Safety data sheet

According to regulation (EC) No. 1907/2006

Rev.date: 10.05.2019 replaces version from 08.03.2011

1. Identification of the substance/preparation and the company/undertaking

1.1. Product identifier

Catalogue no.: IC6200su
Product name: alpha-1-Antitrypsin ELISA TMB-Substrate (SUB)

1.2. Relevant identified uses of the substance or mixture and uses advised against
Materials for use in the appropriate testkit.

1.3. Details of the supplier of the safety data sheet

Company: ImmuChrom GmbH
Lise-Meitner-Str. 13
64646 Heppenheim
Tel.: +49 6252 910084
Fax: +49 6252 910070
Email: info@immuchrom.de
www.immuchrom.de

1.4. Emergency telephone number
Available during the normal working hours +49 6252 910084

2. Hazards identification

2.1. Classification of the substance or mixture (Regulation (EC) No 1272/2008
none

2.2. Label elements (Regulation (EC) No 1272/2008
Hazard pictograms

Signal word

Hazard statements

Precautionary statements
P280
P302 + P352
P305 + P351 + P338
P310

3. Composition/information on ingredients

The mixture contains the substances listed below and substances without dangerous potential.

CAS-No.	EINECS	Description	Percent	H-codes of pure substance
54827-17-7	259-364-6	3,3´,5,5´-Tetramethylbenzidine	<0,036	315, 319, 335
60-00-4	205-358-3	Ethylendiamintetraacetic-di-sodium-salt	0,093	319
26172-55-4	247-500-7	5-Chlor-2-methyl-4-isothiazolin-3-on	0,00009	301, 311, 314, 317, 331, 410
2682-20-4	220-239-6	2-Methyl-4-isothiazolin-3-on	0,00003	301, 311, 314, 317, 331, 410
7722-84-1	231-765-0	Hydrogenperoxyde	<0,002	302, 318

4. First aid measures

4.1. Description of first aid measures
General advice: First aider needs to protect himself.
After inhalation: Fresh air, in case of discomfort consult a physician.

After skin contact: Wash with plenty of water, remove contaminated clothing, in case of discomfort consult a physician.

After eye contact: Rinse out with plenty of water. Immediately contact a ophthalmologist.

If swallowed : Give water to drink (two glases at most). Immediately contact a physician.

4.2. Most important symptoms and effects, both acute and delayed
No information available

4.3. Indication of immediate medical attention and special treatment needed
No information available

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5. Fire fighting measures

5.1. Extinguishing media
Suitable extinguishing media: Water, foam, carbon dioxyde (CO_2)

Unsuitable extinguishing media: none

5.2. Special hazards arising from the substance ort he mixture
Ambient fire may cause evolution of nitrous gases

5.3. Advice for firefighters
Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.

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6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures
Ensure adequate ventilation, observe emergency procedures, call an expert.

6.2. Environmental precaution
Do not empty into drains

6.3. Methods and materials for containment and cleaning up
Cover drains. Collect, bind and pump off spills.

6.4. Reference to other sections
For waste treatment refer to section 13

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7. Handling and storage

7.1 Precaution for safe handling
Wear disposable gloves while handling specimens or kit reagents and wash hands thoroughly afterwards.

7.2. Conditions for safe storage, including any incompatibilities

Keep tightly closed.

Store at +2 - +8 °C.

7.3. Specific end uses

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

8. Exposure controls/personal protection

8.1. Control parameters

CAS-No.	Description	MAK (TRGS 900)
54827-17-7	3,3´,5,5´-Tetramethylbenzidine	not listed
60-00-4	Ethylendiamintetraacetic-di-sodium-salt	not listed
26172-55-4	5-Chlor-2-methyl-4-isothiazolin-3-on	0,05 mg/m³
2682-20-4	2-Methyl-4-isothiazolin-3-on	0,05 mg/m³
7722-84-1	Hydrogenperoxyd	1,4 mg/m³

8.2. Exposure controls
Technical measures to reduce safety risk for the operator should be given priority over the use of personal protective equipment.

Individual protection measures

Hygiene measures: Wear disposable gloves while handling specimens or kit reagents and wash hands thoroughly afterwards. Do not eat, drink, smoke or apply makeup in areas where specimens or kit reagents are handled.

Eye protection: Wear safety glasses.

Hand protection: wear safety gloves
The gloves must comply with the specifications of the directive EC 89/686/EEC and the related standard EN374.

