

# SAFETY DATA SHEET

|                       |            |
|-----------------------|------------|
| <b>Version:</b>       | 1.1        |
| <b>Revision Date:</b> | 2021-04-14 |
| <b>Print Date:</b>    | 2021-04-14 |

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

### 1.1 Product identifiers

|                         |             |
|-------------------------|-------------|
| <b>Product Number:</b>  | T0153       |
| <b>Product name:</b>    | Tirofiban   |
| <b>CAS Registry Nr:</b> | 144494-65-5 |

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

Laboratory chemicals, Manufacture of substances.

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

|                 |                           |
|-----------------|---------------------------|
| <b>Company:</b> | Chemodex AG               |
|                 | CH - 9000 St. Gallen      |
|                 | Switzerland, Europe       |
|                 | Tel: +41 71 244 48 25     |
|                 | Fax: +41 71 244 48 26     |
|                 | Email: info@chemodex.com  |
|                 | Website: www.chemodex.com |

### 1.4 Emergency telephone number

|                         |                         |
|-------------------------|-------------------------|
| <b>Tox Info Suisse:</b> | 145 or +41 44 251 51 51 |
|-------------------------|-------------------------|

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## SECTION 2: Hazards identification


### 2.1 Classification of the substance or mixture

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

|   |      |
|---|------|
| Skin irritation (Category 2)  | H315 |
| Eye irritation (Category 2A)  | H319 |
| Specific target organ toxicity - single exposure (Category 3), Respiratory system | H335 |
|   |      |

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)

|      |                                   |
|------|-----------------------------------|
| H315 | Causes skin irritation.           |
| H319 | Causes serious eye irritation.    |
| H335 | May cause respiratory irritation. |

### Precautionary statement(s)

|                    |  |
|--------------------|--|
| P261               | Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray.  |
| P264               | Wash skin thoroughly after handling.   |
| P271               | Use only outdoors or in a well-ventilated area.  |
| P280               | Use only outdoors or in a well-ventilated area.  |
| P302 + P352        | IF ON SKIN: Wash with plenty of soap and water.  |
| P304 + P340 + P312 | IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/ doctor if you feel unwell.      |
| P305 + P351 + P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| P332 + P313        | If skin irritation occurs: Get medical advice/ attention.  |
| P337 + P313        | If eye irritation persists: Get medical advice/ attention.   |
| P362               | Take off contaminated clothing and wash before reuse.  |
| P403 + P233        | Store in a well-ventilated place. Keep container tightly closed.   |
| P405               | Store locked up.   |
| 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 Substances

|                          |   |
|--------------------------|---|
| <b>Synonyms:</b>         | MK-383<br>L-700,462<br>(2S)-2-(Butylsulfonylamino)-3-{4-[4-(4-piperidyl)butoxy]phenyl} propanoic acid<br>N-(Butylsulfonyl)-O-[4-(4-piperidiny)butyl]-L-tyrosine |
| <b>Mol. Formula:</b>     | C22H36N2O5S   |
| <b>Mol. Weight:</b>      | 440.6 g/mol   |
| <b>CAS Registry No.:</b> | 144494-65-5   |

| Component | Classification | Concentration |
|-----------|----------------|---------------|
| Tirofiban |                |               |

|  |   |          |
|--|---|----------|
|  | Skin Irrit. 2; Eye Irrit. 2A; STOT SE 3; H315, H319, H335 | <= 100 % |
|--|---|----------|

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

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## 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.

#### 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

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

#### 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

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## 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, Nitrogen oxides (NO<sub>x</sub>), Sulfur oxides

### 5.3 Advice for firefighters

Wear self contained breathing apparatus for fire fighting if necessary.

### 5.4 Further information

No data available

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## SECTION 6: Accidental release measures

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

Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust. For personal protection see section 8.

### 6.2 Environmental precautions

Do not let product enter drains.

### 6.3 Methods and material 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.

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## 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. Protect from light and moisture. Store at -20°C.

### 7.3 Specific end use(s)

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

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## 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.

If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

#### Body Protection

impervious clothing, 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.

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## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

|    |  |                                   |
|----|--|-----------------------------------|
| a) | <b>Appearance:</b>                                   | Colour: Off-white<br>Form: Powder |
| b) | <b>Odour:</b>  | No data available                 |
| c) | <b>Odour Threshold:</b>                              | No data available                 |
| d) | <b>pH:</b>   | No data available                 |
| e) | <b>Melting point/freezing point:</b>                 | 223 - 225 °C                      |
| f) | <b>Initial boiling point and boiling range:</b>      | No data available                 |
| g) | <b>Flash point:</b>                                  | No data available                 |
| h) | <b>Evaporation rate:</b>                             | No data available                 |
| i) | <b>Flammability (solid, gas):</b>                    | No data available                 |
| j) | <b>Upper/lower flammability or explosive limits:</b> | No data available                 |
| k) | <b>Vapour pressure:</b>                              | No data available                 |
| l) | <b>Vapour density:</b>                               | No data available                 |
| m) | <b>Relative density:</b>                             | 1.154 g/cm <sup>3</sup>           |
| n) | <b>Water solubility:</b>                             | No data available                 |

|    |   |                   |
|----|---|-------------------|
| o) | <b>Partition coefficient (n-octanol/water):</b> | No data available |
| p) | <b>Auto-ignition temperature:</b>               | No data available |
| q) | <b>Decomposition temperature:</b>               | No data available |
| r) | <b>Viscosity:</b>                               | No data available |
| s) | <b>Explosive properties:</b>                    | No data available |
| t) | <b>Oxidizing properties:</b>                    | No data available |

## 9.2 Other safety information

Dissociation constant 3.3  
10.5

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## SECTION 10: Stability and reactivity

### 10.1 Reactivity

No data available

### 10.2 Chemical stability

Stable for at least 2 years 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, Nitrogen oxides (NO<sub>x</sub>), Sulfur oxides

Other decomposition products - No data available

In the event of fire: see section 5

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## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

#### **Acute toxicity**

Inhalation: No data available

Dermal: No data available

#### **Skin corrosion/irritation**

|  |
|--|
| No data available  |
| <b>Serious eye damage/eye irritation</b>   |
| No data available  |
| <b>Respiratory or skin sensitisation</b>   |
| No data available  |
| <b>Germ cell mutagenicity</b>  |
| No data available  |
| <b>Carcinogenicity</b>   |
| IARC: No ingredient 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 ingredient 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.                                 |
| <b>Reproductive toxicity</b>   |
| No data available  |
| <b>Specific target organ toxicity - single exposure</b>  |
| No data available  |
| Inhalation - May cause respiratory irritation.   |
| <b>Specific target organ toxicity - repeated exposure</b>  |
| No data available  |
| <b>Aspiration hazard</b>   |
| No data available  |
| <b>Additional Information</b>  |
| RTECS: YP2364100   |
| To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.                                      |

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## 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

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## 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.

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## SECTION 14: Transport information

### DOT (US)

Not dangerous goods

### IMDG

Not dangerous goods

### IATA

Not dangerous goods

### 14.6 Special precautions for user

No data available

### 14.7 Further information

No data available

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## 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.

### **Massachusetts Right To Know Components**

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



**Pennsylvania Right To Know Components**

Tirofiban

CAS-No. 144494-65-5

**New Jersey Right To Know Components**

Tirofiban

CAS-No. 144494-65-5

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**SECTION 16: Other information****Further information**

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The above information is believed to be correct but shall not be taken as being all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Chemodex Ltd. and its affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See [www.chemodex.com](http://www.chemodex.com) and/or the reverse side of invoice or packing slip for additional terms and conditions of sale.