

# SAFETY DATA SHEET



In accordance with 453/2010 and 1272/2008

(All references to EU regulations and directives are abbreviated into only the numeric term)

Issued 2015-09-24

## SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

### 1.1. Product identifier

**Trade name**

**FabRICATOR® Z**

Supplier's product number

A0-FRZ-020

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

**Identified uses**

Antibody fragmentation reagent

**General advises concerning use**

For Research Use Only

### 1.3. Details of the supplier of the safety data sheet

**Company**

Genovis AB

Box 790

SE-22007 LUND

Sweden

**Telephone**

+46 46 10 12 30

**E-mail**

info@genovis.com

### 1.4. Emergency telephone number

In case of emergency contact toxicological information, emergency tel 112.

For non-emergency poison information, see [http://www.who.int/gho/phe/chemical\\_safety/poisons\\_centres/en/](http://www.who.int/gho/phe/chemical_safety/poisons_centres/en/)

## SECTION 2: HAZARDS IDENTIFICATION

### 2.1. Classification of the substance or mixture

**Classification in accordance with 1272/2008**

Upon assessment, this mixture is not classified as hazardous according to 1272/2008.

### 2.2. Label elements

**Label information in accordance with 1272/2008**

Hazard pictograms Not applicable

Signal words Not applicable

Hazard statements Not applicable

### 2.3. Other hazards

Not relevant.

## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

This product is composed of a mixture of several solid substances.

### 3.2. Mixtures

Note that the table shows known hazards of the ingredients in a pure form. These hazards are reduced or eliminated when mixed or diluted, see Section 16d.

Constituent	Classification	Concentration
<b>TRIS (HYDROXYMETHYL)-AMINOMETHANE</b>		
CAS No 77-86-1 EC No 201-064-4	-	<40%
<b>FabRICATOR® Z</b>		
	Skin Irrit 2; H315	1 - 9.99%

<b>SODIUM CHLORIDE</b>		
CAS No	7647-14-5	-
EC No	231-598-3	>50%

Explanations to the classification and labelling of the ingredients are given in Section 16e. Official abbreviations are printed in normal font. Text in italics are specifications and/or complement used in the calculation of the hazards of this mixture, see Section 16b

## SECTION 4: FIRST AID MEASURES

### 4.1. Description of first aid measures

#### Generally

No special measures are considered to be necessary. If symptoms do occur however, call a doctor/physician.

#### Upon breathing in

Allow the injured person to rest in a warm place with fresh air, if symptoms persist seek medical advice.

#### Upon contact with the eyes

As a precaution, rinse the eye thoroughly with water; If symptoms occur, call a doctor/physician.

#### Upon skin contact

Normal washing of the skin is considered sufficient; If nevertheless symptoms do occur, contact a physician.

#### Upon ingestion

Flush nose, mouth and throat with water.

If symptoms persist contact a doctor.

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

No further relevant information available.

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

Symptomatic treatment.

## SECTION 5: FIRE-FIGHTING MEASURES

### 5.1. Extinguishing media

Extinguish with water mist, powder, carbon dioxide or alcoholresistant foam.

### 5.2. Special hazards arising from the substance or mixture

Gases detrimental to health can be spread in case of fire.

The product is not hazardous in the flammable sense.

The product does not oxidise.

### 5.3. Advice for fire-fighters

In case of fire use a respirator mask.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

### 6.1. Personal precautions, protective equipment and emergency procedures

Do not inhale dust and avoid contact with skin, eyes and clothes when cleaning up spill.

Avoid dust formation.

### 6.2. Environmental precautions

Avoid discharge into sewers.

### 6.3. Methods and material for containment and cleaning up

Sweep carefully and collect.

Avoid stirring the material up so that it aerates.

Contaminated products should be treated as chemical waste and declared as non-hazardous goods.

For waste disposal see section 13.

### 6.4. Reference to other sections

See section 8 and 13 for personal protection equipment and disposal considerations

## SECTION 7: HANDLING AND STORAGE

### 7.1. Precautions for safe handling

Do not inhale dust and avoid contact with skin and eyes.

