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

- · 1.1 Product identifier
- · Trade name:

HSP65 (mycobacterial), mAb (3F7)

- · Synonyms: Heat shock protein 65
- · Article number: OAED00202
- · 1.2 Relevant identified uses of the substance or mixture and uses advised against No further relevant information available.
- · Application of the substance / the preparation: Laboratory chemicals
- · 1.3 Details of the supplier of the safety data sheet
- · Manufacturer/Supplier: Aviva Systems Biology 5754 Pacific Center Blvd., Ste. 201

San Diego, CA 92121 U.S.A.

info@avivasysbio.com

· Further information obtainable from:

Customer service **During normal business** hours. U.S. 1-888-880-0001

· 1.4 Emergency telephone number:

U.S. +1 888-880-0001

#### SECTION 2: Hazards identification

- · 2.1 Classification of the substance or mixture
- · Classification according to Regulation (EC) No 1272/2008 The product is not classified according to the CLP regulation.
- · 2.2 Label elements
- · Labelling according to Regulation (EC) No 1272/2008: Void
- · Hazard pictograms: Void
- · Signal word: Void
- · Hazard statements: Void
- · 2.3 Other hazards
- · Results of PBT and vPvB assessment
- · PBT: Not applicable. · vPvB: Not applicable.

#### SECTION 3: Composition/information on ingredients

- · 3.2 Chemical characterisation: Mixtures
- · Description:

Mixture of substances listed below with nonhazardous additions. Liquid. Contains PBS.

· Dangerous components:

CAS: 26628-22-8 0.09% sodium azide Acute Tox. 2, H300; Aquatic Acute 1, H400; Aquatic Chronic 1, H410 EINECS: 247-852-1

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· Additional information:

For lyophilized materials containing hazardous substances, percent hazardous material determination based on pre-lyophilized volume.

For the wording of the listed risk phrases refer to section 16.

#### SECTION 4: First aid measures

- 4.1 Description of first aid measures
- · General information: No special measures required.
- · After inhalation: Supply fresh air; consult doctor in case of complaints.
- · After skin contact: Remove contaminated clothing.
- · After eye contact: Rinse opened eye for several minutes under running water.
- · After ingestion: If symptoms persist consult doctor.
- · 4.2 Most important symptoms and effects, both acute and delayed

No further relevant information available.

• <u>4.3 Indication of any immediate medical attention and special treatment needed</u> In case of accident, seek medical advice immediately and show the label and the MSDS where possible.

### SECTION 5: Firefighting measures

- · 5.1 Extinguishing media
- · Suitable extinguishing agents:

CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

· 5.2 Special hazards arising from the substance or mixture

No further relevant information available.

- 5.3 Advice for firefighters
- · Protective equipment:

Wear self-contained respiratory protective device.

Do not inhale explosion gases or combustion

gases. Wear fully protective suit.

#### SECTION 6: Accidental release measures

· 6.1 Personal precautions, protective equipment and emergency procedures:

Wear protective clothing.

- <u>6.2 Environmental precautions:</u> Dilute with plenty of water.
- 6.3 Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

· <u>6.4 Reference to other sections</u>

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

#### SECTION 7: Handling and storage

- · 7.1 Precautions for safe handling: No special measures required.
- · Information about fire and explosion protection: No special measures required.
- · 7.2 Conditions for safe storage, including any incompatibilities

Keep away from heat, sources of ignition and incompatibles such as oxidizing agents.

- · Storage:
- · Requirements to be met by storerooms and receptacles:

Store tightly sealed in a cool, dry and well ventilated location (see label for storage temperature and additional specific information).

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· Information about storage in one common storage facility:

Do not store in warm environment or in contact with flammable or oxidizing substances.

- · Further information about storage conditions: None.
- 7.3 Specific end use(s) No further relevant information available.

### SECTION 8: Exposure controls/personal protection

- · Additional information about design of technical facilities: No further data; see item 7.
- · 8.1 Control parameters
- · Ingredients with limit values that require monitoring at the workplace:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

- · Additional information: The lists valid during the making were used as basis.
- · 8.2 Exposure controls
- · Personal protective equipment:
- · General protective and hygienic measures:

The usual precautionary measures are to be adhered to when handling chemicals.

- · Respiratory protection: Not required.
- · Protection of hands:

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/the preparation/the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· Eye protection: Goggles recommended during refilling

#### SECTION 9: Physical and chemical properties

· 9.1 Information on basic physical and chemical properties		
· General Information		
· Appearance:		
Form:	Liquid	
Colour:	According to product specification	
· Odour:	Characteristic	
· Odour threshold:	Not determined.	
· pH-value:	Not determined.	
· Change in condition		
Melting point/Melting range:	Undetermined.	
Boiling point/Boiling range:	Undetermined.	
· Flash point:	Not applicable.	
· Flammability (solid, gaseous):	Not applicable.	

