

# Safety Data Sheet

according to 1907/2006/EC, Article 31, (Commission Regulation (EU) 2020/878)

Trade name: **Defensyl™ MB**

Version: 9

Revision: 2024.02.22

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

### 1.1 Product identifier

Trade name **Defensyl™ MB**  
CAS number **56-81-5 (and) 221227-05-0**

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

**Recommended Use** SU3 Industrial uses: Uses of substances as such or in preparations at industrial sites  
SU21 Consumer uses: Private households/general public/consumers  
SU22 Professional uses

**Uses advised against** Not determined  
**Product category** Not determined  
**Process category** Not determined

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

**Manufacturer/Supplier**  
CORUM INC.  
6FL., No.360, Ruei Guang Rd.,  
Neihu Dist., Taipei 114729, Taiwan  
**Further information obtainable from**  
[marketing.support@corum.com.tw](mailto:marketing.support@corum.com.tw)

### 1.4 Emergency telephone number

**Company phone number** CORUM Tel. 886-2-8751-6060  
Fax. 886-2-8751-6363

## SECTION 2: HAZARDS IDENTIFICATION

### 2.1 Classification of the substance or mixture

**Classification according to Regulation (EC) No 1272/2008**  
This substance is not classified according to the CLP regulation.

### 2.2 Label elements

**Label according to Regulation (EC) No 1272/2008**  
Not applicable

### 2.3 Other hazards

#### **Results of PBT and vPvB assessment**

##### **PBT:**

Based on available data, the ingredients of this mixture do not meet the PBT criteria (not PBT) according to (EC) 1907/2006, Annex XIII.

##### **vPvB:**

Based on available data, the ingredients of this mixture do not meet the vPvB criteria (not vPvB) according to (EC) 1907/2006, Annex XIII.

#### **Determination of endocrine-disrupting properties**

The product does not contain ingredients with endocrine-disrupting properties for humans.

## Safety Data Sheet

according to 1907/2006/EC, Article 31, (Commission Regulation (EU) 2020/878)

Trade name: Defensyl™ MB

Version: 9

Revision: 2024.02.22

## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

## 3.1 Substances

Not applicable

## 3.2 Mixtures

Composition/information on ingredients

Name	Chemical name	Identification	Classification	SCLs, M-Factors	%
<b>COMPONENT</b>					
Glycerin	Glycerol	(CAS No.) 56-81-5 (EC No.) 200-289-5	Not Classified	-	99.95%
Palmitoyl Tetrapeptide-7	-	(CAS No.) 221227-05-0 (EC No.) -	-	-	0.05%

## SECTION 4: FIRST AID MEASURES

## 4.1 Description of first aid measures

## General information

No data available.

## After inhalation

Supply fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Seek medical treatment.

## After skin contact

Immediately wash with soap and copious amounts of water. If symptoms develop, seek medical attention.

## After eye contact

Check for and remove any contact lenses. Rinse opened eye for 15 minutes under running water. If symptoms persist, consult a doctor.

## After swallowing

Rinse mouth with water. Call for medical help immediately.

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

## Symptoms

No further relevant information available.

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

## Note to physicians

No further relevant information available.

## SECTION 5: FIRE-FIGHTING MEASURES

## 5.1 Extinguishing media

## Suitable extinguishing media

CO<sub>2</sub>, powder or water spray.

Fight larger fires with water spray or alcohol resistant foam.

## Unsuitable extinguishing media

**Safety Data Sheet**

according to 1907/2006/EC, Article 31, (Commission Regulation (EU) 2020/878)

Trade name: **Defensyl™ MB**

Version: 9

Revision: 2024.02.22

Not determined

**5.2 Special hazards arising from the substance or mixture**

No further relevant information available.

**5.3 Advice for firefighters**

**Protective equipment:**

Wear protective clothing and glasses.

Wear self-contained respiratory protective device.

**SECTION 6: ACCIDENTAL RELEASE MEASURES**

**6.1 Personal precautions, protective equipment and emergency procedures**

May have particular danger of slipping on leaked/spilled product.

Avoid contact with skin, eyes and clothes.

**6.2 Environmental precautions**

Do not allow product to reach sewage system or any water course.

**6.3 Methods and material for containment and cleaning up**

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

Dispose of material collected according to regulations.

**6.4 Reference to other sections**

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 Precaution for safe handling**

**Advice on safe handling**

Keep away from heat and direct sunlight. Shake well before use.

