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

1.1. Product identifier

mEOS-Trap Agarose Kit

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

Relevant identified uses: Research
Uses advised against: Other

1.3. Details of the supplier of the safety data sheet

Manufacturer

ChromoTek GmbH

Fraunhoferstraße 1
D 82152 Planegg-Martinsried

Telephone +49 89 124 148 80
Telefax: +49 89 124 148 811

Supplier

ChromoTek GmbH

Fraunhoferstraße 1
D 82152 Planegg-Martinsried

Telephone +49 89 124 148 80
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Information contact

ChromoTek GmbH

Information telephone +49 89 124 148 80
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E-mail (competent person) info@chromotek.com
Website <http://www.chromotek.com/>

1.4. Emergency telephone number

ChromoTek GmbH

Telephone +49 89 124 148 80

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008:
Flam. Liq. 3, H226; Eye Irrit. 2, H319

2.2. Label elements

Classification according to Regulation (EC) No 1272/2008 [CLP]

Hazard pictograms



GHS02,GHS07

Signal word:

Warning

Hazard statements:

H226 Flammable liquid and vapour.
H319 Causes serious eye irritation.

Precautionary statements:

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P233 Keep container tightly closed.
P240 Ground and bond container and receiving equipment.
P241 Use explosion-proof [electrical/ventilating/lighting/.?] equipment.
P242 Use non-sparking tools.
P243 Take action to prevent static discharges.
P264 Wash .? thoroughly after handling.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P303+361+353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
P305+351+338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+313 If eye irritation persists: Get medical advice/attention.
P403+235 Store in a well-ventilated place. Keep cool.
P501 Dispose of contents/container to disposal.

Hazardous component(s) for labelling:

Ethanol

Special labelling of particular preparations:

Safety data sheet available for professional user on request.

2.3. Other hazards

No risks worthy of mention. Please observe the information on the safety data sheet at all times.

SECTION 3: Composition / information on ingredients

3.1. Substances

not applicable

3.2. Mixtures

Mixture with, among others, the following ingredients and other non-hazardous admixtures

Composition/information on ingredients

Substance:	EC-no.:	CAS-No.:	INDEX no.:	REACH-no.:	Concentration:	Classification: EC 1272/2008 (CLP):
Ethanol	200-578-6	64-17-5	603-002-00-5	01-2119457610-43-0000	15 - 25 %	Flam. Liq. 2, H225; Eye Irrit. 2, H319
Sodium Azide	247-852-1	26628-22-8	011-004-00-7		< 0,1 %	Acute Tox. 1/2, H300; Acute Tox. 1/2, H310; STOT RE 2, H373; Aquatic Chronic 1, H410

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

SECTION 4: First aid measures

4.1. Description of first aid measures

General information:	In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible). Take off immediately all contaminated clothing.
In case of inhalation:	Provide fresh air. In case of respiratory tract irritation, consult a physician.
Following skin contact:	After contact with skin, wash immediately with plenty of water and soap. In case of skin irritation, consult a physician.
After eye contact:	In case of contact with eyes, rinse immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart. Subsequently consult an ophthalmologist.
After ingestion:	Rinse mouth immediately and drink plenty of water. Seek medical attention if problems persist.

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

Symptoms No known symptoms to date. Danger No risks worthy of mention.

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

Notes for the doctor No special measures are necessary. Treatment: Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media Water fog. Carbon dioxide (CO₂). Foam. dry extinguishing powder.

Unsuitable extinguishing media High power water jet.

5.2. Special hazards arising from the substance or mixture

Vapours may form explosive mixtures with air. In case of fire may be liberated: Pyrolysis products, toxic.

5.3. Advice for firefighters

General information

Co-ordinate fire-fighting measures to the fire surroundings. Use water spray jet to protect personnel and to cool endangered containers. Move undamaged containers from immediate hazard area if it can be done safely.

Special protective equipment for fire-fighters:

In case of fire: Wear self-contained breathing apparatus.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Wear personal protection equipment. Remove persons to safety. Provide adequate ventilation.

6.2. Environmental precautions

Do not allow to enter into surface water or drains.

6.3. Methods and material for containment and cleaning up

Treat the recovered material as prescribed in the section on waste disposal.

