

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

### 1.1. Product identifier

Product form	: Mixture
Trade name	: Harlequin® Listeria Chromogenic Agar (Ottaviani & Agosti) (LCA)
Product code	: NCM1004
Type of product	: Food Safety -- [Food Safety]
Part Number(s)	: NCM1004 7700004790 NCM1004A 700004791 NCM1004B 700004792 NCM1004C 700004793 NCM1004D 700004794 NCM1004S

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

#### Relevant identified uses

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

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

#### Manufacturer

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 Regulation (EC) No. 1272/2008 [CLP]

Skin corrosion/irritation, Category 2	H315
Serious eye damage/eye irritation, Category 2	H319
Skin sensitisation, Category 1	H317
Specific target organ toxicity – Repeated exposure, Category 2	H373
Hazardous to the aquatic environment – Chronic Hazard, Category 2	H411

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

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

May cause damage to organs through prolonged or repeated exposure. Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation. Toxic to aquatic life with long lasting effects.

### 2.2. Label elements

#### Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP)



Signal word (CLP)

: Warning

# Harlequin® Listeria Chromogenic Agar (Ottaviani & Agosti) (LCA)

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Contains	: Lithium chloride; Sodium pyruvate
Hazard statements (CLP)	: H315 - Causes skin irritation. H317 - May cause an allergic skin reaction. H319 - Causes serious eye irritation. H373 - May cause damage to organs through prolonged or repeated exposure. H411 - Toxic to aquatic life with long lasting effects.
Precautionary statements (CLP)	: P261 - Avoid breathing dust/fume/gas/mist/vapours/spray. P264 - Wash hands, forearms and face thoroughly after handling. P280 - Wear protective gloves/protective clothing/eye protection/face protection/hearing protection. P314 - Get medical advice/attention if you feel unwell. P321 - Specific treatment (see supplemental first aid instruction on this label). P391 - Collect spillage.

### 2.3. Other hazards

Contains no PBT and/or vPvB substances  $\geq 0.1\%$  assessed in accordance with REACH Annex XIII

Component	
Substance(s) not meeting the PBT criteria of REACH regulation, in accordance with Annex XIII	Lithium chloride (7447-41-8), Sodium chloride (7647-14-5), Sodium pyruvate (113-24-6), Sodium carbonate (497-19-8)
Substance(s) not meeting the vPvB criteria of REACH regulation, in accordance with Annex XIII	Lithium chloride (7447-41-8), Sodium chloride (7647-14-5), Sodium pyruvate (113-24-6), Sodium carbonate (497-19-8)

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or substance(s) are not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %

## SECTION 3: Composition/information on ingredients

### 3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Lithium chloride	CAS-No.: 7447-41-8 EC-No.: 231-212-3	$\geq 10 - < 15$	Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Dermal), H312 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT RE 2, H373
Sodium chloride substance with national workplace exposure limit(s) (LT, LV)	CAS-No.: 7647-14-5 EC-No.: 231-598-3	$\geq 5 - < 10$	Not classified
Sodium pyruvate	CAS-No.: 113-24-6 EC-No.: 204-024-4	$\geq 1 - < 5$	Eye Irrit. 2, H319 Skin Sens. 1B, H317 Aquatic Chronic 2, H411
Sodium carbonate substance with national workplace exposure limit(s) (RO)	CAS-No.: 497-19-8 EC-No.: 207-838-8 EC Index-No.: 011-005-00-2	$\geq 0.1 - < 0.5$	Acute Tox. 4 (Inhalation:dust,mist), H332 Skin Corr. 1, H314 Eye Dam. 1, H318
Magnesium sulfate anhydrous	CAS-No.: 7487-88-9 EC-No.: 231-298-2	$\geq 0.1 - < 0.5$	Aquatic Acute 1, H400 (M=100) Aquatic Chronic 1, H410 (M=100)

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

# Harlequin® Listeria Chromogenic Agar (Ottaviani & Agosti) (LCA)

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

First-aid measures general	: Get medical advice/attention if you feel unwell.
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact	: Wash skin with plenty of water. Take off contaminated clothing. If skin irritation or rash occurs: Get medical advice/attention.
First-aid measures after eye contact	: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
First-aid measures after ingestion	: Call a poison center or a doctor if you feel unwell.
Self protection of the first-aider	: First-aiders should pay attention to their own protection and use the recommended personal protective equipment (see section 8).

