

# VLVbio SAFETY DATA SHEET

First	edition	Revision date	Replaces	Art. no	Issued by	Page						
-		10/04/2019	04/09/2018	10011	Trossa AB	1 of 12						
		N	130 Apopto	sense® ELI	SA							
SEC	SECTION 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING											
1.1 Item	PRODUCT ID	DENTIFIER	M30 Apoptosens 10011	e® ELISA								
1.2	THE SUBSTA	DENTIFIED USES OF NCE OR MIXTURE DVISED AGAINST	regulation; EU 12	The product is a medical device product and is not covered by the CLP- regulation; EU 1272/2008 (Classification & Labelling of Chemical Products). The product consists of a kit for diagnosis using ELISA analysis.								
1.3	DETAILS OF SAFETY DAT	THE SUPPLIER OF TH A SHEET	E VLVbio AB Hästholmsvägen 131 30 Nacka Sweden	32								
			Phone +46 (0)8 1	22 053 00, Email: <u>ir</u>	nfo@vlvbio.com;	io.com						
			For questions reg info@vlvbio.com	• •	lata sheet, please contact:							
1.4	EMERGENCY NUMBER	<b>TELEPHONE</b>	In England and W	/ales: NHS 111 - dia	tional Poisons Information I 111. In Scotland: NHS 24 - Iand, dial 112 or 999.							

#### **SECTION 2. HAZARDS IDENTIFICATION**

#### 2.1 CLASSIFICATION OF THE SUBSTANCE OR MIXTURE (CLP)

Health hazards:

The product is classified as hazardous to health. The classifications are referred to the content of sulphuric acid in the stop solution component: Causes skin irritation (Skin Irrit. 2; H315).

Causes serious eye irritation (Eye Irrit. 2; H319).

Environmental hazards

The product is not classified as hazardous to the environment.

Physical hazards

The product is not classified for physical hazards.

2.2 LABEL ELEMENTS

Hazard Pictograms

First edition	Revision date	Replaces	Art. no	Issued by	Page
-	10/04/2019	04/09/2018	10011	Trossa AB	2 of 12

(!	
Signal word	
WARNING	
Substances that	t contribute to the classification
Sulphuric acid.	
Hazard statem	ents
H315	Causes skin irritation.
H319	Causes serious eye irritation.
	statements Avoid breathing fumes. Wear protective gloves/protective clothing/eye protection. IF ON SKIN: Wash with plenty of water. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Other labelling	
- Other regulation	ons
-	
Other informat	ion
-	
2.3 OTHER H	AZARDS

SECTION 3. COMPOSI	TION/INFOR	MATION ON	INGREDIENTS			
<b>3.1 MIXTURES</b> Description of the mixture.						
Medical device product - kit	for diagnosis (	using ELISA an	alysis.			
Substance	EC No.	CAS No.	REACH No. <sup>2</sup>	Conc. w/w %	Classification (CLP) <sup>1</sup>	
Kathon* (octhilinone (ISO); 2-octyl-2H-isothiazol-3-one	247-761-7	26530-20-1	01- 2120768921- 45-xxxx	<0.1	Acute Tox. 4 Acute Tox. 3 Skin Sens. 1 Acute Tox. 3 Aquatic Acute 1 Aquatic Chronic 1	H302 <sup>a</sup> H311 <sup>a</sup> H317 <sup>a</sup> H331 <sup>a</sup> H400 <sup>a</sup> H410 <sup>a</sup>

First edition	Revision date	Replaces	Art. no	Issued by	Page
-	10/04/2019	04/09/2018	10011	Trossa AB	3 of 12

Tartrazin**	217-699-5	1934-21-0	01- 2120116875- 52-xxxx	0.02	Skin Sens. 1	H317 <sup>c</sup>
3,3',5,5' Tetramethyl- benzidin***	259-364-6	54827-17-7	-	≤ 0.05	Skin Irrit. 2 Eye Irrit. 2 STOT SE 3	H315 <sup>b, c</sup> H319 <sup>b, c</sup> H335 <sup>b, c</sup>
<sup>d</sup> Sulphuric acid****	231-639-5	7664-93-9	01- 2119458838- 20-xxxx	5.5	Skin Corr. 1A	H314ª

a) Harmonised classification according to Annex VI, part 3, table 3.1 and 3.2, Regulation (EC) No 1272/2008 (CLP).

b) Classification according to one of the most used alternatives in ECHA's Classification & Labelling Inventory.
c) Classification according to the manufacturer.

d) Substance for which there are occupational exposure limits in the work environment (*EH40/2005 Workplace exposure limits, 2018*).

