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

1.1. Product identifier

SUMO-Tag-Trap Agarose (suta)

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

Relevant identified uses: Laboratory use
Uses advised against: Other:

1.3. Details of the supplier of the safety data sheet

Manufacturer
ChromoTek GmbH

Fraunhoferstr. 1
D 82152 Planegg-Martinsried

Telephone +49 89 124 148 810
Telefax: +49 89 124 148 811

Supplier
ChromoTek GmbH

Fraunhoferstr. 1
D 82152 Planegg-Martinsried

Telephone +49 89 124 148 810
Telefax: +49 89 124 148 811

Information contact
ChromoTek GmbH

Information telephone +49 89 124 148 810
Information telefax +49 89 124 148 811
E-mail (competent person) germany@ptglab.com
Website https://www.ptglab.com/

1.4. Emergency telephone number

Giftnotrufzentrale München

Telephone +49 89 19 240

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008:
Flam. Liq. 2, H225

2.2. Label elements

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

GHS02

Signal word: Danger
Hazard statements:

H225 Highly flammable liquid and vapour.

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.
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].
P403+235 Store in a well-ventilated place. Keep cool.
P501 Dispose of contents/container.

Special labelling of particular preparations:
none

2.3. Other hazards
Not known

SECTION 3: Composition / information on ingredients

3.1. Substances
not applicable

3.2. Mixtures
SUMO-Tag-Trap Agarose (suta) is a mixture with, among others, the following ingredients and other non-hazardous admixtures in aqueous solution

Composition/information on ingredients

Substance:	CAS-No.:	REACH-no.:	Concentration:	Classification: EC 1272/2008 (CLP):	M, ATE, Note
Ethanol	64-17-5	01-2119457610-43-0000	20 %	Flam. Liq. 2, H225 Eye Irrit. 2, H319	M = 0

(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
In case of inhalation: No special measures are necessary. Consult an ophthalmologist.
Following skin contact: 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. Seek medical attention if problems persist.
After ingestion: No special measures are necessary. Consult an ophthalmologist.

4.2. Most important symptoms and effects, both acute and delayed
Symptoms Nausea. vomiting. Danger Depression of the central nervous system. unconsciousness.

4.3. Indication of any immediate medical attention and special treatment needed
Let water be drunken in little sips (dilution effect). Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	Water fog. alcohol resistant foam. dry extinguishing powder. Carbon dioxide (CO_2).
Unsuitable extinguishing media	High power water jet.

5.2. Special hazards arising from the substance or mixture

Vapours may form explosive mixtures with air.

5.3. Advice for firefighters

General information

Move undamaged containers from immediate hazard area if it can be done safely. Use water spray jet to protect personnel and to cool endangered containers.

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

Provide adequate ventilation. Remove all sources of ignition. Remove persons to safety. Wear personal protection equipment.

6.2. Environmental precautions

Do not allow to enter into surface water or drains.

6.3. Methods and material for containment and cleaning up

Take up mechanically, placing in appropriate containers for disposal. Treat the recovered material as prescribed in the section on waste disposal. Avoid generation of dust. Clear contaminated areas thoroughly. Wash with plenty of water.

6.4. Reference to other sections

See protective measures under point 7 and 8.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advices on safe handling

Avoid contact with skin and eyes.

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 and in a well-ventilated place.

Hints on joint storage

Do not store together with: Oxidizing agents.

7.3. Specific end use(s)
Observe instructions for use.

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/m³]	Limitation of exposure peaks:	Remark:
Ethanol	64-17-5	EN	TRGS 900	500	960	2(II)	DFG, Y
		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/m³]	Limitation of exposure peaks:	Remark:

DNEL-/PNEC-values
DNEL value

Substance:	CAS-No.:	DNEL/DMEL

PNEC Value

Substance:	CAS-No.:	PNEC

Additional information
none

8.2. Exposure controls
Occupational exposure controls:
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. gas filtering equipment (EN 141).

Hand protection
Tested protective gloves are to be worn: DIN-/EN-Norms: EN ISO 374 Suitable material: Butyl rubber. FKM (fluororubber).

Eye/face protection
Tightly sealed safety glasses.

Body protection:
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. Barrier creams are not substitutes for body protection.