Avoid handling in a manner which will raise dust.

The usual precautions for handling chemicals should be observed.

## 7.2. Conditions for safe storage, including any incompatibilities

Store cool, in sealed package.

Handle in a premises which is well ventilated.

Store in a well-ventilated space.

Store only in the original package.

## 7.3. Specific end uses

Not relevant.

# SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

## 8.1. Control parameters

### 8.1.1. National limit values, United Kingdom

All ingredients (cf. Section 3) lack occupational exposure limit values.

## 8.2. Exposure controls

In terms of minimizing risks, no special attention is needed for this product besides the general obligations that follow EU directive 89/391 and national occupational legislation.

Use protective glasses, safety goggles, or a visor.

Protective gloves are normally not needed due to the properties of this product, but may be necessary for other reasons, e.g.

mechanical risks, temperature conditions or microbiological risks. Very sensitive persons can use gloves labelled "Low Chemical resistant" or "Waterproof" or with the pictogram indicated here.

A particle filter P1 could be required during strongly dust generating work.

For limitation of environmental exposure, see Section 12.



# SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

## 9.1. Information on basic physical and chemical properties

a) Appearance	Form: lyophilised powder Colour: Not indicated
b) Odour	Not applicable
c) Odour threshold	Not applicable
d) pH	Not applicable
e) Melting point/freezing point	Not applicable
f) Initial boiling point and boiling range	Not applicable
g) Flash point	Not applicable
h) Evaporation rate	Not applicable
i) Flammability (solid, gas)	Not applicable
j) Upper/lower flammability or explosive limits	Not applicable
k) Vapour pressure	Not applicable
l) Vapour density	Not applicable
m) Relative density	Not applicable
n) Solubility	Not applicable
o) Partition coefficient: n-octanol/water	Not applicable
p) Auto-ignition temperature	Not applicable
q) Decomposition temperature	Not applicable
r) Viscosity	Not applicable
s) Explosive properties	Not applicable
t) Oxidising properties	Not applicable

## 9.2. Other information

No data available

## SECTION 10: STABILITY AND REACTIVITY

### 10.1. Reactivity

Not indicated

### 10.2. Chemical stability

The product is stable at normal storage and handling conditions.

### 10.3. Possibility of hazardous reactions

Not indicated

### 10.4. Conditions to avoid

Not indicated

### 10.5. Incompatible materials

Not indicated

### 10.6. Hazardous decomposition products

Not indicated

## SECTION 11: TOXICOLOGICAL INFORMATION

### 11.1. Information on toxicological effects

#### General or unspecific toxicity

The product is not classified as toxic.

#### Acute effects

Not classified as an acutely toxic substance.

#### Harmfulness

The product is not classified as harmful to health.

#### Repeated dose toxicity

To the best of our knowledge, no chronic effects have been reported for this product.

#### Carcinogenicity

To the best of our knowledge, no carcinogenic effects have been reported for this product.

#### CMR effects

To the best of our knowledge, no mutagenic or otherwise genetic or reproductive toxic effects have been reported for this product.

#### Corrosive and irritating effects

The product is not corrosive. Minor irritation cannot be ruled out for persons who are prone/susceptible.

#### Synergism and antagonism

To the best of our knowledge, no synergistic effects have been reported for this product or any of its ingredients.

#### Effect on judgement and other psychological effects

To the best of our knowledge this product does not affect discernment if used in the manner intended.

#### Effect on human microflora

Effects on human micro flora have not been proven, or are negligible.

#### Relevant toxicological properties

##### TRIS (HYDROXYMETHYL)-AMINOMETHANE

LD50 rat (Orally) 24h = 5900 mg/kg

##### SODIUM CHLORIDE

LD50 rabbit (Dermally) 24h > 10000 mg/kg dermal

LD50 rat (Orally) 24h = 3000 mg/kg oral

## SECTION 12: ECOLOGICAL INFORMATION

### 12.1. Toxicity

#### SODIUM CHLORIDE

EC50 Freshwater water flea (Daphnia magna) 48 h = 1000 mg/l

LC50 Fish 96h = 17.9 mg/l

### 12.2. Persistence and degradability

No information about persistence or degradability exists but there is no reason to suppose that the product is persistent.