\* Kathon is included in M30 HRP Conjugate (2), M30 Conjugate Dilution Buffer (3), M30 Standard A-G (4), M30 Control Low and High (5).

Hazardous components are 5-chloro-2 methyl-2H-isothiazol-3-one (EC No. 247-500-7) and 2-methyl-2H -isothiazol-3-one (EC No. 220-239-6) as a mixture, 1:3 (CAS No. 55965-84-9), conc. 1–2.5 %. Concentration of the dangerous substances in component numbers 2-5:  $\leq 0.004$  %. 0.0015 %  $\leq$  conc. < 0.06 %

\*\* Tartrazin is included in M30 Standard A-G, M30 Control Low and High

\*\*\* 3,3',5,5' Tetramethyl-benzidin is included in the TMB substrate.

\*\*\*\* Sulphuric acid is included in the Stop solution to 5.5 %, why the classification H314 of the mixture not is applicable.

The product kit also contains: M5 Coated Microstrips, Wash Tablet and Sealing Tape.

Other information

For a full text of H- phrases: See Section 16

#### SECTION 4. FIRST AID MEASURES

## 4.1 DESCRIPTION OF FIRST AID MEASURES Inhalation

Fresh air and rest. If difficulties in breathing, get medical advice.

Skin contact

Rinse with water. Consult a doctor if symptoms persist.

Eye contact

After contact with eyes, flush cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Contact a doctor.

Ingestion

First edition	<b>Revision date</b>	Replaces	Art. no	Issued by	Page
-	10/04/2019	04/09/2018	10011	Trossa AB	4 of 12

Flush mouth with plenty of water (do not swallow), drink a couple of glasses of water. Do not induce vomiting Consult a doctor if more than a small amount has been swallowed.

Information to medical advice

Treat symptomatically.

#### 4.2 MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED

Inhalation:

May cause burning in the nose and throat, coughing and sore throat. Long-lasting or/and repeating exposure may cause allergy or asthma symptoms or breathing difficulties if inhaled.

Skin Contact Causing pain, redness and irritation.

Eye Contact Causes redness, pain and transient irritation.

Ingestion:

Smaller amounts are not expected to provide any acute or delayed symptoms.

Other:

#### 4.3 INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED

Eye wash should be available at the working place.

#### SECTION 5. FIREFIGHTING MEASURES

#### 5.1 EXTINGUISHING MEDIA RELEVANT

Suitable extinguishing media are powder, foam, carbon dioxide or water spray. No special extinguishing media needed. Use the same extinguishing media as recommended for the surroundings. Do not use direct water jet.

#### 5.2 SPECIAL HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE

In case of fire, toxic and corrosive fumes such as oxides of carbon, sulphur oxides or other combustion products may develop.

#### 5.3 ADVICE FOR FIREFIGHTERS

Precautions according to the standard procedure for chemical fires.

First edition	<b>Revision date</b>	Replaces	Art. no	Issued by	Page
	10/04/2019	04/09/2018	10011	Trossa AB	5 of 12

#### SECTION 6. ACCIDENTAL RELEASE MEASURES

#### 6.1 PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES

Ensure adequate ventilation. Wear gloves and eye protection if splashing, or direct contact. When large spills, contact the fire department.

#### 6.2 ENVIRONMENTAL PRECAUTIONS

Avoid discharge of large amounts into the sewer.

#### 6.3 METHODS AND MATERIAL FOR CONTAINMENT AND CLEANING UP

Absorb spillages with suitable inert absorbent material such as sand or active clay. Collect the spill and treat as hazardous waste.

Collected and treated as hazardous waste.

Rinse away residues with plenty of water.

#### 6.4 REFERENCE TO OTHER SECTIONS

See Section 8 for Exposure controls / personal protection and Section 13 for disposal considerations.

#### SECTION 7. HANDLING AND STORAGE

#### 7.1 PRECAUTIONS FOR SAFE HANDLING

Avoid inhalation and direct contact with the product.

Do not eat, drink and smoke when handling the product. Normal hand hygiene.