**Information about fire - and explosion protection:**

No special measures required.

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

**Storage conditions**

Store only in the original receptacle.  
Store away from oxidizing agents.  
Protect from heat and direct sunlight.  
Protect from humidity and water.  
Protect from exposure to the light.  
Keep container tightly sealed.

**Incompatible materials**

None known based on information supplied.

**Storage class (VbF)**

No

**Requirements to be met by storerooms and receptacles.**

No special measures required.

**Information about storage in common storage facility**

Not required

# Safety Data Sheet

according to 1907/2006/EC, Article 31, (Commission Regulation (EU) 2020/878)

Trade name: **Defensyl™ MB**

Version: 9

Revision: 2024.02.22

## Further information about storage conditions

Once the appearance of this product becomes hazy translucent or has bubbles, it is because of the high concentration of peptide inside. We suggest adding 10% of the product into pure water to test. If the liquid turns transparent, to the best of our knowledge, the product is qualified.

### 7.3 Specific end use(s)

No further relevant information available.

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1 Control parameters

#### Ingredients with limit values that require monitoring at the workplace

##### Exposure limits

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

##### DNEL

Not determined

##### PNEC

Not determined

##### Additional information

Not required

### 8.2 Exposure controls

#### Appropriate engineering controls

Ensure that eyewash and safety showers are in close proximity to work location. Good general ventilation is recommended for handling the product. No further data; see section 7.

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

##### General protective and hygienic measures

Avoid contact with the eyes and skin. Wash hands before breaks and at the end of work.

##### Personal protective equipment

##### Respiration protection

Not necessary if room is well-ventilated.

##### Hands protection

Protective gloves



##### 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.

##### 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

Chemical safety goggles

##### General protective measure

Avoid contact with the eyes and skin.

##### General hygiene measure

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

##### Environmental exposure controls

No further relevant information available.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Physical State	Liquid
Appearance	Viscous liquid
Color	Colorless
Odor	Characteristic
Odor threshold	Not determined

Property

pH value (5%)	Not determined
Melting point/Melting range	Not determined
Boiling point/Boiling range	Not determined
Flash point	204°C (ASTM D92)
Flammability (solid, gaseous)	Not determined
Ignition temperature	Not determined
Decomposition temperature	Not determined
Self-igniting	Not determined
Danger of explosion	Product does not present an explosion hazard.
Explosion limit	
Lower	Not determined
Upper	Not determined
Oxidizing properties	Not determined
Explosive properties	Not determined
Vapor pressure	Not determined
Vapor density	Not determined
Relative density	Not determined
Evaporation rate	Not determined
Solubility	Fully miscible
Partition coefficient (n-octanol/water at 25 °C)	Not determined
Kinematic viscosity	Not applicable
Dynamic viscosity	Not applicable

9.2 Other information

Surface tension	Not applicable
Dissociation constant	Not applicable
Granulometry	Not applicable

Information with regard to physical hazard classes

Explosives	Void
Flammable Gases and Chemically Unstable Gases	Void
Flammable Aerosols	Void
Oxidising Gases	Void
Gases Under Pressure	Void
Flammable Liquids	Void
Flammable Solids	Void
Self-reactive Substances and Mixtures	Void
Pyrophoric Liquids	Void
Pyrophoric Solids	Void
Self-heating Substances and Mixtures	

## Safety Data Sheet

according to 1907/2006/EC, Article 31, (Commission Regulation (EU) 2020/878)

Trade name: **Defensyl™ MB**

Version: 9

Revision: 2024.02.22

	Void
<b>Substances and Mixtures which in contact with water emit flammable gases</b>	Void
<b>Oxidising Liquids</b>	Void
<b>Oxidising Solids</b>	Void
<b>Organic Peroxides</b>	Void
<b>Substances and Mixtures corrosive to Metals</b>	Void
<b>Desensitized Explosives</b>	Void

## SECTION 10: STABILITY AND REACTIVITY

**10.1 Reactivity**

Not determined

**10.2 Chemical stability**

The product is stable under ordinary condition.

**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**

See Section 7 for information on safe handling.

**10.5 Incompatible materials**

See Section 7 for information on safe handling.

**10.6 Hazardous decomposition products**

No dangerous decomposition products known.

