

## SAFETY DATA SHEET

## FabRICATOR® Z Immobilized

## SECTION 1: Identification

## 1.1. Product identifier

## Trade name

FabRICATOR® Z Immobilized

## Product no.

A0-FZ6-010, A0-FZ6-025, A0-FZ6-050 A2-FZ2-005, A2-FZ2-025

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

## Relevant identified uses of the substance or mixture

Antibody fragmentation reagent

Restricted to professional and industrial use.

## Uses advised against

None known.

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

## Company and address

**Genovis AB**

Box 4

244 21 Kävlinge

Sweden

+46 (0)46 10 12 30

www.genovis.com

## E-mail

info@genovis.com

## SDS date

4/13/2026

## SDS Version

1.0

## 1.4. Emergency telephone number

Contact the poison control at 1-800-222-1222 (24/7) or use the webPOISONCONTROL® (triage.webpoisoncontrol.org) to get specific guidance for your case

See also section 4 "First aid measures".

## SECTION 2: Hazard(s) identification

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200)

## 2.1. Classification of the substance or mixture

Flam. Liq. 3; H226, Flammable liquid and vapour.

## 2.2. Label elements

## Hazard pictogram(s)



## Signal word

Warning

## Hazard statement(s)

Flammable liquid and vapour. (H226)

### Precautionary statement(s)

#### General

Not applicable.

#### Prevention

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. (P210)

#### Response

In case of fire: Use water mist/carbon dioxide/alcohol-resistant foam to extinguish. (P370+P378)

#### Storage

Store in a well-ventilated place. Keep cool. (P403+P235)

#### Disposal

Dispose of contents/container in accordance with local regulation.  
(P501)

## SECTION 3: Composition/Information on Ingredients

### 3.1. Substances

Not applicable. This product is a mixture.

### 3.2. Mixtures

Product/substance	Identifiers	% w/w	Classification	Note
ethanol;ethyl alcohol	CAS No.: 64-17-5	1-20%	Flam. Liq. 2, H225	
FabRICATOR® Z	CAS No.:	1-10%		

Where the concentration of an ingredient is expressed as a range the exact concentration has been withheld as a trade secret.

See full text of H-phrases in section 16. Occupational exposure limits are listed in section 8, if these are available.

### Other information

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## SECTION 4: First-aid measures

### 4.1. Description of first aid measures

#### General information

If breathing is irregular, drowsiness, loss of consciousness or cramps: Call 911 and give immediate treatment (first aid).

Contact a doctor if in doubt about the injured person's condition or if the symptoms persist. Never give an unconscious person water or other drink.

#### Inhalation

Upon breathing difficulties or irritation of the respiratory tract: Bring the person into fresh air and stay with him/her.

#### Skin contact

Remove contaminated clothing and shoes immediately. Ensure to wash exposed skin thoroughly with water and soap. Skin cleanser can be used. DO NOT use solvents or thinners.

#### Eye contact

If in eyes: Flush eyes with water or saline water (20-30 °C) for at least 5 minutes. Remove contact lenses. Seek medical assistance and continue flushing during transport.

#### Ingestion

If the person is conscious, rinse the mouth with water and stay with the person. Never give the person anything to drink.

In case of malaise, seek medical advice immediately and bring the safety data sheet or label from the product. Do

not induce vomiting, unless recommended by the doctor. Have the person lean forward with head down to avoid inhalation of or choking on vomited material.

#### Burns

Rinse with water until pain stops then continue to rinse for 30 minutes.

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

None known.

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

Treat symptomatically.

#### Information to medics

Bring this safety data sheet or the label from this product.

### SECTION 5: Fire-fighting measures

#### 5.1. Extinguishing media

Suitable extinguishing media: Alcohol-resistant foam, carbon dioxide, powder, water mist.

Unsuitable extinguishing media: Waterjets should not be used, since they can spread the fire.

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

Flammable liquid and vapour.

In use may form flammable/explosive vapour-air mixture.

Fire will result in dense smoke. Exposure to combustion products may harm your health. Closed containers, which are exposed to fire, should be cooled with water. Do not allow fire-extinguishing water to enter the sewage system and nearby surface waters.

If the product is exposed to high temperatures, e.g. in the event of fire, dangerous decomposition compounds are produced. These are:

Carbon oxides (CO / CO<sub>2</sub>)

#### 5.3. Advice for firefighters

Wear self-contained breathing apparatus and protective clothing to prevent contact. Upon direct exposure contact the Poison Help Line on 1-800-222-1222 (24/7) in order to obtain further advice.

