
| Persistence and degradability | Readily biodegradable in water. |
|-------------------------------|---------------------------------|

|                              |                                     |
|------------------------------|-------------------------------------|
| Chemical oxygen demand (COD) | 0.675 g O <sub>2</sub> /g substance |
|------------------------------|-------------------------------------|

#### Citric acid (5949-29-1)

|                               |  |
|-------------------------------|--|
| Persistence and degradability | Biodegradable in the soil, Readily biodegradable in water. |
|-------------------------------|--|

|                                 |  |
|---------------------------------|--|
| Biochemical oxygen demand (BOD) | 0.481 g O <sub>2</sub> /g substance (Anhydrous form) |
|---------------------------------|--|

|                |  |
|----------------|--|
| Biodegradation | 97 % Related to: CO <sub>2</sub> formation (% of the theoretical value).; Exposure Time: 28 d)(OECD Test Guideline 301B) |
|----------------|--|

#### Sorbitan, mono-(9Z)-9-octadecenoate, poly(oxy-1,2-ethanediyl) derivs. (9005-65-6)

|                               |   |
|-------------------------------|---|
| Persistence and degradability | Biodegradability in water: no data available. |
|-------------------------------|---|

### 12.3. Bioaccumulative potential

#### Sodium acetate (127-09-3)

|   |                           |
|---|---------------------------|
| Partition coefficient n-octanol/water (Log Pow) | -3.7 (Calculated, KOWWIN) |
|---|---------------------------|

|                           |                      |
|---------------------------|----------------------|
| Bioaccumulative potential | Not bioaccumulative. |
|---------------------------|----------------------|

#### Citric acid (5949-29-1)

|   |   |
|---|---|
| Partition coefficient n-octanol/water (Log Pow) | -1.6 (Anhydrous form, Experimental value) |
|---|---|

|                           |                      |
|---------------------------|----------------------|
| Bioaccumulative potential | Not bioaccumulative. |
|---------------------------|----------------------|

#### Sorbitan, mono-(9Z)-9-octadecenoate, poly(oxy-1,2-ethanediyl) derivs. (9005-65-6)

|                           |                                    |
|---------------------------|------------------------------------|
| Bioaccumulative potential | No bioaccumulation data available. |
|---------------------------|------------------------------------|

### 12.4. Mobility in soil

#### Sodium acetate (127-09-3)

|                 |  |
|-----------------|--|
| Surface tension | No data available (test not performed) |
|-----------------|--|

|  |   |
|--|---|
| Organic Carbon Normalized Adsorption Coefficient (Log Koc) | 0 (log Koc, SRC PCKOCWIN v1.66, Calculated value) |
|--|---|

|                |                        |
|----------------|------------------------|
| Ecology - soil | Highly mobile in soil. |
|----------------|------------------------|

#### Citric acid (5949-29-1)

|                 |                                     |
|-----------------|-------------------------------------|
| Surface tension | No data available in the literature |
|-----------------|-------------------------------------|

|  |  |
|--|--|
| Organic Carbon Normalized Adsorption Coefficient (Log Koc) | 1 (log Koc, SRC PCKOCWIN v2.0, Calculated value) |
|--|--|

|                |                        |
|----------------|------------------------|
| Ecology - soil | Highly mobile in soil. |
|----------------|------------------------|

### 12.5. Results of PBT and vPvB assessment

#### Component

|                           |   |
|---------------------------|---|
| Sodium acetate (127-09-3) | This substance does not meet the PBT criteria of UK REACH regulation, annex XIII<br>This substance does not meet the vPvB criteria of UK REACH regulation, annex XIII |
|---------------------------|---|

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| Component   |   |
|---|---|
| Citric acid (5949-29-1)   | This substance does not meet the PBT criteria of UK REACH regulation, annex XIII<br>This substance does not meet the vPvB criteria of UK REACH regulation, annex XIII |
| Sorbitan, mono-(9Z)-9-octadecenoate, poly(oxy-1,2-ethanediyl) derivs. (9005-65-6) | This substance does not meet the PBT criteria of UK REACH regulation, annex XIII<br>This substance does not meet the vPvB criteria of UK REACH regulation, annex XIII |