## SECTION 11: TOXICOLOGICAL INFORMATION

**11.1 Information on toxicological effects**

Name	Glycerin CAS:56-81-5	Palmitoyl Tetrapeptide-7 CAS:221227-05-0
<b>Acute toxicity</b>	*There is no justification for classification based on data from available studies.	Not determined
<b>Skin corrosion/irritation</b>	*No adverse effect observed (not irritating)	No irritant (dilution at 5%)
<b>Serious eye damage/irritation</b>	*No adverse effect observed (not irritating)	Slightly irritant (dilution at 10%)
<b>Respiratory tract</b>	Not determined	Not determined
<b>Respiratory/skin sensitization</b>	*Not sensitising, OECD 429: S.I. of 1.1, 0.7 and 0.5 at 25%, 50% and 100% v/v There is no justification for classification based on data from available studies.	Not determined
<b>Toxicokinetics, metabolism and distribution</b>	Not determined	Not determined

# Safety Data Sheet

according to 1907/2006/EC, Article 31, (Commission Regulation (EU) 2020/878)

Trade name: **Defensyl™ MB**

Version: 9

Revision: 2024.02.22

<b>Repeated dose toxicity</b>	*There is no justification for classification based on data from available studies.	Not determined
<b>Germ Cell mutagenicity</b>	*No adverse effect observed (negative) There is no justification for classification based on data from available studies.	Non mutagenic and non pro mutagenic (Defensyl™ MB)
<b>Carcinogenicity</b>	*There was no indication of a carcinogenic response in rats fed 8,000 mg/kg/day glycerol in the diet for 2 years.	Not determined
<b>Reproductive toxicity</b>	*There is no justification for classification based on data from available studies.	Not determined
<b>STOT-single exposure</b>	Not determined	Not determined
<b>STOT-repeated exposure</b>	Not determined	Not determined
<b>Aspiration hazard</b>	Not determined	Not determined

\*from ECHA webpage registration data

## 11.2 Information on other hazards

**Endocrine disrupting properties**      Substance is not listed.

## SECTION 12: ECOLOGICAL INFORMATION

Name	Glycerin CAS:56-81-5	Palmitoyl Tetrapeptide-7 CAS:221227-05-0
<b>12.1 Toxicity</b> Aquatic toxicity	*Due to the low acute and chronic toxicity to aquatic organisms as reported i no environmental classification is required for Glycerol.	No further relevant information available.
<b>12.2 Persistence and degradability</b>	*The biodegradation of glycerin was examined using industrial activated sludge. Glycerin was nearly completely degraded within 24 hours.	No further relevant information available.
<b>12.3 Bioaccumulative potential</b>	*The study does not need to be conducted because the substance has a low potential for bioaccumulation based on log Kow <=3	No further relevant information available.
<b>12.4 Mobility in soil</b>	No further relevant information available.	No further relevant information available.
<b>12.5 Results of PBT and vPvB assessment</b>	<b>PBT:</b> Not applicable <b>vPvB:</b> Not applicable	<b>PBT:</b> Not applicable <b>vPvB:</b> Not applicable
<b>12.6 Endocrine disrupting properties</b>	The product does not contain substances with endocrine disrupting properties.	The product does not contain substances with endocrine disrupting properties.
<b>12.7 Other adverse effects</b>	No further relevant information available.	No further relevant information available.

\*from ECHA webpage registration data

# Safety Data Sheet

according to 1907/2006/EC, Article 31, (Commission Regulation (EU) 2020/878)

Trade name: **Defensyl™ MB**

Version: 9

Revision: 2024.02.22

## SECTION 13: DISPOSAL CONSIDERATIONS

### 13.1 Waste treatment methods

<b>Recommendation</b>	Observe community, national or regional regulations for waste handling and treatment.
<b>European waste catalogue</b>	Not applicable

### 13.2 Uncleaning packaging

<b>Recommendation</b>	Disposal must be made according to official regulations.
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## SECTION 14: TRANSPORT INFORMATION

### 14.1 UN number or ID number

<b>ADR/RID</b>	Not applicable
<b>ADN</b>	Not applicable
<b>IMDG</b>	Not applicable
<b>IATA</b>	Not applicable

### 14.2 UN proper shipping name

<b>ADR/RID</b>	Not applicable
<b>ADN</b>	Not applicable
<b>IMDG</b>	Not applicable
<b>IATA</b>	Not applicable

### 14.3 Transport hazard class(es)

<b>ADR/RID</b>	Not applicable
<b>ADN</b>	Not applicable
<b>IMDG</b>	Not applicable
<b>IATA</b>	Not applicable