Ensure that contaminated clothing does not come into contact with foodstuffs etc. and is washed before re-use.

When handling the product, the Work Environment Authority AFS 2014: 43 "Chemical safety risks" must be followed. (Thermosets)

#### 7.2 CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES

Store in a cool dry place in a well ventilated / not in direct sunlight / away from ignition sources. Do not freeze. Protect from light.

Vapor concentration on the floor and in low-lying spaces.

Must be stored according to national regulations for flammables.

#### 7.3 SPECIFIC END USE

See Section 1.

First edition	Revision date	Replaces	Art. no	Issued by	Page
-	10/04/2019	04/09/2018	10011	Trossa AB	6 of 12

SECTION 8. EXPOSURE CONTRO	LS/PERSONAL PROTECTION
8.1 CONTROL PARAMETERS Exposure limits according to National re	gulations (Great Britain EH40, Workplace exposure limits).
Sulphuric acid (The mist is defined as the thoracic fraction).	0.05 mg/m <sup>3</sup> (TWA 8h)
This information refers to Great Britain. Other information	For other countries, refer to national legislation.
-	
<b>8.2 EXPOSURE CONTROLS</b> Appropriate technical measures.	
Methods are designed to prevent direct	contact.
Possibility to rinse eyes shall be available	e at place of work.
Ensure adequate ventilation. In case of i (LEV) should be used. Individual protection measures and pers	nsufficient ventilation, mechanical ventilation with local exhaust ventilation
Eye/face protection:	Protective glasses shall be used.
Skin protection:	Protective gloves meeting the requirements of Standard EN 374 shall be used. Recommended glove material: neoprene.
Respiratory protection:	Not normally required.
Other protection:	Not normally required.
Thermal hazard.	Not relevant.
8.3 ENVIRONMENTAL EXPOSURE CON	ITROLS
Avoid release to the environment.	

First edition	Revision date	Replaces	Art. no	Issued by	Page
-	10/04/2019	04/09/2018	10011	Trossa AB	7 of 12

#### SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

#### 9.1 INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES

Component number	1	2	3	4–5	6	7	8	9
Appearance	Solid	Liquid	Liquid	Liquid	Liquid	Liquid	Solid	Solid (Tape
	(Microstri						(Tablet)	
	ps)							
Colour	Colourles	Light red	Blue	Yellow	Colourless	Colourless	White	Colourless
	S	brown			to light yellow			
Odour	No smell	No smell	No smell	No smell	No smell	No smell	No smell	No smell
рН	N/A	7.0	$7.0 \pm 0.1$	7.0 ± 0.1	3.55 ± 0.20	≤1	N/A	N/A
Melting point/freezing	N/A	0 °C	0 °C	0 °C	0 °C	0 °C	N/A	N/A
point								
Initial boiling point and	N/A	100 °C	100 °C	100 °C	100 °C	101 °C	N/A	N/A
boiling range								
Flash point	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Evaporation rate	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Flammability	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Upper/lower	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
flammability or								
explosive limits								
Vapour pressure	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Vapour density	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Relative density	N/A	N/A	N/A	N/A	N/A	1,03	N/A	N/A
						g/cm3 (20		
						°C)		
Solubility in water	N/A	soluble	soluble	soluble	soluble	soluble	soluble	N/A
Partition coefficient: n-	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
octanol /water								
Auto-ignition	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
temperature								
Decomposition	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
temperature								
Viscosity	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Explosive properties	Not	Not	Not	Not	Not	Not	Not	Not
	explosive	explosive	explosive	explosive	explosive	explosive	explosive	explosive

#### 9.2 OTHER INFORMATION

Component 7 can be corrosive to metals.

#### SECTION 10. STABILITY AND REACTIVITY

#### **10.1 REACTIVITY**

May be corrosive to metals (component number 7)<sup>4</sup>.

#### **10.2 CHEMICAL STABILITY**

Stabile until expiry date stated on label if stored under specified conditions<sup>4</sup>.

#### **10.3 POSSIBILITY OF HAZARDOUS REACTIONS**

First edition	Revision date	Replaces	Art. no	Issued by	Page
-	10/04/2019	04/09/2018	10011	Trossa AB	8 of 12

No hazardous reactions at normal usage and storage<sup>4</sup>.

