**Identification**

**Product identifier**

**Sheet Code:** 272

**Trade name:** Kinevac (5 µg / vials)

**Chemical Name:**
L-a-aspartyl-O-sulfo-L-tyrosyl-L-methionylglycyl-L-tryptophyl-L-methionyl-L-a-aspartyl-L-phenylalaninamide

**Synonyms:** Sincalide for Injection.

**How Supplied:** Package of 10 vials with 5 micrograms per vial.

**Relevant identified uses of the substance or mixture and uses advised against**

We recommend that you use this product in a manner consistent with the listed use. If your intended use is not consistent with the stated use, please contact your sales or technical service representative.

**Chemical Family:** Cholecystopancreatic-gastrointestinal hormone peptide

**Molecular Formula:** C49H62N10O16S3*

**CAS Number:** 25126-32-3*

*Information pertains to sincalide.

**Details of the supplier of the safety data sheet**

**Manufacturer/Supplier:**
Bracco Diagnostics Inc.
P.O. Box 5225
Princeton, NJ 08543

**Further Information Obtainable from:**
B-Lands Consulting
WTC, 5 Place Robert Schuman, BP 1516
38025 Grenoble, FRANCE
Tel: +33 476 295 869
Fax: +33 476 295 870
services@reachteam.eu
www.reachteam.eu

**Information department:**
B-Lands Consulting
WTC, 5 Place Robert Schuman, BP 1516
38025 Grenoble, FRANCE
Tel: +33 476 295 869
Fax: +33 476 295 870
Email: clients@reachteam.eu
www.reachteam.eu

**Emergency telephone number:**

EMERGENCY CONTACT:
Health: 1-800-257-5181
U.S. Transport - Chemtrec: 1-800-424-9300
International Transport - Chemtrec: 1-703-527-3887

**Emergency Overview:**

Single dose vials containing a sterile lyophilized white powder.
See Health Effects and Toxicology sections for additional information.
2 Hazard(s) identification

Classification of the substance or mixture

GHS07

Eye Irrit. 2A H319 Causes serious eye irritation.

Label elements

GHS label elements

The product is classified and labeled according to the Globally Harmonized System (GHS).

Hazard pictograms GHS07

Signal word Warning

Hazard statements

Causes serious eye irritation.

Precautionary statements:

If medical advice is needed, have product container or label at hand.
Keep out of reach of children.
Read label before use.
Wash thoroughly after handling.
Wear protective gloves/protective clothing/eye protection/face protection.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
If eye irritation persists: Get medical advice/attention.

Effects of Overexposure - Routes of Entry:

Inhalation:

Under normal conditions, this material is handled in closed vials and exposure by inhalation is not expected to occur.

Skin Contact:

Exposure may occur via skin contact if gloves and protective clothing are not worn.
No information for absorption through skin.

Ingestion:

Ingestion of large quantities of this material in an occupational setting would not be expected to occur.
Ingestion of trace amounts of the material might occur if the material contacts hands and hands are not washed prior to eating, drinking or smoking.
The extent of systemic absorption after ingestion is not known.
Many peptides are inactivated in the gastrointestinal tract.

Note:

When prepared in a clinical setting, sterile water for injection is added to the vial containing sincalide.
The resulting solution is intended for intravenous injection or infusion under the care of a physician.

Additional Information:

Information pertaining to particular dangers for man and environment:

Negative Effects on the Health: See also Sections 11
Negative Effects on the Environment: See also Section 12

NFPA ratings (scale 0 - 4)

Health = 0
Fire = 0
Reactivity = 0
### 3 Composition/information on ingredients

#### Chemical characterization: Substances

**Active Ingredient:**
- CAS: 25126-32-3
  - Sincalide
- EINECS: 246-639-0

**Impurities and stabilising additives:**
- CAS: 67-43-6
  - EINECS: 200-652-8
  - Pentetic Acid
- CAS: 9005-64-5
  - NLP: 500-018-3
  - RTECS: TR7400000
  - Polysorbate 20
- CAS: 7681-57-4
  - EINECS: 231-673-0
  - Index number: 016-063-00-2
  - sodium metabisulphite
  - Hydrochloric acid
  - Hydrochloric acid
- CAS: 1310-73-2
  - EINECS: 215-185-5
  - Index number: 011-002-00-6
  - sodium hydroxide

