

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

#### **1.1 Product identifiers**

Product name	: Artesunate
Product Number	: 10-2411
Brand	: Focus Biomolecules
CAS-No.	: 88495-63-0

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

Identified uses : For Laboratory Research Use Only

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

Company	:	Focus Biomolecules 400 Davis Drive, Suite 600 Plymouth Meeting, Pa 19462
Telephone E-mail	:	+1 855-362-8721 support@focusbiomolecules.com
Emergency telephone number		
Emergency Phone #	:	CHEMTREC within USA/Canada 1-800- 424-9300 CHEMTREC outside USA/Canada 1-703-527-3887

# **SECTION 2:** Hazards identification

### 2.1 Classification of the substance or mixture

### GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Acute toxicity, Oral (Category 4), H302 Acute toxicity, Inhalation (Category 4), H332 Acute toxicity, Dermal (Category 4), H312

For the full text of the H-Statements mentioned in this Section, see Section 16. 2.2

## GHS Label elements, including precautionary statements

Pictogram

Signal word



Warning

Hazard statement(s) H302 + H312 + H332

Harmful if swallowed, in contact with skin or if inhaled.

Artesunate

1.4

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Precautionary statement(s)	
P261	Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.
P264	Wash skin thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P271	Use only outdoors or in a well-ventilated area.
P280	Wear protective gloves/ protective clothing.
P301 + P312 + P330	IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell. Rinse
	mouth.
P302 + P352 + P312	IF ON SKIN: Wash with plenty of water. Call a POISON CENTER/doctor if
	you feel unwell.
P304 + P340 + P312	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
	Call a POISON CENTER/doctor if you feel unwell. Wash contaminated
P363	clothing before reuse.
P501	Dispose of contents/ container to an approved waste disposal plant.

### 2.3 Hazards not otherwise classified (HNOC) or not covered by GHS - none

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

3.1	<b>Substances</b> Formula Molecular weight CAS-No.	: C <sub>19</sub> H <sub>28</sub> O <sub>8</sub> : 384.42 g/mol : 88495-63-0		
	Component		Classification	Concentration
	Artesunate		Acute Tox. 4; H302, H332, H312	<= 100 %
			Acute 10x. 4, 11502, 11552, 11512	~ 100 /0

For the full text of the H-Statements mentioned in this Section, see Section 16.

## **SECTION 4: First aid measures**

#### 4.1 Description of first aid measures

#### **General advice**

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

#### If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

#### In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

#### In case of eye contact

Flush eyes with water as a precaution.

### If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

- **4.2** Most important symptoms and effects, both acute and delayed The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11
- **4.3 Indication of any immediate medical attention and special treatment needed** No data available

## **SECTION 5: Firefighting measures**

#### 5.1 Extinguishing media

**Suitable extinguishing media** Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

- 5.2 Special hazards arising from the substance or mixture Carbon oxides
- **5.3** Advice for firefighters Wear self-contained breathing apparatus for firefighting if necessary.
- 5.4 Further information No data available

#### **SECTION 6: Accidental release measures**

- 6.1 Personal precautions, protective equipment and emergency procedures
  Use personal protective equipment. Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure
  adequate ventilation. Avoid breathing dust.
  For personal protection see section 8.
- 6.2 Environmental precautions

Do not let product enter drains.

- **6.3** Methods and materials for containment and cleaning up Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.
- **6.4 Reference to other sections** For disposal see section 13.

## **SECTION 7: Handling and storage**

## 7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols.Further processing of solid materials may result in the formation of combustible dusts. The potential for combustible dust formation should be taken into consideration before additional processing occurs. Provide appropriate exhaust ventilation at places where dust is formed.

For precautions see section 2.2.

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

Keep container tightly closed in a dry and well-ventilated place.

Keep in a dry place. Storage class (TRGS 510): 11: Combustible Solids

### 7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

## SECTION 8: Exposure controls/personal protection

#### 8.1 Control parameters

### Components with workplace control parameters

Contains no substances with occupational exposure limit values.

### 8.2 Exposure controls

#### Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

### Personal protective equipment

#### **Eye/face protection**

Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

#### Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

#### **Body Protection**

Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

#### **Respiratory protection**

For nuisance exposures use type P95 (US) or type P1 (EU EN 143) particle respirator.For higher level protection use type OV/AG/P99 (US) or type ABEK-P2 (EU EN 143) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

#### Control of environmental exposure

Do not let product enter drains.

## **SECTION 9: Physical and chemical properties**

#### 9.1 Information on basic physical and chemical properties

a)	Appearance	Form: crystalline, powder Color: white
b)	Odor	No data available
c)	Odor Threshold	No data available
d)	рН	No data available
e)	Melting point/freezing point	Melting point/range: 131 - 135 °C (268 - 275 °F)
f)	Initial boiling point and boiling range	No data available

	g)	Flash point	No data available
	h)	Evaporation rate	No data available
	i)	Flammability (solid, gas)	No data available
	j)	Upper/lower flammability or explosive limits	No data available
	k)	Vapor pressure	No data available
	I)	Vapor density	No data available
	m)	Relative density	No data available
	n)	Water solubility	No data available
	0)	Partition coefficient: n-octanol/water	No data available
	p)	Auto-ignition temperature	No data available
	q)	Decomposition temperature	No data available
	r)	Viscosity	No data available
	s)	Explosive properties	No data available
	t)	Oxidizing properties	No data available
9.2 (	Other	safety information	

No data available

# **SECTION 10: Stability and reactivity**

### 10.1 Reactivity

No data available

## 10.2 Chemical stability

Stable under recommended storage conditions.

### **10.3 Possibility of hazardous reactions** No data available

# **10.4** Conditions to avoid

No data available

# **10.5 Incompatible materials**

Strong oxidizing agents

# 10.6 Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. -Carbon oxides Other decomposition products - No data available In the event of fire: see section 5

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

### 11.1 Information on toxicological effects

### Acute toxicity No data available

#### **Skin corrosion/irritation** No data available

**Serious eye damage/eye irritation** No data available

**Respiratory or skin sensitisation** No data available

Germ cell mutagenicity

No data available

## Carcinogenicity

- IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
- NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
- OSHA: No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.

#### **Reproductive toxicity**

No data available

**Specific target organ toxicity - single exposure** No data available

**Specific target organ toxicity - repeated exposure** No data available

#### Aspiration hazard No data available

**Additional Information** RTECS: Not available

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

# **SECTION 12: Ecological information 12.1**

### Toxicity

No data available

**12.2 Persistence and degradability** No data available

### 12.3 Bioaccumulative potential

No data available

### 12.4 Mobility in soil

No data available

## 12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

#### 12.6 Other adverse effects

No data available

## **SECTION 13: Disposal considerations**

### 13.1 Waste treatment methods

#### Product

Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

## Contaminated packaging

Dispose of as unused product.

# **SECTION 14: Transport information**

### **DOT (US)** Not dangerous goods

### IMDG

Not dangerous goods

# IATA

Not dangerous goods

# **SECTION 15: Regulatory information**

### SARA 302 Components

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

### SARA 313 Components

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

## SARA 311/312 Hazards

Acute Health Hazard

# Massachusetts Right To Know Components

No components are subject to the Massachusetts Right to Know Act.

No components are subject to the Massachusetts Right to Know Act. Pennsylvania

### Right To Know Components

Artesunate	CAS-No. 88495-63-0	Revision Date
Artesunate	CAS-No. 88495-63-0	Revision Date
<b>New Jersey Right To Know Components</b> Artesunate	CAS-No. 88495-63-0	Revision Date

## **SECTION 16: Other information**

#### **Further information**

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