#### **10.4 CONDITIONS TO AVOID**

No data available<sup>4</sup>.

#### **10.5 INCOMPATIBLE MATERIALS**

None<sup>4</sup>.

#### **10.6 HAZARDOUS DECOMPOSITION PRODUCTS**

None known under normal handling and use<sup>4</sup>

#### SECTION 11. TOXICOLOGICAL INFORMATION

The product is classified as hazardous to health. Specific effects are described below.

#### **11.1 INFORMATION ON TOXICOLOGICAL EFFECTS**

Acute toxicity:	The product is not classified as acute toxic but contains Kathon which is classified as harmful if swallowed.				
Sulphuric acid <sup>2</sup>	LD <sub>50</sub> oral rat: >2000 mg/kg LC <sub>50</sub> inhalation rat: 0,375 mg/l/4h				
	(OECD Guideline 403 (Acute Inhalation Toxicity)				
Corrosive/Irritating on the skin	The product is a skin irritant.				
Serious eye damage / irritation:	The product is irritating to the eyes.				
Respiratory / skin sensitization:	The product is not classified as a sensitizer.				
	Kathon is classified as sensitising and therefore, prolonged and repeated exposure on the skin may induce an allergic skin reaction or sensitisation.				
Germ cell mutagenicity:	Not classified as mutagenic.				
Carcinogenicity	Not classified as carcinogenic.				
Toxic to reproduction	Not classified as toxic to reproduction.				
Specific organ toxicity-single exposure:	Not considered to cause damage to organs after single exposure.				
Specific organ toxicity-repeated exposure:	It is not considered to cause damage to organs after repeated exposure.				

First edition	<b>Revision date</b>	Replaces	Art. no	Issued by	Page
	10/04/2019	04/09/2018	10011	Trossa AB	9 of 12

Aspiration Hazard: Specific effects Not classified as an aspiration hazard.

None known.

#### **11.2 OTHER INFORMATION**

-

#### SECTION 12. ECOLOGICAL INFORMATION

The product is not classified as hazardous to the environment but contains smaller amounts of substances that are.

#### 12.1 TOXICITY

The product is assessed to have low acute aquatic toxicity and low chronic aquatic toxicity.

Sulphuric acid<sup>3</sup>

LC50 Fisk 96h: 42 mg/l (Art: Gambusia affinis)

EC50 Daphnia 48h: >29 mg/l

#### **12.2 PERSISTENCE AND DEGRADABILITY**

The product is considered to be degradable<sup>3</sup>

#### **12.3 BIOACCUMULATIVE POTENTIAL**

No data.

#### 12.4 MOBILITY IN SOIL

No data.

#### 12.5 RESULTS OF PBT AND vPvB ASSESSMENT

Based on available information, this mixture contains no substance that meets the PBT or vPvB criteria according to Annex XIII to Regulation (EC) No. 1907/2006 (REACH).

#### **12.6 OTHER ADVERSE EFFECTS**

None known.

#### SECTION 13. DISPOSAL CONSIDERATIONS

**13.1 WASTE TREATMENT METHODS** Product

First edition	<b>Revision date</b>	Replaces	Art. no	Issued by	Page
-	10/04/2019	04/09/2018	10011	Trossa AB	10 of 12

Classified as hazardous waste, with hazard class HP 4 (Irritant — skin irritation and eye damage) according to Commission Regulation (EU) No 1357/2014 on waste.

EWC-code: 16 03 05\* (Organic waste containing hazardous substances) according to the European Waste Catalogue.

https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:02000D0532-20150601

All disposal practices must be in accordance with local, regional, national and international regulations. Dispose of packaging or containers in accordance with local, regional, national and international regulations. Packaging

Empty containers are treated as product.

All kit components and tested specimen should be considered as bio hazardous/infectious and should be disposed of in accordance with federal, state and local environmental regulations.

#### SECTION 14. TRANSPORT INFORMATION

This product is not covered by the regulations for transportation of dangerous goods.

#### SECTION 15. REGULATORY INFORMATION

## 15.1 SAFETY, HEALTH AND ENVIRONMENTAL REGULATIONS/LEGISLATION SPECIFIC FOR THE SUBSTANCE OR MIXTURE

This safety data sheet is prepared in accordance with the EUROPEAN PARLIAMENT AND COUNCIL REGULATION (EC) No 1907/2006 of 18 December 2006 concerning the registration, evaluation, authorization and restriction of chemicals (REACH) and Commission Regulation (EU) No 2015/830 of 28 May 2015 amending the European Parliament and Council Regulation (EC) No 1907/2006 on the registration, evaluation, authorization and restriction of chemicals (REACH).