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· Ignition temperature:			
Decomposition temperature:	Not determined.		
· Self-igniting:	Product is not selfigniting.		
· Danger of explosion:	Product does not present an explosion hazard.		
· Explosion limits: Lower: Upper:	Not determined. Not determined.		
· Vapour pressure:	Not determined.		
<ul><li>Density:</li><li>Relative density</li><li>Vapour density</li><li>Evaporation rate</li></ul>	Not determined. Not determined. Not determined. Not determined.		
· Solubility in / Miscibility with water:	Fully miscible.		
· Partition coefficient (n-octanol/water	· Partition coefficient (n-octanol/water): Not determined.		
· Viscosity: Dynamic: Kinematic:	Not determined. Not determined.		
<ul> <li>Solvent content:</li> <li>Organic solvents:</li> <li>9.2 Other information</li> </ul>	0,0 % No further relevant information available.		

#### SECTION 10: Stability and reactivity

- · 10.1 Reactivity No further relevant information available.
- · 10.2 Chemical stability: Stable. Avoid strong oxidizing agents.
- · Thermal decomposition / conditions to be avoided:

No decomposition if used according to specifications.

- 10.3 Possibility of hazardous reactions: No dangerous reactions known.
- 10.4 Conditions to avoid: No further relevant information available.
- 10.5 Incompatible materials: No further relevant information available.
- 10.6 Hazardous decomposition products: No dangerous decomposition products known.

#### **SECTION 11:** Toxicological information

- · 11.1 Information on toxicological effects
- · Acute toxicity Based on available data, the classification criteria are not met.

· LD/LC5	· LD/LC50 values relevant for classification:		
26628-2	26628-22-8 sodium azide		
Oral	LD50 - Oral	27 mg/kg (rat)	
Dermal	LD50 - Dermal	20 mg/kg (rabbit)	

- · Primary irritant effect:
- · Skin corrosion/irritation Based on available data, the classification criteria are not met.
- · Serious eye damage/irritation Based on available data, the classification criteria are not met.
- · Respiratory or skin sensitisation Based on available data, the classification criteria are not met.
- · CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)
- · Germ cell mutagenicity Based on available data, the classification criteria are not met.
- · Carcinogenicity Based on available data, the classification criteria are not met.

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- · Reproductive toxicity Based on available data, the classification criteria are not met.
- · STOT-single exposure Based on available data, the classification criteria are not met.
- · STOT-repeated exposure Based on available data, the classification criteria are not met.
- · As piration hazard Based on available data, the classification criteria are not met.

#### SECTION 12: Ecological information

- · 12.1 Toxicity
- · Aquatic toxicity: 26628-

22-8 sodium azide

LC50 - Median Lethal Concentration (dynamic) 2,84-3,92 mg/L (fish)

Oncorhynchus mykiss (96h)

EC50 - Median Effective Concentration (static) 4,2 mg/L (daphnia)

Daphnia pulex (48h), Intoxication

- · 12.2 Persistence and degradability: No further relevant information available.
- 12.3 Bioaccumulative potential: No further relevant information available.
- · 12.4 Mobility in soil: No further relevant information available.
- · Additional ecological information:
- · General notes: Generally not hazardous for water
- · 12.5 Results of PBT and vPvB assessment
- · PBT: Not applicable.
- · vPvB: Not applicable.
- 12.6 Other adverse effects No further relevant information available.

#### SECTION 13: Disposal considerations

- · 13.1 Waste treatment methods
- · Recommendation: Smaller quantities can be disposed of with household waste.
- · Uncleaned packaging:
- · Recommendation:

All waste must be handled in accordance with local, state and federal regulations. This material and its container must be disposed of in a safe way.

· Recommended cleansing agents: Water, if necessary together with cleansing agents.

SECTION 14: Transport information	n	
· <u>14.1 UN-Number</u> · ADR, IMDG, IATA	Void	
· 14.2 UN proper shipping name · ADR, IMDG, IATA	Void	
· 14.3 Transport hazard class(es)		
· ADR, IMDG, IATA · Class	Void	
· <u>14.4 Packing group</u> · ADR, IMDG, IATA	Void	
· <u>14.5</u> Environmental hazards:	Not applicable.	
· 14.6 Special precautions for user:	Not applicable.	
• 14.7 Transport in bulk according to Anne of MARPOL73/78 and the IBC Code:	x II Not applicable.	
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· UN "Model Regulation": Void

### **SECTION 15: Regulatory information**

- · 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
- · Directive 2012/18/EU
- · Named dangerous substances ANNEX I None of the ingredients is listed.
- · 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

## SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship. For research use only. Not for drug, household or other uses.

· Relevant phrases

H300 Fatal if swallowed.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

- · Department is suing MSDS: Customer service
- · Contact: tel. +1 610-941-0430
- · Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative

Acute Tox. 2: Acute toxicity, Hazard Category 2

Aquatic Acute 1: Hazardous to the aquatic environment - AcuteHazard, Category 1 Aquatic Chronic 1: Hazardous to the aquatic environment - Chronic Hazard, Category 1

EU