

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Revision Date 27.04.2020

Version 2.4

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

1.1 Product identifier

Catalogue No.	632881
Millipore Ref.	47-210
Product name	MilliplexMAP A431 Cell Lysate: EGF treated 100ul
REACH Registration Number	This product is a mixture. REACH Registration Number see section 3.

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

Identified uses	Biochemical research/analysis For additional information on uses please refer to the Merck Chemicals portal (www.merckgroup.com).
-----------------	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

1.3 Details of the supplier of the safety data sheet

Company	Merck KGaA * 64271 Darmstadt * Germany * Phone: +49 6151 72-0
Responsible Department	LS-QHC * e-mail: prodsafe@merckgroup.com

1.4 Emergency telephone number

Please contact the regional company representation in your country.

SECTION 2. Hazards identification

2.1 Classification of the substance or mixture

REGULATION (EC) No 1272/2008

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

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

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

Safety data sheet available on request.

2.3 Other hazards

None known.

SECTION 3. Composition/information on ingredients

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Catalogue No. 632881
Product name MilliplexMAP A431 Cell Lysate: EGF treated 100ul

Chemical nature Mixture of inorganic and organic compounds

3.1 Substance

Not applicable

3.2 Mixture

Hazardous components (REGULATION (EC) No 1272/2008)

Chemical name (Concentration)

CAS-No.	Registration number	Classification
---------	---------------------	----------------

20-[4-(1,1,3,3-Tetramethylbutyl)phenoxy]-3,6,9,12,15,18-hexaoxaicosan-1-ol	($\geq 10\%$ - $< 20\%$)	
----------------------------------------------------------------------------	----------------------------	--

2497-59-8	*)	
sodium deoxycholate	($\geq 1\%$ - $< 10\%$)	

302-95-4	01-2120768604-47-XXXX	Acute toxicity, Category 4, H302
----------	-----------------------	----------------------------------

dodecyl sulphate sodium salt ($\geq 1\%$ - $< 2,5\%$)

Substance does not meet the criteria for PBT or vPvB according to Regulation (EC) No 1907/2006, Annex XIII.

151-21-3	01-2119489461-32-XXXX	Flammable solid, Category 2, H228 Acute toxicity, Category 4, H302 Skin irritation, Category 2, H315 Serious eye damage, Category 1, H318 Specific target organ toxicity - single exposure, Category 3, H335 Long-term (chronic) aquatic hazard, Category 3, H412
----------	-----------------------	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

*) A registration number is not available for this substance as the substance or its use are exempted from registration according to Article 2 REACH Regulation (EC) No 1907/2006, the annual tonnage does not require a registration or the registration is envisaged for a later registration deadline.

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

After inhalation: fresh air.

In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower.

After eye contact: rinse out with plenty of water. Remove contact lenses.

After swallowing: make victim drink water (two glasses at most). Consult doctor if feeling unwell.

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Catalogue No.

632881

Product name

MilliplexMAP A431 Cell Lysate: EGF treated 100ul

4.2 Most important symptoms and effects, both acute and delayed

irritant effects, Cough, Nausea, Vomiting, Diarrhoea, Shortness of breath, Tiredness, agitation, Stomach/intestinal disorders, ataxia (impaired locomotor coordination)

4.3 Indication of any immediate medical attention and special treatment needed

No information available.

SECTION 5. Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

Water, Foam, Carbon dioxide (CO₂), Dry powder

Unsuitable extinguishing media

For this substance/mixture no limitations of extinguishing agents are given.

5.2 Special hazards arising from the substance or mixture

Mixture with combustible ingredients.

Development of hazardous combustion gases or vapours possible in the event of fire.

5.3 Advice for firefighters

Special protective equipment for firefighters

In the event of fire, wear self-contained breathing apparatus.

Further information

Suppress (knock down) gases/vapours/mists with a water spray jet. Prevent fire extinguishing water from contaminating surface water or the ground water system.

SECTION 6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Advice for non-emergency personnel: Avoid inhalation of dusts. Evacuate the danger area, observe emergency procedures, consult an expert.

Advice for emergency responders:

Protective equipment see section 8.

6.2 Environmental precautions

Do not let product enter drains.