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

Symptoms/effects after inhalation	: None under normal conditions. Dust of the product, if present, may cause respiratory irritation after excessive inhalation exposure.
Symptoms/effects after skin contact	: Irritation. May cause an allergic skin reaction.
Symptoms/effects after eye contact	: Eye irritation.
Symptoms/effects after ingestion	: None under normal conditions.

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

Treat symptomatically.

### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

Suitable extinguishing media	: Water spray. Dry powder. Foam.
Unsuitable extinguishing media	: Do not use a heavy water stream.

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

Fire hazard	: No fire hazard.
Explosion hazard	: No direct explosion hazard.
Hazardous decomposition products in case of fire	: Toxic fumes may be released.

#### 5.3. Advice for firefighters

Firefighting instructions	: Fight fire from safe distance and protected location. Do not enter fire area without proper protective equipment, including respiratory protection.
Protection during firefighting	: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

### SECTION 6: Accidental release measures

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

General measures	: Notify authorities if product enters sewers or public waters. Absorb spillage to prevent material damage.
------------------	-------------------------------------------------------------------------------------------------------------

##### For non-emergency personnel

Protective equipment	: Wear recommended personal protective equipment.
Emergency procedures	: Ventilate spillage area. Do not breathe dust/fume/gas/mist/vapours/spray. Avoid contact with skin and eyes.

##### For emergency responders

Protective equipment	: Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".
Emergency procedures	: Evacuate unnecessary personnel.

# Harlequin® Listeria Chromogenic Agar (Ottaviani & Agosti) (LCA)

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

### 6.2. Environmental precautions

Avoid release to the environment.

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

For containment	: Collect spillage.
Methods for cleaning up	: Mechanically recover the product.
Other information	: Dispose of materials or solid residues at an authorized site.

### 6.4. Reference to other sections

For further information refer to section 13.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Precautions for safe handling	: Ensure good ventilation of the work station. Do not breathe dust/fume/gas/mist/vapours/spray. Avoid contact with skin and eyes. Wear personal protective equipment.
Hygiene measures	: Wash contaminated clothing before reuse. Contaminated work clothing should not be allowed out of the workplace. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

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

Technical measures	: Keep in a cool, well-ventilated place away from heat.
Storage conditions	: Keep cool. Protect from sunlight.
Storage temperature	: 2 – 8 °C
Packaging materials	: Always store product in container of same material as original container.

### 7.3. Specific end use(s)

No additional information available

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

No additional information available

### 8.2. Exposure controls

#### Appropriate engineering controls

##### Appropriate engineering controls:

Ensure good ventilation of the work station.

#### Personal protection equipment

##### Personal protective equipment:

Wear recommended personal protective equipment.

##### Personal protective equipment symbol(s):



#### Eye and face protection

##### Eye protection:

Safety glasses

#### Skin protection

##### Skin and body protection:

Wear suitable protective clothing

# Harlequin® Listeria Chromogenic Agar (Ottaviani & Agosti) (LCA)

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

### Hand protection:

Protective gloves

### Respiratory protection

#### Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

### Environmental exposure controls

#### Environmental exposure controls:

Avoid release to the environment.

## SECTION 9: Physical and chemical properties

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

Physical state	: Solid
Colour	: Beige.
Appearance	: Powder.
Odour	: Characteristic.
Odour threshold	: Not available
Melting point	: Not available
Freezing point	: Not applicable
Boiling point	: Not available
Flammability	: Non flammable
Lower explosion limit	: Not applicable
Upper explosion limit	: Not applicable
Flash point	: Not applicable
Auto-ignition temperature	: Not applicable
Decomposition temperature	: Not available
pH	: 7 – 7.4
pH solution	: Not available
Viscosity, kinematic	: Not applicable
Solubility	: Soluble in water.
Partition coefficient n-octanol/water (Log Kow)	: Not available
Vapour pressure	: Not available
Vapour pressure at 50°C	: Not available
Density	: Not available
Relative density	: Not available
Relative vapour density at 20°C	: Not applicable
Particle size	: Not available

### 9.2. Other information

No additional information available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

### 10.2. Chemical stability

Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

### 10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

# Harlequin® Listeria Chromogenic Agar (Ottaviani & Agosti) (LCA)

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

### 10.5. Incompatible materials

No additional information available

### 10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## SECTION 11: Toxicological information

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

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)