Respiratory protection: Not necessary

Environmental exposure control: Do not empty into drains

9. Physical and chemical properties

Form	liquid, slightly foaming when shaken
Colour	colourless
Odour	characteristic
pH-Value	3,6-3,8
Melting point	no information available
Boiling point	100 °C
Flash point	no information available
Evaporation rate	no information available
Flammability (solid, gas)	no information available
Lower explosion limit	not exposive
Higher explosion limit	not explosive
Vapour pressure	no information available
Relative density	1,003 g/ml
Water solubility	complete
Partition coefficient: n-oktanol/water	no information available
Autoignition temperature	no information available
Decomposition temperature	no information available
Viscosity, dynamic	no information available
Explosive properties	not explosive
Oxidizing properties	no information available
Other data	none

10. Stability and reactivity

10.1. Reactivity
no information available

10.2. Chemical stability
Temperature sensitive. The mixture is stable at 2-8 °C up to the expiry date given on the label

10.3. Possibility of hazardous reactions
Risk of explosion and/or toxic gas formation with the following substances
no information available

Violent reactions possible with:

No degradation when using according to the specification

10.4. Conditions to avoid
Heat, direct sunlight

10.5. Incompatible materials
Heavy metal salts, peroxidases, catalses

10.6. Hazardous decomposition products
Endproduct of the decomposition is the yellow diammonia ion of tetramethylbenzidine, which is classified as non dangerous.

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11. Toxicological information

11.1. Information on toxicological effects

Component	**Type**	**Value**	**Species**
3,3´,5,5´-Tetramethylbenzidine	no information available		
Ethylendiamintetraacetic-di-sodium-salt	LD_{50} (oral)	2000 mg/kg	Rat
5-Chlor-2-methyl-4-isothiazolin-3-on	LD_{50} (oral)	3350 mg/kg	Rat
2-Methyl-4-isothiazolin-3-on	LD_{50} (oral)	550 mg/kg	Rat
Hydrogenperoxyd	LD_{50} (oral)	1232 mg/kg	Rat
	LD_{50} (dermal)	3000 mg/kg	Rabbit

Skin irritation
Slight irritation

Eye irritation
Slight irritation

CMR effects
No information available

Specific target organ toxicity
No information available

Aspiration hazard
No information available

11.2. Further information
Quantative data on toxicity of the mixture are not available

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12. Ecological information

12.1. Toxicity
Only relevant for the preservatives 5-Chlor-2-methyl-4-isothiazolin-3-on und 2-Methyl-4-isothiazolin-3-on.

Species	Type	Value	Exposition time (h)
Trout	LC_{50} (mg/l)	0,19	
Perch	LC_{50} (mg/l)	0,28	
Algae (Skeletonema costatum)	EC_{50} (mg/l)	0,003	
Algae (Selenastrum capricornutum)	EC_{50} (mg/l)	0,018	
Invertebrate (Daphnia magna)	EC_{50} (mg/l)	0,16	

12.2. Persistence and degradability

Substance	t1/2 anaerob (h)
5-Chlor-2-methyl-4-isothiazolin-3-on	4,8
2-Methyl-4-isothiazolin-3-on	9,1

12.3. Bioaccumulative potencial
No information available

12.4. Mobility in soil
No information available

12.5. Results of PBT- and vPvB-assessment
A PBT- and vPvB-assessment is not available, as a chemical safety assassment is not required/not conducted.

12.5. Other adverse effects
No other effects are known
When using according the instruction ecological danger is not expected

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13. Disposal consideration

Leftovers should be disposed concerning to the regulation 2008/98/EC and/or national and regional regulations.

Uncontaminated packing can be treated as normal waste or conduct into the recycling process.

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14. Transport information

Not supposed to the transport regulation

ADR/RID

IATA

IMDG

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15. Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture
EU regulation
This safety data sheet complies with the requirements of the regulation (EC) No. 1907/2006

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

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16. Other information

Text of H-codes mentioned in section 2

H301	Toxic if swallowed
H302	Harmful when swallowed
H311	Toxic in contact with skin
H314	Causes severe skin burns and eye damage
H315	Cause skin irritation
H317	May cause an allergic skin reaction
H318	Causes serious eye damage
H319	Causes serious eye irritation
H331	Toxic if inhaled
H335	May cause respiratory irritation
H410	Toxic to aquatic life with long lasting effects

Precautionary statements

P280	Wear protective gloves, protective clothing, eye protection
P302+P352	If on skin: Wash with plenty of soap and water
P305+P351+P338	If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rising.
P310	Immediately call a POISON CENTER or doctor/physician

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