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:	Suspension
Colour:	No data available
Odour:	No data available
Odour threshold:	No data available

Safety relevant basis data

	parameter	Value	unit	Remark
Melting point/freezing point:				No data available
Initial boiling point and boiling range:				No data available
Flammability:				No data available
lower flammability or explosive limits:				not applicable
Upper flammability or explosive limits:				not applicable
Flash point:		ca 35	°C	
Ignition temperature:				No data available
Decomposition temperature:				not applicable
pH:				No data available
Kinematic viscosity:				No data available
Water solubility (g/L):				
Partition coefficient: n-octanol/water:				No data available
Vapour pressure:				No data available
Density:				No data available
Relative density:				
Particle properties:				No data available

9.2. Other information

There are no data available on the mixture itself.

SECTION 10: Stability and reactivity

10.1. Reactivity

none

10.2. Chemical stability

With proper storage and handling the product is stable.

10.3. Possibility of hazardous reactions

No data available

10.4. Conditions to avoid
Heat. UV radiation/sunlight.

10.5. Incompatible materials
Oxidizing agent Reducing agent. Alkalis (alkalis). Alkali metals.

10.6. Hazardous decomposition products
Pyrolysis products, toxic. Carbon dioxide. Carbon monoxide.

SECTION 11: Toxicological information

11.1. Information on hazard classes within the meaning of Regulation (EC) No. 1272/2008
Data apply to the main component.

M-factor: -
Acute toxicity (oral): -
Acute toxicity (dermal): -
Acute toxicity (inhalative): -

Acute toxicity

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 kg/d NOAEL STOT-RE inhalative (rat, 21 days) > 20 mg/L

Skin corrosion/irritation:
slightly irritant but not relevant for classification.

Serious eye damage/irritation:
slightly irritant but not relevant for classification.

Respiratory or skin sensitisation:
No information available.

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)
Carcinogenicity:
No indications of human carcinogenicity exist.
Germ cell mutagenicity:
No indications of human carcinogenicity exist.
Reproductive toxicity:
No indications of human reproductive toxicity exist.

STOT-single exposure:
No information available.

STOT-repeated exposure:
none

Aspiration hazard
Not an irritant.

Additional information
none

11.2. Information about other hazards
11.2.1 Endocrine disrupting properties

No information available.

11.2.2 Other Information

none

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

Product is biodegradable.

12.3. Bioaccumulative potential

No indication of bioaccumulation potential.

12.4. Mobility in soil

No information available.

12.5. Results of PBT and vPvB assessment

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

12.6 Endocrine disruptive effect

No known endocrine disrupting properties

12.7. Other adverse effects

none

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Appropriate disposal/Product:

Dispose of waste according to applicable legislation.

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.: 1170

14.2. UN proper shipping name

Land transport (ADR/RID)
ETHANOL (ETHYLALKOHOL) oder ETHANOL, LÖSUNG (ETHYLALKOHOL, LÖSUNG)

Sea transport (IMDG), Air transport (ICAO-TI / IATA-DGR)
ETHANOL (ETHYL ALCOHOL) or ETHANOL SOLUTION (ETHYL ALCO- HOL SOLUTION)

14.3. Transport hazard class(es)

Hazard label(s) / Label: 3

Classification code: / Classification Code: F1

14.4. Packing group

Packing group/ Packing Group: II

14.5. Environmental hazards

	Yes	No
ADR/RID / IMDG / ICAO-TI / IATA-DGR:	☐	☒
Marine pollutant:	☐	☒

14.6. Special precautions for user

Land transport (ADR/RID)

transport category: 2
tunnel restriction code: D/E
Special provisions: 144, 601
Limited quantity (LQ): 1 L

Sea transport (IMDG)

EmS-No: F-E, S-D
Special provisions:
Limited quantity (LQ): 1 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 according to 1999/13/EC about limitation of emissions of volatile organic compounds (VOC-guideline).
none

Regulation (EC) No 2037/2000 concerning materials, which cause damage to the ozone layer.
none

Regulation (EC) No. 648/2004 (Detergents regulation)
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.
Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information

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

H225	Highly flammable liquid and vapour.
H319	Causes serious eye irritation.

Training advice
none

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 storag

Documentation of changes:
none

Key literature references and sources for data
Data arise from reference works and literature.

Abbreviations and acronyms
none