**Chemical characterization: Mixtures**

**Description:** Mixture: consisting of the following components.

**Hazardous Components:**
- CAS: 7681-57-4
  - EINECS: 231-673-0
  - Index number: 016-063-00-2
  - sodium metabisulphite
  - Hydrochloric acid
  - Hydrochloric acid
  - Acute Tox. 4, H302
  - Acute Tox. 4, H302
  - Skin Corr. 1B, H314
  - STOT SE 3, H335
  - <1%

- CAS: 231-595-7
  - EINECS: 231-595-7
  - Index number: 017-002-01-X
  - RTECS: MW 9620000
  - sodium hydroxide
  - Hydrochloric acid
  - Hydrochloric acid
  - Skin Corr. 1A, H314
  - STOT SE 3, H335
  - <1%

**Non-Hazardous Components:**
- CAS: 69-65-8
  - EINECS: 200-711-8
  - D-mannitol
  - >1%

- CAS: 1119-34-2
  - EINECS: 214-275-1
  - RTECS: CF 1995500
  - (+)-L-arginine hydrochloride
  - >1%

(Contd. on page 4)
Trade name: Kinevac (5 µg/vials)

**4 First-aid measures**

**Description of first aid measures**

General information: No special measures required.

After Inhalation: Supply fresh air. If required, provide artificial respiration.

After Skin Contact:
Remove contaminated clothing.
Wash skin with plenty of water for 5 minutes.
Seek medical attention if irritation (redness, itching or swelling) develops or persists.

After Eye Contact:
Wash with running water for several minutes holding the eyelids open.
If any symptoms of irritation develop and/or persist, consult your doctor.

After Swallowing:
Get medical attention immediately.
Vomiting may be induced only if a person is conscious and if ingestion has occurred within the past three hours.
Never induce vomiting in a person who is unconscious or experiencing convulsions.

Most important symptoms and effects, both acute and delayed See also Section 2 and 11.

Indication of any immediate medical attention and special treatment needed
No further relevant information available.

Means of Specific and Immediate Treatment to Keep at the Workplace: No special measures required.

Note to physicians:
Carefully review the “Medical Conditions Aggravated by Exposure” statement in Section 11, here below.

**5 Fire-fighting measures**

**Extinguishing media**

Suitable extinguishing agents: In case of fire, flood with Water

For safety reasons unsuitable extinguishing agents: Unknown.

Special hazards arising from the substance or mixture See also Section 10.

Hazardous Combustion Products:
Carbon Dioxide (CO2)
In the absence of Oxygen: Carbon Monoxide (CO)
Nitrogen Oxides (NₓOᵧ)
Hydrogen Chloride (HCl)
Sulfur Oxides (SOₓ)
Trade name: Kinevac (5 µg / vials)

Additional Information: Not Available

Advice for Firefighters
Evacuate personnel to an upwind direction, remove unneeded material and cool container(s) with water from a maximum distance.
Move container from fire area if you can do it without risk.

Protective Equipment:
Firefighters should wear adequate personal protective equipment with protection of respiratory tract (selfcontained breathing apparatus) (SCBA).
Wear flame and chemicals resistant clothing, boots and gloves (see Section 8).

Accidental release measures

Personal precautions, protective equipment and emergency procedures
*Wear protective equipment appropriate to the circumstances (see Section 8)
Avoid inhalation of dust / fog.

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

Methods and material for containment and cleaning up:
Sweep material onto paper and place into a fiber drum for reclamation or disposal.
The spill area should be ventilated and decontaminated after material has been picked up.

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.
See Section 12 for Ecological Information.

Handling and storage

Precautions for Safe Handling
Adopt adequate aspiration at places where you develop dust.
Avoid skin and eye contact.

Conditions for Safe Storage, including any Incompatibilities
Requirements to be met by Storerooms and Receptacles:
Store in a cool, dry place in tightly closed receptacles.

Container Requirements: Package of 10 vials

Storage Conditions: Store at 15-30 degrees C (59 to 86 degrees F).

Information about Storage in one Common Storage Facility: Not required.
Further information about storage conditions: None.

Specific end use(s) No further relevant information available.

Exposure controls/personal protection

Additional information about design of technical systems: No further data; see item 7.

Control parameters
Components with limit values that require monitoring at the workplace:
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

Additional information: The lists that were valid during the creation were used as basis.
Exposure controls
Appropriate Technical Controls: Provide adequate aspiration / ventilation in the workplace
Additional information about Design of Technical Facilities: No further data (see Section 7).