### SECTION 6: Accidental release measures

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

Storages not yet ignited must be cooled by water mist. Remove flammable materials if conditions allow it. Ensure sufficient ventilation.

Ensure adequate ventilation, especially in confined areas.

Contaminated areas may be slippery.

#### 6.2. Environmental precautions

Avoid discharge to lakes, streams, sewers, etc.

Keep unauthorized persons away from the spill

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

Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations.

Wherever possible cleaning should be performed with normal cleaning agents. Avoid use of solvents.

#### 6.4. Reference to other sections

See section 13 "Disposal considerations" on handling of waste.

See section 8 "Exposure controls/personal protection" for protective measures.

### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

Ground and bond container and receiving equipment.

Use explosion-proof electrical/lighting/ventilating equipment.

Use non-sparking tools.

Take action to prevent static discharges.

Avoid contact during pregnancy and while nursing.

Smoking, drinking and consumption of food is not allowed in the work area.  
See section 8 "Exposure controls/personal protection" for information on personal protection.

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

Containers that have been opened must be carefully resealed and kept upright to prevent leakage.  
Take action to prevent static discharges.

Must be stored in a cool and well-ventilated area, away from possible sources of ignition.

**Recommended storage material**

Keep only in original packaging.

**Liquid class**

Flammable liquid / Class IC (NFPA 30)

**Storage conditions**

Dry, cool and well ventilated

**Incompatible materials**

Strong acids, strong bases, strong oxidizing agents, and strong reducing agents.

**7.3. Specific end use(s)**

This product should only be used for applications quoted in section 1.2.

**SECTION 8: Exposure controls/personal protection**

**8.1. Control parameters**

ethanol;ethyl alcohol

Short term exposure limit (STEL) (ACGIH TLV) (ppm): 1000

Long term exposure limit (OSHA Table Z-1) (mg/m<sup>3</sup>): 1900

Long term exposure limit (OSHA Table Z-1) (ppm): 1000

Part 1910 - Occupational Safety and Health Standards (29 CFR 1910.1000 TABLE Z-1 - Limits for Air Contaminants)

**8.2. Exposure controls**

Compliance with the given occupational exposure limits values should be controlled on a regular basis.

**General recommendations**

Smoking, drinking and consumption of food is not allowed in the work area.

**Exposure scenarios**

There are no exposure scenarios implemented for this product.

**Exposure limits**

Professional users are subjected to the legally set maximum concentrations for occupational exposure. See occupational hygiene limit values above.

**Appropriate technical measures**

The formation of vapours must be kept at a minimum and below current limit values (see above). Installation of a local exhaust system if normal air flow in the work room is not sufficient is recommended. Ensure eyewash and emergency showers are clearly marked.

Apply standard precautions during use of the product. Avoid inhalation of vapours.

**Hygiene measures**

In between use of the product and at the end of the working day all exposed areas of the body must be washed thoroughly. Pay special attention to hands, forearms and face.

**Measures to avoid environmental exposure**

No specific requirements.

**Individual protection measures, such as personal protective equipment**

**Generally**

Use only protective equipment with a recognized certification mark, e.g. the UL mark.

**Respiratory Equipment**

Type	Class	Colour	Standards
S/SL	P2	White	EN149




**Skin protection**

No specific requirements.

**Hand protection**

Material	Glove thickness (mm)	Breakthrough time (min.)	Standards
Nitrile	-	> 480	EN374



**Eye protection**

Type	Standards
Safety glasses	EN166



**SECTION 9: Physical and chemical properties**

**9.1. Information on basic physical and chemical properties**

**Physical state**

Liquid

**Color**

White

**Odor**

Alcohol odor

**Odor threshold (ppm)**

No data available.

**pH**

5-8

**Density (g/cm<sup>3</sup>)**

No data available.

-

**Relative density**

1-1.5

**Kinematic viscosity**

No data available

**Particle characteristics**

No data available

**Phase changes**

**Melting point/freezing point (°F)**

-

**Melting point/freezing point (°C)**

-9

**Softening point/range (°F)**

Does not apply to liquids.

**Boiling point (°F)**

-

**Boiling point (°C)**

89

**Vapor pressure**

No data available

**Relative vapor density**

No data available

**Decomposition temperature (°F)**

No data available

Data on fire and explosion hazards

Flash point (°F)

-

Flash point (°C)

36

Flammability (°F)

The material is ignitable.

Auto-ignition temperature (°F)

No data available

Explosion limits (% v/v)

No data available

Solubility

Solubility in water

Soluble

n-octanol/water coefficient (LogKow)

No data available

Solubility in fat (g/L)

No data available

9.2. Other information

Evaporation rate (n-butylacetate = 100)

No data available

Other physical and chemical parameters

No data available.