6.3 Methods and materials for containment and cleaning up

Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dusts.

6.4 Reference to other sections

Indications about waste treatment see section 13.

SECTION 7. Handling and storage

7.1 Precautions for safe handling

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Catalogue No. 632881
Product name MilliplexMAP A431 Cell Lysate: EGF treated 100ul

Advice on safe handling
Observe label precautions.

Hygiene measures
Change contaminated clothing. Wash hands after working with substance.

7.2 Conditions for safe storage, including any incompatibilities

Storage conditions
Tightly closed. Dry.

Recommended storage temperature see product label.

7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated.

SECTION 8. Exposure controls/personal protection

8.1 Control parameters

Derived No Effect Level (DNEL)

dodecyl sulphate sodium salt (151-21-3)

Worker DNEL, longterm	Systemic effects	dermal	4060 mg/kg Body weight
Worker DNEL, longterm	Systemic effects	inhalation	285 mg/m ³
Consumer DNEL, longterm	Systemic effects	dermal	2440 mg/kg Body weight
Consumer DNEL, longterm	Systemic effects	inhalation	85 mg/m ³
Consumer DNEL, longterm	Systemic effects	oral	24 mg/kg Body weight

Predicted No Effect Concentration (PNEC)

dodecyl sulphate sodium salt (151-21-3)

PNEC Fresh water	0,137 mg/l
PNEC Marine water	0,0137 mg/l
PNEC Aquatic intermittent release	0,055 mg/l
PNEC Sewage treatment plant	1084 mg/l
PNEC Fresh water sediment	4,82 mg/kg
PNEC Marine sediment	0,482 mg/kg
PNEC Soil	0,882 mg/kg

8.2 Exposure controls

Engineering measures

Technical measures and appropriate working operations should be given priority over the use of personal protective equipment.

See section 7.1.

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Catalogue No.
Product name

632881
MilliplexMAP A431 Cell Lysate: EGF treated 100ul

Individual protection measures

Protective clothing needs to be selected specifically for the workplace, depending on concentrations and quantities of the hazardous substances handled. The chemical resistance of the protective equipment should be enquired at the respective supplier.

Eye/face protection

Safety glasses

Hand protection

full contact:

Glove material:	Nitrile rubber
Glove thickness:	0,11 mm
Break through time:	> 480 min

splash contact:

Glove material:	Nitrile rubber
Glove thickness:	0,11 mm
Break through time:	> 480 min

The protective gloves to be used must comply with the specifications of EC Directive 89/686/EEC and the related standard EN374, for example KCL 741 Dermatril® L (full contact), KCL 741 Dermatril® L (splash contact).

This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN374 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de).

Respiratory protection

required when dusts are generated.

Recommended Filter type: Filter P 2 (acc. to DIN 3181) for solid and liquid particles of harmful substances

The entrepreneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be properly documented.

Environmental exposure controls

Do not let product enter drains.

SECTION 9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

Form	Lyophilisate
Colour	white to grey
Odour	No strong odour known.
Odour Threshold	No information available.

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Catalogue No.	632881
Product name	MilliplexMAP A431 Cell Lysate: EGF treated 100ul

pH	No information available.
Melting point	No information available.
Boiling point	No information available.
Flash point	No information available.
Evaporation rate	No information available.
Flammability (solid, gas)	No information available.
Lower explosion limit	No information available.
Upper explosion limit	No information available.
Vapour pressure	No information available.
Relative vapour density	No information available.
Density	No information available.
Relative density	No information available.
Water solubility	No information available.
Partition coefficient: n-octanol/water	No information available.
Auto-ignition temperature	No information available.
Decomposition temperature	No information available.
Viscosity, dynamic	No information available.
Explosive properties	Not classified as explosive.
Oxidizing properties	none

9.2 Other data

none

SECTION 10. Stability and reactivity

10.1 Reactivity

See section 10.3

10.2 Chemical stability

The product is chemically stable under standard ambient conditions (room temperature) .

10.3 Possibility of hazardous reactions

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Catalogue No.