### 14.4 Packing group

<b>ADR/RID</b>	Not applicable
<b>ADN</b>	Not applicable
<b>IMDG</b>	Not applicable
<b>IATA</b>	Not applicable

### 14.5 Environmental hazard

<b>Marine pollutant</b>	No
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### 14.6 Special precautions for user

<b>Special precaution for user</b>	Not applicable
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### 14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not applicable

### 14.8 ICAO/IATA – DGR

Not regulated as dangerous good

### 14.9 Maritime transport in bulk according to

<b>IMO instruments</b>	Not applicable
<b>UN "Model Regulation"</b>	Not applicable



## Safety Data Sheet

according to 1907/2006/EC, Article 31, (Commission Regulation (EU) 2020/878)

Trade name: Defensyl™ MB

Version: 9

Revision: 2024.02.22

## SECTION 15: REGULATORY INFORMATION

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

Name	Glycerin CAS:56-81-5	Palmitoyl Tetrapeptide-7 CAS:221227-05-0
Inventory - United States - Toxic Substances Control Act (TSCA)	Y	N
Inventory - Canada - Domestic Substances List (DSL)	Y	N
Inventory - Canada - Non-Domestic Substances List (NDSL)	N	N
Inventory - Canada - Revised In Commerce List (R-ICL)	N	Y
ECHA Inventory of substances	Y	N
Japan Existing and New Chemical Substances (ENCS)	Y	N
Inventory of Existing Chemical Substances in China (IECSC)	Y	N
Korean Existing and Evaluated Chemical Substances (KECL)	Y	N
Philippines Inventory of Chemicals and Chemical Substances (PICCS)	Y	N
Australian Inventory of Industrial Chemicals (AIIC)	Y	N
New Zealand Inventory of Chemicals	Y	N
TCSI - Taiwan Chemical Substance Inventory	Y	Y
OECD - List of High Production Volume Chemicals	Y	N

Y : listed, N : not listed, E : exempted

**U.S. - FIFRA - Pesticide Product Other Ingredients**

Substance is not listed.

**U.S. - EPA - HPV (High Production Volume) Challenge Program Chemical List**

Substance is not listed.

**NOSH - Health Standards - Pesticides**

Substance is not listed.

**Directive 2004/42/EC****Seveso category**

Substance is not listed.

**Directive 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment - Annex II**

Substance is not listed.

**Regulation (EU) 2019/1148****Annex I - RESTRICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing under Article 5(3))**

Substance is not listed.

**Annex II - REPORTABLE EXPLOSIVES PRECURSORS**

Substance is not listed.

# Safety Data Sheet

according to 1907/2006/EC, Article 31, (Commission Regulation (EU) 2020/878)

Trade name: **Defensyl™ MB**

Version: 9

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**Regulation (EC) No 273/2004 on drug precursors**

Substance is not listed.

**Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors**

Substance is not listed.

**Regulation (EC) No 1005/2009 on substances that deplete the ozone layer - ANNEX I (Ozone-depleting potential)**

Substance is not listed.

**National regulations**

**Other regulations, limitations and prohibitive regulations**

Not determined

**Substances of very high concern (SVHC) according to REACH, Article 59(10)**

Substance is not listed.

**15.2 Chemical safety assessment**

A chemical safety assessment has not been carried out.

## SECTION 16: OTHER INFORMATION

This information is furnished without warranty, express or implied, except that it is accurate to the best knowledge of CORUM Inc. It relates only to the specific material designated herein and does not relate to use in combination with any other material or in any process. CORUM Inc. assumes no legal responsibility for use of or reliance upon this information.

### Abbreviations and acronyms

NOAEL: Non Observed Adverse Effect Level

LOAEL: Lowest Observed Adverse Effect Level

NOEC: No Observed Effect Concentration

GHS: Globally Harmonized System of Classification and Labeling Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

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

VbF: Ordinance on the storage of combustible liquids, Austria

DNEL: Derived No-Effect Level (REACH)

PNEC: Predicted No-Effect Concentration (REACH)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

SVHC: Substances of Very High Concern

PBT: Persistent Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

STOT: Specific Target Organ Toxicity

ADR: Agreement on Dangerous Goods by Road

RID: Regulations concerning the Intl Transport of Dangerous Goods by Rail

ADN: The European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways

IMDG: International Maritime Dangerous Goods

IATA: International Air Transport Association

### Sources

Own data from manufacture

Chemical safety report according to REACH registration dossier