Oxidizing properties

No data available

SECTION 10: Stability and reactivity

10.1. Reactivity

No data available.

10.2. Chemical stability

The product is stable under the conditions, noted in section 7 "Handling and storage".

10.3. Possibility of hazardous reactions, including those associated with foreseeable emergencies

None known.

10.4. Conditions to avoid

Mechanical influences (e.g. Shock, pressure, impact, friction). Fire, sparks or other ignition sources.

10.5. Incompatible materials

Strong acids, strong bases, strong oxidizing agents, and strong reducing agents.

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity

Product/substance	ethanol;ethyl alcohol
Species:	Rabbit
Route of exposure:	Dermal
Test:	LD50 (24h)
Result:	>20000 mg/kg

Product/substance	ethanol;ethyl alcohol
Species:	Rat

Route of exposure: Inhalation  
 Test: LC50 (4 hours)  
 Result: 124.7 mg/L

Product/substance ethanol;ethyl alcohol  
 Species: Rat  
 Route of exposure: Oral  
 Test: LD50 (24h)  
 Result: 6200 mg/kg

Based on available data, the classification criteria are not met.

**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 sensitisation**

Based on available data, the classification criteria are not met.

**Skin sensitisation**

Based on available data, the classification criteria are not met.

**Germ cell mutagenicity**

Based on available data, the classification criteria are not met.

**Carcinogenicity**

Based on available data, the classification criteria are not met.

**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.

**Aspiration hazard**

Based on available data, the classification criteria are not met.

**Long term effects**

None known.

**Other information**

None known.

**SECTION 12: Ecological information**

**12.1. Toxicity**

Product/substance ethanol;ethyl alcohol  
 Species: Fish  
 Duration: 96 hours  
 Test: LC50  
 Result: 13480 mg/L

Product/substance ethanol;ethyl alcohol  
 Species: Fish  
 Duration: 96 hours  
 Test: LC50  
 Result: 13480 mg/L

Product/substance ethanol;ethyl alcohol  
 Species: Daphnia  
 Duration: 48 hours  
 Test: LC50  
 Result: 5400 mg/L

Product/substance ethanol;ethyl alcohol  
 Species: Daphnia  
 Duration: 48 hours  
 Test: EC50  
 Result: 9268 mg/L

Product/substance ethanol;ethyl alcohol  
 Duration: 48 hours  
 Test: LC50  
 Result: 8140 mg/L

Product/substance ethanol;ethyl alcohol  
 Species: Daphnia  
 Duration: 24 hours  
 Test: EC50  
 Result: 10800 mg/L

Product/substance ethanol;ethyl alcohol  
 Species: Algae  
 Duration: 72 hours  
 Test: IC50  
 Result: >10.9 mg/L

Product/substance ethanol;ethyl alcohol  
 Duration: 96 hours  
 Test: LC50  
 Result: 11000 mg/L

Product/substance ethanol;ethyl alcohol  
 Species: Fish  
 Duration: 24 hours  
 Test: LC50  
 Result: 11200 mg/L

Product/substance ethanol;ethyl alcohol  
 Duration: 16 hours  
 Test: IC50  
 Result: 6500 mg/L

Based on available data, the classification criteria are not met.

#### 12.2. Persistence and degradability

Based on available data, the classification criteria are not met.

#### 12.3. Bioaccumulative potential

Based on available data, the classification criteria are not met.

#### 12.4. Mobility in soil

No data available.

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

This mixture/product does not contain any substances known to fulfil the criteria for PBT and vPvB classification.

#### 12.6. Other adverse effects

None known.

### SECTION 13: Disposal considerations

#### RCRA Hazardous waste ("P" and "U" list) (40 CFR 261)




None of the components are listed

#### Specific labelling

#### Contaminated packing

Packaging containing residues of the product must be disposed of similarly to the product.

**SECTION 14: Transport information**

	<b>14.1 UN / ID</b>	<b>14.2 UN proper shipping name</b>	<b>14.3 Hazard class(es)</b>	<b>14.4 PG*</b>	<b>14.5 Env**</b>	<b>Other information:</b>
DOT	UN1170	ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)	Transport hazard class: 3 Label: 3 Classification code: F1 	III	No	Limited quantities: 5 L Tunnel restriction code: (D/E) See below for additional information.
IMDG	UN1170	ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)	Transport hazard class: 3 Label: 3 Classification code: F1 	III	No	Limited quantities: 5 L EmS: F-E S-D See below for additional information.
IATA	UN1170	ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)	Transport hazard class: 3 Label: 3 Classification code: F1 	III	No	See below for additional information.