632881

Product name

MilliplexMAP A431 Cell Lysate: EGF treated 100ul

Risk of explosion/exothermic reaction with:

Alkali metals

Exothermic reaction with:

Lithium

Violent reactions possible with:

Strong oxidizing agents, bases

Caution! In contact with nitrites, nitrates, nitrous acid possible liberation of nitrosamines!

10.4 Conditions to avoid

no information available

10.5 Incompatible materials

no information available

10.6 Hazardous decomposition products

in the event of fire: See section 5.

SECTION 11. Toxicological information

11.1 Information on toxicological effects

Mixture

Acute oral toxicity

Acute toxicity estimate: > 2.000 mg/kg

Calculation method

Acute inhalation toxicity

This information is not available.

Acute dermal toxicity

This information is not available.

Skin irritation

This information is not available.

Eye irritation

This information is not available.

Sensitisation

This information is not available.

Germ cell mutagenicity

This information is not available.

Carcinogenicity

This information is not available.

Reproductive toxicity

This information is not available.

Teratogenicity

This information is not available.

Specific target organ toxicity - single exposure

This information is not available.

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Catalogue No.

632881

Product name

MilliplexMAP A431 Cell Lysate: EGF treated 100ul

Specific target organ toxicity - repeated exposure

This information is not available.

Aspiration hazard

This information is not available.

11.2 Further information

After absorption:

insomnia, ataxia (impaired locomotor coordination), agitation, Stomach/intestinal disorders, Diarrhoea, Irritation and corrosion, Cough, Shortness of breath

After absorption of toxic quantities:

Tiredness, vasodilation

After uptake of large quantities:

Nausea, Vomiting, Convulsions

Under given conditions, contact with nitrites or nitric acid can lead to the formation of nitrosamines, which have shown themselves to be carcinogenic in animal experiments.

However, when the product is handled appropriately, hazardous effects are unlikely to occur.

Handle in accordance with good industrial hygiene and safety practice.

Components

20-[4-(1,1,3,3-Tetramethylbutyl)phenoxy]-3,6,9,12,15,18-hexaoxaicosan-1-ol

No information available.

sodium deoxycholate

Acute oral toxicity

LD50 Rat: 1.370 mg/kg

(RTECS)

dodecyl sulphate sodium salt

Acute oral toxicity

LD50 Rat: 977 mg/kg

OECD Test Guideline 401

Acute dermal toxicity

LD50 Rabbit: > 2.000 mg/kg

OECD Test Guideline 402

Skin irritation

Rabbit

Result: Irritations

OECD Test Guideline 404

Eye irritation

Rabbit

Result: Irreversible effects on the eye

OECD Test Guideline 405

Sensitisation

Maximisation Test

Result: negative

(IUCLID)

Germ cell mutagenicity

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Catalogue No. 632881
Product name MilliplexMAP A431 Cell Lysate: EGF treated 100ul

Genotoxicity in vitro
Ames test
Salmonella typhimurium
Result: negative
Method: OECD Test Guideline 471

Mutagenicity (mammal cell test):
Mouse lymphoma test
Result: negative
Method: OECD Test Guideline 476

SECTION 12. Ecological information

Mixture

12.1 Toxicity

No information available.

12.2 Persistence and degradability

No information available.

12.3 Bioaccumulative potential

No information available.

12.4 Mobility in soil

No information available.

12.5 Results of PBT and vPvB assessment

Substance(s) in the mixture do(es) not meet the criteria for PBT or vPvB according to Regulation (EC) No 1907/2006, Annex XIII, or a PBT/vPvB assessment was not conducted.

12.6 Other adverse effects

Additional ecological information

Discharge into the environment must be avoided.

Components

20-[4-(1,1,3,3-Tetramethylbutyl)phenoxy]-3,6,9,12,15,18-hexaoxaicosan-1-ol

Partition coefficient: n-octanol/water
log Pow: ca. 3,720 (25 °C)
(calculated)
Bioaccumulation is not expected. (Lit.)

sodium deoxycholate

No information available.

dodecyl sulphate sodium salt

Toxicity to fish
flow-through test LC50 Pimephales promelas (fathead minnow): 29 mg/l; 96 h
OECD Test Guideline 203

flow-through test NOEC Pimephales promelas (fathead minnow): > 1,357 mg/l; 42 d
(ECHA)

Toxicity to daphnia and other aquatic invertebrates
EC0 E.sulcatum: 40 mg/l; 72 h
(Lit.)