6.4. Reference to other sections

Safe handling: see section 7 Personal protection equipment: see section 8 Disposal: see section 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advices on safe handling

Specific end use(s) Provide adequate ventilation as well as local exhaust at critical locations.

Precautions against fire and explosion:

Usual measures for fire prevention.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed. Ensure adequate ventilation of the storage area. Keep/Store only in original container. Protect against: heat.

Hints on joint storage

Keep away from food, drink and animal feedingstuffs.

7.3. Specific end use(s)

none

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

occupational exposure limit value

Substance:	CAS-No.:		Source:	Occupational exposure limit value:[ppm]	Occupational exposure limit value:[mg/m ³]	Limitation of exposure peaks:	Remark:
Ethanol	64-17-5	De	TRGS 900	500	960	2(II)	DFG, Y
Ethanol	64-17-5	EN	Gestis International Limit Values	1000	1920		

Substance with a common (EC) occupational exposure limit value.

Substance:	CAS-No.:		Source:	Occupational exposure limit value:[ppm]	Occupational exposure limit value:[mg/m ³]	Limitation of exposure peaks:	Remark:
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DNEL-/PNEC-values

DNEL value

Substance:	CAS-No.:	DNEL/DMEL
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PNEC Value

Substance:	CAS-No.:	PNEC
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Additional information

none

8.2. Exposure controls

Occupational exposure controls:

Provide adequate ventilation as well as local exhaust at critical locations. Technical measures and the application of suitable work processes have priority over personal protection equipment.

General protection and hygiene measures:

When using do not eat, drink, smoke, sniff. Wash hands before breaks and after work. Apply skin care products after work. Wash contaminated clothing prior to re-use.

Personal protection equipment

Minimum standard for preventive measures while handling with working materials are specified in the TRGS 500.

Respiratory protection

Respiratory protection necessary at: Formation of aerosol. Suitable respiratory protection apparatus: Combination filter device (DIN EN 141)..

Hand protection

Suitable material: Tested protective gloves are to be worn: DIN-/EN-Norms: EN ISO 374 Suitable material:
Butyl / 0,5mm / 8h / -
Viton® / 0,4mm / 8h / -
Unsuitable material:
NR (Naturkautschuk)
NBR (Nitrilkautschuk)
PVC (Polyvinylchlorid)

Eye/face protection

Tightly sealed safety glasses.

Body protection:

Suitable protective clothing: Overall. For the protection against direct skin contact, body protective clothing is essential (in addition to the usual working clothes). Only wear fitting, comfortable and clean protective clothing.

Environmental exposure controls

refer to chapter 7. No further action is necessary.

Consumer exposure controls

refer to chapter 7. No further action is necessary.

Exposure Scenario:

none

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance

Physical state: Liquid
Colour: clear
Odour: characteristic
Odour threshold: No data available

Safety relevant basis data

	parameter	Value	unit	Remark
pH:				No data available
Melting point/freezing point:				No data available
Initial boiling point and boiling range:				No data available
Flash point:		~ 35,5	°C	
Evaporation rate:				No data available

Flammability (solid, gas):	No data available
Explosivity:	No data available
Upper flammability or explosive limits:	No data available
lower flammability or explosive limits:	No data available
Vapour pressure:	No data available
Vapour density:	No data available
Relative density:	
Density:	No data available
Soluble (g/L) in:	No data available
Water solubility (g/L):	No data available
Fat solubility (g/L):	No data available
Partition coefficient: n-octanol/water:	No data available
Ignition temperature:	No data available
Decomposition temperature:	No data available
Viscosity:	No data available
Oxidizing properties:	No data available

9.2. Other information

none

SECTION 10: Stability and reactivity

10.1. Reactivity

Vapours may form explosive mixtures with air.

10.2. Chemical stability

Decomposition with: UV-radiation/sunlight. heat.

10.3. Possibility of hazardous reactions

Vapours may form explosive mixtures with air.

10.4. Conditions to avoid

heat. UV-radiation/sunlight.

10.5. Incompatible materials

Oxidising agent

10.6. Hazardous decomposition products

In case of fire may be liberated: Carbon dioxide. Carbon monoxide.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

M-factor:

Acute toxicity (oral):

Acute toxicity

Acute toxicity (dermal):

Acute toxicity (inhalative):

Substance:	CAS-No.:	Toxicological information
Ethanol	64-17-5	LD50 oral (rat) 7060 mg/kg LC50 inhalation (rat, 4 h) 51 mg/L LD50 dermal (rabbit) > 2000 mg/kg NOAEL STOT-RE oral (rat, 90 days, liver) 1730 mg/kg/d NOAEL STOT-RE inhalative (rat, 21 days) > 20 mg/L

Skin corrosion/irritation:
mild irritant.