\* Packing group

\*\* Environmental hazards

**Additional information**

This product is within scope of the regulations of transport of dangerous goods.

DOT / See § 172.101 Hazardous Materials Table for any information on special provisions, requirements, or warnings in connection with transport. See § 172.602, for instructions in writing regarding mitigation of damages in relation to incidents or accidents during transport.

IMDG / See section 3.2.1, for any information on special provisions, requirements, or warnings in connection with transport.

IATA / See Table 4.2 for any information on special provisions, requirements, or warnings in connection with transport.

**14.6. Special precautions for user**

Not applicable.

**14.7. Transport in bulk according to IMO instruments**

No data available.

**SECTION 15: Regulatory information**

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

**15.2. U.S. Federal regulations**

**TSCA (the non-confidential portion)**

ethanol;ethyl alcohol is listed

**Clean Air Act**

None of the components are listed

**EPCRA Section 302**

None of the components are listed

**EPCRA Section 304**

None of the components are listed

**EPCRA section 313**

None of the components are listed

#### CERCLA

None of the components are listed

#### Hazardous chemical inventory reporting

#### State regulations

##### California / Prop. 65

None of the components are listed

##### Massachusetts / Right To Know Act

ethanol;ethyl alcohol is listed

##### New Jersey / Right To Know Act

ethanol;ethyl alcohol / Substance number: 0844

ethanol;ethyl alcohol is on the Special Health Hazard Substance List

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##### New York / Right To Know Act

ethanol;ethyl alcohol is listed

ethanol;ethyl alcohol is regulated with a Treshold Reporting Quantity (TRQ) of: 0 pounds

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##### Pennsylvania / Right To Know Act

ethanol;ethyl alcohol is listed

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#### 15.4. Restrictions for application

Restricted to professional users.

Pregnant women and women breastfeeding must not be exposed to this product. The risk, and possible technical precautions or design of the workplace needed to eliminate exposure, must be considered.

#### 15.5. Demands for specific education

No specific requirements.

#### 15.6. Additional information

Not applicable.

#### 15.7. Chemical safety assessment

No

#### 15.8. Sources

OSHA Hazard Communication Standard (29 CFR 1910.1200)

## SECTION 16: Other information

#### Full text of H-phrases as mentioned in section 3

H225, Highly flammable liquid and vapour.

#### The full text of identified uses as mentioned in section 1

None known.

#### Abbreviations and acronyms

ACGIH = American Conference of Governmental Industrial Hygienists

ADN = European Provisions concerning the International Carriage of Dangerous Goods by Inland Waterway

ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road

ATE = Acute Toxicity Estimate

BCF = Bioconcentration Factor

CAS = Chemical Abstracts Service

CERCLA = Comprehensive Environmental Response Compensation and Liability Act

DOT = Department of Transportation

EINECS = European Inventory of Existing Commercial chemical Substances

EPCRA = Emergency Planning and Community Right-To-Know Act

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

HCIS = Hazardous Chemical Information System

HNOC = Hazards Not Otherwise Classified

IARC = International Agency for Research on Cancer

IATA = International Air Transport Association

IMDG = International Maritime Dangerous Goods

LogKow = logarithm of the n-octanol/water coefficient

MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)

NFPA = National Fire Protection Association

NIOSH = National Institute for Occupational Safety and Health

OECD = Organisation for Economic Co-operation and Development

OSHA = Occupational Safety and Health Administration

PBT = Persistent, Bioaccumulative and Toxic

RCRA = Resource Conservation and Recovery Act

RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail

RRN = REACH Registration Number

SARA = Superfund Amendments and Reauthorization Act

SCL = A specific concentration limit.

STEL = Short-term exposure limits

STOT-RE = Specific Target Organ Toxicity - Repeated Exposure

STOT-SE = Specific Target Organ Toxicity - Single Exposure

TSCA = The Toxic Substances Control Act

TWA = Time weighted average

UN = United Nations

UVBC = Unknown or variable composition, complex reaction products or of biological materials

VOC = Volatile Organic Compound

vPvB = Very Persistent and Very Bioaccumulative

#### Additional information

The classification of the mixture in regard to physical hazards has been based on experimental data.

#### The safety data sheet is validated by

Stephan Björk

#### Other

A change (in proportion to the last essential change (first cipher in SDS version, see section 1)) is marked with a triangle.

The information in this safety data sheet applies only to this specific product (mentioned in section 1) and is not necessarily correct for use with other chemicals/products.

It is recommended to hand over this safety data sheet to the actual user of the product. Information in this safety data sheet cannot be used as a product specification.

Country-language: US-en