### 12.3. Bioaccumulative potential

No information exists on bioaccumulation, but there is no cause for concern in respect of this.

#### 12.4. Mobility in soil

No information about mobility in the nature exists but there is no reason to suppose the product to be ecologically harmful because of this.

#### 12.5. Results of PBT and vPvB assessment

No chemical safety report has been executed.

#### 12.6. Other adverse effects

Not indicated

## SECTION 13: DISPOSAL CONSIDERATIONS

### 13.1. Waste treatment methods

#### Waste handling for the product

The product is not classified as hazardous waste.

Also take local regulations for dealing with waste into account.

#### Recycling of the product

This product is not usually recycled.

#### Transportation of waste

Waste class J(0) - Does not have adverse effects on health or the environment.

## SECTION 14: TRANSPORT INFORMATION

This product is only supposed to be transported by road or railway and just the transport regulations ADR/RID thus apply. If other means of transport are to be used, contact the publisher of this safety data sheet.

### 14.1. UN number

Not classified as dangerous goods

### 14.2. UN proper shipping name

Not applicable

### 14.3. Transport hazard class(es)

Not applicable

### 14.4. Packing group

Not applicable

### 14.5. Environmental hazards

Not applicable

### 14.6. Special precautions for user

Not applicable

### 14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not applicable

## SECTION 15: REGULATORY INFORMATION

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

Not applicable.

### 15.2. Chemical safety assessment

Assessment and chemical safety report in accordance with 1907/2006 Annex I has not yet been performed.

## SECTION 16: OTHER INFORMATION

### 16a. Indication of where changes have been made to the previous version of the safety data sheet

#### Revisions of this document

##### Earlier versions

This is the first version.

### 16b. Legend to abbreviations and acronyms used in the safety data sheet

#### Full texts for Hazard Class and Category Code mentioned in section 3

*No phys haz*

Non-assigned physical hazard

*No tox haz*

Not classified as toxic

*No environmental hazard*

Not classified as being environmentally hazardous

Skin Irrit 2

Skin Irritant (Category 2)

## **Explanations of the abbreviations in Section 14**

ADR European Agreement concerning the International Transport of Dangerous Goods by Road

RID Regulations concerning the International Transport of Dangerous Goods by Rail

## **16c. Key literature references and sources for data**

### **Sources for data**

Primary data for the calculation of the hazards has preferentially been taken from the official European classification list, 1272/2008 Annex I, as updated to 2015-06-12.

Where such data was lacking, on the second hand the documentation on which this official classification is based was used, e.g. IUCLID (International Uniform Chemical Information Database). On the third hand, information was used from reputable international chemical suppliers, and on the fourth hand from other available information, e.g. safety data sheets from other suppliers or information from non-profit associations, whereby the reliability of the source was judged by an expert. If, in spite of this, reliable information was not found, the hazards were judged by expert opinions based on the known properties of similar substances, and according to the principles in 1907/2006 and 1272/2008.

### **Full texts for Regulations mentioned in this Safety Data Sheet**

453/2010 COMMISSION REGULATION (EU) No 453/2010 of 20 May 2010 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)

1272/2008 REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006

89/391 COUNCIL DIRECTIVE (89/391/EEC of 12 June 1989 on the introduction of measures to encourage improvements in the safety and health of workers at work

1907/2006 REGULATION (EC) No 1907/2006 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC Annex I

## **16d. Methods of evaluating information referred to in 1272/2008 Article 9 which was used for the purpose of classification**

The calculation of the hazards of this mixture has been performed as an evaluation by applying a weight of evidence determination using expert judgement in accordance with 1272/2008 Annex I, weighing all available information having a bearing on the determination of the hazards of the mixture, and in accordance with 1907/2006 Annex XI.

## **16e. List of relevant hazard statements and/or precautionary statements**

### **Full texts for hazard statements mentioned in section 3**

H315 Causes skin irritation

## **16f. Advice on any training appropriate for workers to ensure protection of human health and the environment**

### **Other relevant information**