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Catalogue No.

632881

Product name

MilliplexMAP A431 Cell Lysate: EGF treated 100ul

EC50 *Daphnia magna* (Water flea): 6 mg/l; 48 h
(IUCLID)

Toxicity to algae

static test EC50 *Desmodesmus subspicatus* (green algae): 53 mg/l; 72 h
DIN 38412

Toxicity to bacteria

microtox test EC50 *Photobacterium phosphoreum*: 0,46 mg/l; 30 min
(IUCLID)

EC50 activated sludge: 130 mg/l; 3 h
OECD Test Guideline 209

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)
flow-through test NOEC *Ceriodaphnia dubia* (water flea): 0,88 mg/l; 7 d

US-EPA

Biodegradability

95 %; 28 d; aerobic
OECD Test Guideline 301B
Readily biodegradable

Ratio BOD/ThBOD

BOD5 99 %
(Lit.)

Partition coefficient: n-octanol/water

log Pow: ≤ -2,03 (20 °C)
OECD Test Guideline 107

Substance does not meet the criteria for PBT or vPvB according to Regulation (EC) No 1907/2006, Annex XIII.

SECTION 13. Disposal considerations

Waste treatment methods

See www.retrologistik.com for processes regarding the return of chemicals and containers, or contact us there if you have further questions.

SECTION 14. Transport information

Land transport (ADR/RID)

14.1 - 14.6

Not classified as dangerous in the meaning of transport regulations.

Inland waterway transport (ADN)

Not relevant

Air transport (IATA)

14.1 - 14.6

Not classified as dangerous in the meaning of transport regulations.

Sea transport (IMDG)

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Catalogue No.	632881
Product name	MilliplexMAP A431 Cell Lysate: EGF treated 100ul

14.1 - 14.6

Not classified as dangerous in the meaning of transport regulations.

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not relevant

SECTION 15. Regulatory information

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

EU regulations

Major Accident Hazard Legislation	SEVESO III Not applicable
-----------------------------------	------------------------------

Regulation (EC) No 1005/2009 on substances that deplete the ozone layer not regulated

Regulation (EC) No 850/2004 of the European Parliament and of the Council of 29 April 2004 on persistent organic pollutants and amending Directive 79/117/EEC not regulated

Substances of very high concern (SVHC) This product does contain substances of very high concern according to Regulation (EC) No 1907/2006 (REACH), Article 59 above the respective regulatory concentration limit of > 0.1 % (w/w).

Contains: 20-[4-(1,1,3,3-Tetramethylbutyl)phenoxy]-3,6,9,12,15,18-hexaoxaicosan-1-ol

This product contains a substance listed on Annex XIV of the REACH Regulation (EC) Nr. 1907/2006.

Listed substance / Sunset Date:	20-[4-(1,1,3,3-Tetramethylbutyl)phenoxy]-3,6,9,12,15,18-hexaoxaicosan-1-ol / 04.01.2021
---------------------------------	-----------------------------------------------------------------------------------------

After the sunset date the use of this substance requires either an authorization or can only be used for exempted uses, e.g. use in scientific research and development which includes routine analytics or use as intermediate.

National legislation

Storage class	10 - 13
---------------	---------

15.2 Chemical safety assessment

For this product a chemical safety assessment was not carried out.

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Catalogue No.	632881
Product name	MilliplexMAP A431 Cell Lysate: EGF treated 100ul

SECTION 16. Other information

Full text of H-Statements referred to under sections 2 and 3.

H228	Flammable solid.
H302	Harmful if swallowed.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H335	May cause respiratory irritation.
H412	Harmful to aquatic life with long lasting effects.

Training advice

Provide adequate information, instruction and training for operators.

Key or legend to abbreviations and acronyms used in the safety data sheet

Used abbreviations and acronyms can be looked up at www.wikipedia.org.

Regional representation

This information is given on the authorised Safety Data Sheet for your country.

The information contained herein is based on the present state of our knowledge. It characterises the product with regard to the appropriate safety precautions. It does not represent a guarantee of any properties of the product.