Regulations

Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substance and mixtures (CLP).

EH40 (Second edition, published 2011) Occupational Exposure Limits, UK.

Commission Regulation (EU) No 1357/2014 of 18 December 2014 replacing Annex III to Directive 2008/98/EC of the European Parliament and of the Council on waste.

European Waste Catalogue (EWC-codes): <u>http://www.sepa.org.uk/media/163421/ewc\_guidance.pdf</u>

Europaparlamentets och Rådets förordning (EG) nr 1272/2008, (CLP).

Kommissionens förordning (EU) nr 1357/2014, (Avfall).

Avfallsförordningen SFS 2011:927.

Other information

The following constituent substances are listed in the Swedish Chemicals Agency's prioritization guide (PRIO): Kathon (octhilinone (ISO); 2-octyl-2H-isothiazol-3-one – Allergenic, Hazard to the environment with long-lasting effects<sup>.5</sup>.

#### **15.2 CHEMICAL SAFETY ASSESSMENT**

First edition	Revision date	Replaces	Art. no	Issued by	Page
-	10/04/2019	04/09/2018	10011	Trossa AB	11 of 12

No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

#### SECTION 16. OTHER INFORMATION

Classification procedure

Test data is prioritized when classifying the product. When no test data are available, the classification rules in regulation (EC) No 1272/2008 of the European Parliament and of the Council on classification, labelling and packaging of substances and mixtures (CLP) been used.

Hazard statements in Section 3

H302	Harmful if swallowed	H335	May cause respiratory irritation			
H314	Causes severe skin burns and eye damage	H400	Very toxic to aquatic life.			
H315	Causes skin irritation	H311	Toxic in contact with skin.			
H317	May cause an allergic skin reaction.	H331	Toxic if inhaled.			
H410	Very toxic to aquatic life with long lasting	H319	Causes serious eye irritation.			
	effect.					
Abbrevia	tions					
BCF	Bio Concentration Factor					
EC <sub>50</sub>	Effective Concentration (concentration that gives	s response	e in 50 % of test subjects)			
ECHA	European Chemical Agency	•	, ,			
EmS	Emergency Schedule Information					
IARC	International Agency for Research on Cancer					
IC <sub>50</sub>	Inhibitory Concentration (concentration that sho	ws inhibit	ion in 50 % of the test subjects)			
ICAO	Regulation for transport by air					
IMDG	Regulation for transport by sea					
LC <sub>50</sub>	Lethal Concentration (concentration causing the death of 50 % of a group of test animals)					
LD <sub>50</sub>	Lethal Dose (dose causing the death of 50 % of a group of test animals)					
LDLO	Lethal Dose Low (= Lowest dose of a toxic material at which the death of the exposed test animal occu					
Log Pow	Partition coefficient octanol - water					
n.a.	not available					
N/A	not applicable					
PBT	Persistent Bio-accumulative and Toxic					
RID	Regulations for transport by rail-road					
STEL	Short Term Exposure Limit					
SVHC	Substance of Very High Concern					
TWA	Time-weighted average					
vPvB	very Persistent and very Bioaccumulative					
Advice ab	dvice about education					
The user of	of this product should have training that is relevar	it to the p	roperties of the product and relevant use.			
1						

occurs.

#### References

- 1) Classification & Labelling Inventory Database, ECHA.
- 2) Registered substances, ECHA.
- 3) Kemiska Ämnen online, Prevent.
- 4) Safety data sheet of the manufacturer M30 Apoptosense® ELISA product number: 10011
- 5) Prioriteringsguiden (PRIO), Keml.

Version description

First edition	Revision date	Replaces	Art. no	Issued by	Page
<u>-</u>	10/04/2019	04/09/2018	10011	Trossa AB	12 of 12

This safety data sheet has been revised, in accordance with title IV and annex II in the regulation (EC) No 1907/2006 of the European parliament and of the council (REACH).

The information has been modified under the following sections in the safety data sheet: 1-16.

The safety data sheet is dated 10/04/2019 and replaces the SDS dated 04/09/2018.