#### Lithium chloride (7447-41-8)

LD50 oral rat	526 mg/kg (Rat, Male, Experimental value, Oral)
LD50 oral	526 mg/kg
LD50 dermal rat	> 2000 mg/kg bodyweight (OECD 402: Acute Dermal Toxicity, 24 h, Rat, Male / female, Experimental value, Dermal, 14 day(s))
LD50 dermal rabbit	1488 mg/kg Source: Corporate Solution From Thomson Micromedex
LC50 Inhalation - Rat	> 5.57 mg/l air (OECD 403: Acute Inhalation Toxicity, 4 h, Rat, Male / female, Experimental value, Inhalation (aerosol))

#### Sodium chloride (7647-14-5)

LD50 oral rat	> 3980 mg/kg bodyweight (Rat, Experimental value, 20 % aqueous solution, Oral)
LD50 dermal rabbit	> 10000 mg/kg (Rabbit, Experimental value, Dermal)
LC50 Inhalation - Rat	> 42 mg/l air (1 h, Rat, Male, Experimental value, 20 % aqueous solution, Inhalation (aerosol))
LC50 Inhalation - Rat (Dust/Mist)	> 10.5 mg/l Source: Corporate Solution From Thomson Micromedex

#### Sodium pyruvate (113-24-6)

LD50 oral	3533 mg/kg bodyweight (Mouse, Experimental value, Oral)
LD50 dermal rat	> 3000 mg/kg bodyweight (Rat, Male, Experimental value, Intraperitoneal)

#### Sodium carbonate (497-19-8)

LD50 oral rat	2800 mg/kg (Rat, Male / female, Experimental value, Oral, 14 day(s))
LD50 oral	2800 mg/kg
LD50 dermal rabbit	> 2000 mg/kg (16 CFR 1500.40, 24 h, Rabbit, Experimental value, Dermal, 14 day(s))
LD50 dermal	2500 mg/kg
LC50 Inhalation - Rat (Dust/Mist)	1.2 mg/l/4h

#### Magnesium sulfate anhydrous (7487-88-9)

LD50 oral rat	> 2000 mg/kg bodyweight (OECD 425: Acute Oral Toxicity: Up-and-Down Procedure, Rat, Male / female, Experimental value, Oral, 14 day(s))
LD50 dermal rat	> 2000 mg/kg (OECD 402: Acute Dermal Toxicity, 24 h, Rat, Male / female, Read-across, Dermal, 14 day(s))

Skin corrosion/irritation : Causes skin irritation.  
pH: 7 – 7.4

#### Lithium chloride (7447-41-8)

pH	7 (57 %, 20 °C, OECD 105: Water Solubility)
----	---------------------------------------------

# Harlequin® Listeria Chromogenic Agar (Ottaviani & Agosti) (LCA)

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

<b>Sodium chloride (7647-14-5)</b>	
pH	7.5 (18 °C)
<b>Sodium pyruvate (113-24-6)</b>	
pH	7 (10 %)
<b>Sodium carbonate (497-19-8)</b>	
pH	11.6 (1 mol/l)
<b>Magnesium sulfate anhydrous (7487-88-9)</b>	
pH	7 (5 %)
Serious eye damage/irritation	: Causes serious eye irritation. pH: 7 – 7.4
<b>Lithium chloride (7447-41-8)</b>	
pH	7 (57 %, 20 °C, OECD 105: Water Solubility)
<b>Sodium chloride (7647-14-5)</b>	
pH	7.5 (18 °C)
<b>Sodium pyruvate (113-24-6)</b>	
pH	7 (10 %)
<b>Sodium carbonate (497-19-8)</b>	
pH	11.6 (1 mol/l)
<b>Magnesium sulfate anhydrous (7487-88-9)</b>	
pH	7 (5 %)
Respiratory or skin sensitisation	: May cause an allergic skin reaction.
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)
STOT-single exposure	: Not classified (Based on available data, the classification criteria are not met)
STOT-repeated exposure	: May cause damage to organs through prolonged or repeated exposure.
<b>Lithium chloride (7447-41-8)</b>	
NOAEL (oral, rat, 90 days)	84.8 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: OECD Guideline 452 (Chronic Toxicity Studies)
STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.
Aspiration hazard	: Not classified (Based on available data, the classification criteria are not met)
<b>Harlequin® Listeria Chromogenic Agar (Ottaviani &amp; Agosti) (LCA)</b>	
Viscosity, kinematic	Not applicable
<b>Lithium chloride (7447-41-8)</b>	
Viscosity, kinematic	Not applicable (solid)
<b>Sodium chloride (7647-14-5)</b>	
Viscosity, kinematic	Not applicable (solid)
<b>Sodium pyruvate (113-24-6)</b>	
Viscosity, kinematic	Not applicable (solid)