Serious eye damage/irritation:
strongly irritant.

Respiratory or skin sensitisation:
May cause an allergic skin reaction.

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

Carcinogenicity:
No indications of human carcinogenicity exist.
Germ cell mutagenicity:
No indications of human germ cell mutagenicity exist.
Reproductive toxicity:
No indications of human reproductive toxicity exist.

STOT-single exposure:
none

STOT-repeated exposure:
none

Aspiration hazard:
mild irritant.

SECTION 12: Ecological information

12.1. Toxicity

The information about ecology refers to the main components.

Ecotoxicity

Substance:	CAS-No.:	Ecotoxicity
Ethanol	64-17-5	LC50 (fish, 96 h) 11000 mg/l EC50 (Great Water flea, 48 h) 12340 mg/L EC50 (algae, 72 h) 11,5 mg/l

12.2. Persistence and degradability

Easily biodegradable (concerning to the criteria of the OECD)

12.3. Bioaccumulative potential

No indication of bioaccumulation potential.

12.4. Mobility in soil

none

12.5. Results of PBT and vPvB assessment

This substance does not meet the criteria for classification as PBT or vPvB.

12.6. Other adverse effects

none

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Appropriate disposal/Product:

Waste disposal according to EC Directives 75/442/EEC and 91/689/EEC on waste and hazardous waste in their latest versions.

Appropriate disposal / Package

Non-contaminated packages may be recycled. Handle contaminated packages in the same way as the substance itself.

List of proposed waste codes / waste designations according to EWC / AVV

According to EAKV, allocation of waste identity numbers/waste descriptions must be carried out in a specific way for every industry and process.

SECTION 14: Transport information

14.1. UN number

UN No.: 1993

14.2. UN proper shipping name

Land transport (ADR/RID)

ENTZÜNDBARER FLÜSSIGER STOFF, N.A.G.
Ethanol

Sea transport (IMDG), Air transport (ICAO-TI / IATA-DGR)

FLAMMABLE LIQUID, N.O.S.
Ethanol

14.3. Transport hazard class(es)

Hazard label(s) / Label: 3

Classification code: / Classification Code: F1



14.4. Packing group

Packing group/ Packing Group: III

14.5. Environmental hazards

ADR/RID / IMDG / ICAO-TI / IATA-DGR:
Marine pollutant:

Yes

No

14.6. Special precautions for user

Land transport (ADR/RID)

transport category:	3	tunnel restriction code:	E
Special provisions:	274, 601	Limited quantity (LQ):	5 l

Sea transport (IMDG)

EmS-No: F-E, S-E

Special provisions: 223 274 955 Limited quantity (LQ): 5 l

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

Remark none

SECTION 15: Regulatory information

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

EU legislation

Information on Regulation (EC) No 166/2006 establishing a European Pollutant Release and Transfer Register:
none

Regulation (EC) No. 1005/2009 on substances that lead to the depletion of the ozone layer:
none

Regulation (EC) No. 648/2004 (Detergents regulation)
none

Regulation (EC) No 850/2004 [POP-Regulation]:
none

Regulation (EU) No 649/2012 on the export and import of dangerous chemicals:
none

Use restriction according to REACH annex XVII, no.::
none

National regulations

Observe in addition any national regulations!

Restrictions of occupation

none

Other regulations, restrictions and prohibition regulations

none

15.2. Chemical Safety Assessment

For this preparation a chemical safety assessment has been carried out.

For this substance a chemical safety assessment is not required.

SECTION 16: Other information

Relevant H- and EUH-phrases (Number and full text):
Hazard statements

H226 Flammable liquid and vapour.
H319 Causes serious eye irritation.

Training advice

Make sure that employees are aware of the intoxication risk. People wearing breathing apparatus must be appropriately trained.

Recommended restrictions of use:

refer to chapter 1.

Further remarks:

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

Documentation of changes:

none

Key literature references and sources for data

Data arise from reference works and literature.

Abbreviations and acronyms

none