### 12.6. Other adverse effects

Ozone : Not classified (Based on available data, the classification criteria are not met)

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

No additional information available

## SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN / RID

| ADR                                     | IMDG          | IATA          | ADN            | RID            |
|---|---------------|---------------|----------------|----------------|
| <b>14.1. UN number</b>                  |               |               |                |                |
| Not applicable                          | Not regulated | Not regulated | Not applicable | Not applicable |
| <b>14.2. UN proper shipping name</b>    |               |               |                |                |
| Not applicable                          | Not regulated | Not regulated | Not applicable | Not applicable |
| <b>Transport document description</b>   |               |               |                |                |
| Not applicable                          | Not regulated | Not regulated | Not applicable | Not applicable |
| <b>14.3. Transport hazard class(es)</b> |               |               |                |                |
| Not applicable                          | Not regulated | Not regulated | Not applicable | Not applicable |
| <b>14.4. Packing group</b>              |               |               |                |                |
| Not applicable                          | Not regulated | Not regulated | Not applicable | Not applicable |
| <b>14.5. Environmental hazards</b>      |               |               |                |                |
| Not applicable                          | Not regulated | Not regulated | Not applicable | Not applicable |
| No supplementary information available  |               |               |                |                |

### 14.6. Special precautions for user

#### Overland transport

Not applicable

#### Transport by sea

Not regulated

#### Air transport

Not regulated

#### Inland waterway transport

Not applicable

#### Rail transport

Not applicable

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

Not applicable

## SECTION 15: Regulatory information

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

#### 15.1.1. National regulations

##### UK REACH Annex XVII (Restriction List)

This product contains no substance(s) listed on UK REACH Annex XVII (Restriction List) equal to or above the level of SDS disclosure

##### UK REACH Annex XIV (Authorisation List)

This product contains no substance(s) listed on UK REACH Annex XIV (Authorisation List) equal to or above the 0.1% level of disclosure

##### UK REACH Candidate List (SVHC)

This product contains no substance(s) listed on the UK REACH Candidate List (SVHC) above the 0.1% level of disclosure

##### GB PIC regulation (Prior Informed Consent)

This product contains no substance(s) listed on the GB PIC List equal to or above the level of SDS disclosure

##### POP Regulation (Persistent Organic Pollutants)

This product contains no substance(s) listed on the GB POP List equal to or above the level of SDS disclosure

##### Ozone Regulation (S.I. No. 168 of 2015)

This product contains no substance(s) listed on the GB Ozone Depletion List equal to or above the level of SDS disclosure

##### Control of Poisons and Explosives Precursors Act

This product contains no substance(s) listed as a reportable poison on the Control of Poisons and Explosives Precursors Regulations equal to or above the level of SDS disclosure

This product contains no substance(s) listed as a regulated poison on the Control of Poisons and Explosives Precursors Regulations equal to or above the level of SDS disclosure

This product contains no substance(s) listed as a reportable explosive precursor on the Control of Poisons and Explosives Precursors Regulations equal to or above the level of SDS disclosure

This substance is not listed as a regulated poison on the Control of Poisons and Explosives Precursors Regulations

##### Drug Precursors Regulation (EC 273/2004)

This product contains no substance(s) listed on the GB Drug Precursors List equal to or above the level of SDS disclosure

#### 15.1.2. Other Information

### 15.2. Chemical safety assessment

No additional information available

## SECTION 16: Other information

### Full text of H- and EUH-statements:

|                   |  |
|-------------------|--|
| Aquatic Chronic 3 | Hazardous to the aquatic environment – Chronic Hazard, Category 3                          |
| Eye Irrit. 2      | Serious eye damage/eye irritation, Category 2  |
| STOT SE 3         | Specific target organ toxicity – Single exposure, Category 3, Respiratory tract irritation |
| H319              | Causes serious eye irritation.   |
| H335              | May cause respiratory irritation.  |
| H412              | Harmful to aquatic life with long lasting effects.   |
| EUH210            | Safety data sheet available on request.  |

Safety Data Sheet (SDS), UK

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This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.