# Harlequin® Listeria Chromogenic Agar (Ottaviani & Agosti) (LCA)

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

### Sodium carbonate (497-19-8)

Viscosity, kinematic	Not applicable (solid)
----------------------	------------------------

### Magnesium sulfate anhydrous (7487-88-9)

Viscosity, kinematic	Not applicable (solid)
----------------------	------------------------

## 11.2. Information on other hazards

No additional information available

## SECTION 12: Ecological information

### 12.1. Toxicity

Ecology - general : Toxic to aquatic life with long lasting effects.  
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) : Toxic to aquatic life with long lasting effects.

### Lithium chloride (7447-41-8)

LC50 - Fish [1]	158 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Oncorhynchus mykiss, Static system, Fresh water, Experimental value, Lethal)
EC50 - Crustacea [1]	249 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, Locomotor effect)
EC50 72h - Algae [1]	> 400 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)
EC50 72h - Algae [2]	112 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)
ErC50 algae	> 400 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Desmodesmus subspicatus, Static system, Fresh water, Experimental value, Nominal concentration)
LOEC (chronic)	2.53 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC (chronic)	1.7 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC chronic fish	17.35 mg/l Test organisms (species): Danio rerio (previous name: Brachydanio rerio) Duration: '34 d'
NOEC chronic algae	25 mg/l

### Sodium chloride (7647-14-5)

LC50 - Fish [1]	5840 mg/l (ASTM, 96 h, Lepomis macrochirus, Flow-through system, Fresh water, Experimental value, Lethal)
LOEC (chronic)	441 mg/l Test organisms (species): Daphnia pulex Duration: '21 d'
NOEC (chronic)	314 mg/l Test organisms (species): Daphnia pulex Duration: '21 d'

### Sodium pyruvate (113-24-6)

LC50 - Fish [1]	> 100 mg/l (96 h, Pisces, QSAR, Nominal concentration)
EC50 - Crustacea [1]	> 100 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, Nominal concentration)
EC50 72h - Algae [1]	2.78 mg/l Test organisms (species): Raphidocelis subcapitata (previous names: Pseudokirchneriella subcapitata, Selenastrum capricornutum)
EC50 96h - Algae [1]	94800000 mg/l Source: ECOSAR
ErC50 algae	> 3 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Pseudokirchneriella subcapitata, Static system, Fresh water, Experimental value, GLP)

# Harlequin® Listeria Chromogenic Agar (Ottaviani & Agosti) (LCA)

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

<b>Sodium pyruvate (113-24-6)</b>	
NOEC (chronic)	3.95 mg/l Test organisms (species): Duration: '28 d'
<b>Sodium carbonate (497-19-8)</b>	
LC50 - Fish [1]	300 mg/l (96 h, Lepomis macrochirus, Static system, Fresh water, Experimental value, Lethal)
EC50 - Crustacea [1]	200 – 227 mg/l (48 h, Ceriodaphnia sp., Semi-static system, Fresh water, Experimental value, Locomotor effect)
EC50 - Crustacea [2]	200 – 227 mg/l Test organisms (species): Ceriodaphnia sp.
EC50 96h - Algae [1]	242 mg/l Source: ECOTOX
<b>Magnesium sulfate anhydrous (7487-88-9)</b>	
LC50 - Fish [1]	680 mg/l (EPA 600/4-90/027, 96 h, Pimephales promelas, Static system, Fresh water, Read-across, Lethal)
LC50 - Fish [2]	15500 mg/l (96 h, Gambusia affinis, Static system)
EC50 - Crustacea [1]	1700 mg/l (24 h, Daphnia magna)
EC50 72h - Algae [1]	0.00411 mg/l
<b>12.2. Persistence and degradability</b>	
<b>Harlequin® Listeria Chromogenic Agar (Ottaviani &amp; Agosti) (LCA)</b>	
Persistence and degradability	Not rapidly degradable
<b>Lithium chloride (7447-41-8)</b>	
Persistence and degradability	Biodegradability in soil: not applicable, Biodegradability: not applicable.
Chemical oxygen demand (COD)	Not applicable (inorganic)
ThOD	Not applicable (inorganic)
<b>Sodium chloride (7647-14-5)</b>	
Persistence and degradability	Biodegradability: not applicable.
Chemical oxygen demand (COD)	Not applicable (inorganic)
ThOD	Not applicable (inorganic)
<b>Sodium pyruvate (113-24-6)</b>	
Persistence and degradability	Readily biodegradable in water.
<b>Sodium carbonate (497-19-8)</b>	
Persistence and degradability	Biodegradability: not applicable.
Chemical oxygen demand (COD)	Not applicable (inorganic)
ThOD	Not applicable (inorganic)
<b>Magnesium sulfate anhydrous (7487-88-9)</b>	
Persistence and degradability	Biodegradability: not applicable.
Chemical oxygen demand (COD)	Not applicable (inorganic)
ThOD	Not applicable (inorganic)

# Harlequin® Listeria Chromogenic Agar (Ottaviani & Agosti) (LCA)

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

### 12.3. Bioaccumulative potential

#### Lithium chloride (7447-41-8)

Partition coefficient n-octanol/water (Log Pow)	-0.46 (Estimated value, KOWWIN, 20 °C)
Bioaccumulative potential	Not bioaccumulative.

#### Sodium chloride (7647-14-5)

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

#### Sodium pyruvate (113-24-6)

Partition coefficient n-octanol/water (Log Pow)	-3.8 (Practical experience/observation, OECD 107: Partition Coefficient (n-octanol/water): Shake Flask Method, 20 °C)
Bioaccumulative potential	Not bioaccumulative.

#### Sodium carbonate (497-19-8)

Partition coefficient n-octanol/water (Log Pow)	-6.19 Source: Quantitative Structure Activity Relation
Bioaccumulative potential	Not bioaccumulative.

#### Magnesium sulfate anhydrous (7487-88-9)

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

### 12.4. Mobility in soil

#### Lithium chloride (7447-41-8)

Surface tension	No data available (test not performed)
Ecology - soil	Low potential for adsorption in soil. May be harmful to plant growth, blooming and fruit formation.

#### Sodium chloride (7647-14-5)

Surface tension	73.03 mN/m (23 °C, 14.5 g/l)
Ecology - soil	No (test)data on mobility of the substance available.

#### Sodium pyruvate (113-24-6)

Surface tension	No data available in the literature
Ecology - soil	No (test)data on mobility of the substance available.

#### Sodium carbonate (497-19-8)

Surface tension	No data available in the literature
Ecology - soil	Low potential for adsorption in soil.

#### Magnesium sulfate anhydrous (7487-88-9)

Surface tension	No data available in the literature
Ecology - soil	No (test)data on mobility of the substance available.

### 12.5. Results of PBT and vPvB assessment

#### Component

Substance(s) not meeting the PBT criteria of REACH regulation, in accordance with Annex XIII	Lithium chloride (7447-41-8), Sodium chloride (7647-14-5), Sodium pyruvate (113-24-6), Sodium carbonate (497-19-8)
Substance(s) not meeting the vPvB criteria of REACH regulation, in accordance with Annex XIII	Lithium chloride (7447-41-8), Sodium chloride (7647-14-5), Sodium pyruvate (113-24-6), Sodium carbonate (497-19-8)

# Harlequin® Listeria Chromogenic Agar (Ottaviani & Agosti) (LCA)

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

### 12.6. Endocrine disrupting properties

No additional information available

### 12.7. Other adverse effects

No additional information available

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Regional waste regulation	: Disposal must be done according to official regulations.
Waste treatment methods	: Dispose of contents/container in accordance with licensed collector's sorting instructions.
Sewage disposal recommendations	: Disposal must be done according to official regulations.
Product/Packaging disposal recommendations	: Comply with applicable regulations for solid waste disposal. Disposal must be done according to official regulations.
Additional information	: Do not re-use empty containers.
Ecological waste information	: The waste of the product should be considered as hazardous as the product itself, with the likelihood of impacting the environment in the same way. Consider the handling and disposal of the waste as defined by the product itself.
HP Code	: HP5 - "Specific Target Organ Toxicity (STOT)/Aspiration Toxicity:" waste which can cause specific target organ toxicity either from a single or repeated exposure, or which cause acute toxic effects following aspiration. HP14 - "Ecotoxic:" waste which presents or may present immediate or delayed risks for one or more sectors of the environment

## SECTION 14: Transport information

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

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

### 14.6. Special precautions for user

#### Overland transport

Not regulated

#### Transport by sea

Not regulated

#### Air transport

Not regulated

# Harlequin® Listeria Chromogenic Agar (Ottaviani & Agosti) (LCA)

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

### Inland waterway transport

Not regulated

### Rail transport

Not regulated

### 14.7. Maritime transport in bulk according to IMO instruments

Not applicable

## SECTION 15: Regulatory information

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

#### EU-Regulations

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

Contains no substance(s) listed on REACH Annex XVII (Restriction Conditions)

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

Contains no substance(s) listed on REACH Annex XIV (Authorisation List)

##### REACH Candidate List (SVHC)

Contains no substance(s) listed on the REACH Candidate List

##### PIC Regulation (Prior Informed Consent)

Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals)

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

Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)

##### Ozone Regulation (2024/590)

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 2024/590 on substances that deplete the ozone layer)

##### Council Regulation (EC) for the control of dual-use items

Contains no substance subject to the COUNCIL REGULATION (EC) for the control of dual-use items

##### Explosives Precursors Regulation (EU 2019/1148)

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

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

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

### 15.2. Chemical safety assessment

No chemical safety assessment has been carried out

## SECTION 16: Other information

### Abbreviations and acronyms:

ACGIH	American Conference of Governmental Industrial Hygienists
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	Acute Toxicity Estimate
BCF	Bioconcentration factor
BLV	Biological limit value
BOD	Biochemical oxygen demand (BOD)
CAS-No.	Chemical Abstracts Service number

# Harlequin® Listeria Chromogenic Agar (Ottaviani & Agosti) (LCA)

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Abbreviations and acronyms:	
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
COD	Chemical oxygen demand (COD)
CSA	Chemical safety assessment
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
EC-No.	European Community number
EC50	Median effective concentration
ED	Endocrine disruptor
EN	European Standard
EWC	European waste catalogue
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration
LD50	Median lethal dose
LOAEL	Lowest Observed Adverse Effect Level
Log Kow	Partition coefficient n-octanol/water (Log Kow)
Log Pow	Partition coefficient n-octanol/water (Log Pow)
MAK	maximum workplace concentration
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration
N.O.S.	Not Otherwise Specified
OECD	Organisation for Economic Co-operation and Development
OEL	Occupational Exposure Limit
OSHA	Occupational Safety Health Administration
PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
PPE	Personal protection equipment
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS	Safety Data Sheet
STP	Sewage treatment plant
TF	Technical function
ThOD	Theoretical oxygen demand (ThOD)
TLM	Median Tolerance Limit
TWA	Time Weighted Average
VOC	Volatile Organic Compounds
vPvB	Very Persistent and Very Bioaccumulative
UFI	Unique Formula Identifier

# Harlequin® Listeria Chromogenic Agar (Ottaviani & Agosti) (LCA)

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Full text of H- and EUH-statements:	
Acute Tox. 4 (Dermal)	Acute toxicity (dermal), Category 4
Acute Tox. 4 (Inhalation:dust,mist)	Acute toxicity (inhalation:dust,mist) Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Aquatic Acute 1	Hazardous to the aquatic environment – Acute Hazard, Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment – Chronic Hazard, Category 1
Aquatic Chronic 2	Hazardous to the aquatic environment – Chronic Hazard, Category 2
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Skin Corr. 1	Skin corrosion/irritation, Category 1
Skin Irrit. 2	Skin corrosion/irritation, Category 2
Skin Sens. 1B	Skin sensitisation, category 1B
STOT RE 2	Specific target organ toxicity – Repeated exposure, Category 2
H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H373	May cause damage to organs through prolonged or repeated exposure.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.

The classification complies with : ATP 12

Safety Data Sheet (SDS), EU

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.