Personal protective equipment
General Protective and Hygienic Measures:
The usual precautionary measures for handling chemicals should be followed.
Wash hands before breaks and at the end of work.
Wear protective equipment (PPE) appropriate to the circumstances.

Do not eat, drink, smoke while working.

Provide appropriate ventilation.
Breathing Equipment:
Not anticipated for normal clinical environment.
In non-routine exposure conditions, where risk assessment shows air-purifying respirators are appropriate, use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).
Self-contained breathing apparatus should be available for emergency use.
Protection of Hands:
Wear impervious gloves if the potential exists for dermal contact.

Material of Gloves:
Latex, Latex / Nitrile or Nitrile 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.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation.
The glove material has to be impermeable and resistant to the product/ the substance/ the mixture.
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:
Wear safety glasses (ANSI Z87.1)

Body Protection: Normal working clothes.
Limitation and Supervision of Exposure into the Environment: See also Section 7.
Additional Information about Design of Technical Systems: No further data; see Section 7.

9 Physical and chemical properties

Information on basic physical and chemical properties

General Information

Appearance: Solid
Form: Solid
Color: White
Trade name: Kinevac (5 µg/vials)

Odour threshold: Not determined.

pH-value: 6.0 - 8.0 (of Solution)

Flash point: Not applicable.

Flammability (solid, gaseous): Not determined.

Ignition temperature:

Decomposition temperature: Not determined.

Auto igniting: Product is not selfigniting.

Danger of explosion: Product does not present an explosion hazard.

Density: Not determined.

Relative density: Not determined.

Vapour density: Not applicable.

Solubility in / Miscibility with Water: Soluble.

Partition coefficient (n-octanol/water): Not determined.

Viscosity:

Dynamic: Not applicable.

Kinematic: Not applicable.

Other information: No further relevant information available.

10 Stability and reactivity

Reactivity: There are not particular dangerous reactions with other substances in normal conditions of use.

Chemical stability: Stable under normal conditions.

Possibility of hazardous reactions: No dangerous reactions known.

Conditions to avoid: No further relevant information available.

Incompatible materials: No further relevant information available.

Hazardous decomposition products: No further relevant information available (See Section 5)

11 Toxicological information

Information on toxicological effects

Acute toxicity:

Toxicological Information for Active Ingredients:

LD/LC50 values that are relevant for classification:

69-65-8 D-mannitol

Oral LD50 13500 mg/kg (rat)

1119-34-2 (+)-L-arginine hydrochloride

Oral LD50 12000 mg/kg (rat)

657-27-2 L-(+)-Lysine Hydrochloride

Oral LD50 10000 mg/kg (rat)

(Contd. on page 8)
**Trade name:** Kinevac (5 µg / vials)

<table>
<thead>
<tr>
<th>Substance</th>
<th>Oral LD50</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>hydrochloric acid</td>
<td>900 mg/kg (Rabbit)</td>
<td></td>
</tr>
<tr>
<td>1310-73-2 sodium hydroxide</td>
<td>2000 mg/kg (rat)</td>
<td></td>
</tr>
</tbody>
</table>

**Primary irritant effect:**

**By Inhalation:**
Inhaling trace amounts of airborne dust would not be expected to produce symptoms. However, some peptides are active following inhalation.

**By Ingestion:**
Inadvertent ingestion of trace amounts of this material would not be expected to result in symptoms.

**on the skin:**
Material contains low concentration of components that are mild irritants or possible irritants. It may have potential to cause mild irritation, however, moderate or severe irritation is not expected.

**on the eyes:** May cause irritation.

**CMR effects (carcinogenity, mutagenicity and toxicity for reproduction):**

**Sensitization:**
This material may act as a sensitizer (allergen) for those persons who are allergic to the formulation or components in the formulation.

**Germ Cell Mutagenicity:** No further relevant information available

**Carcinogenicity:** Not Available.

**Reproductive Toxicity:**
Stage II teratology studies showed no effects in rabbits and hamsters injected with sincalide in doses up to 750 ng/kg. Studies in rats administered sincalide subcutaneously at doses 12.5 times the maximum recommended human dose showed no evidence of harm to the fetus. Sincalide should not be administered to pregnant women near term due to its smooth muscle stimulation effect, which could result in premature labor.

**Specific Target Organ Toxicity**

**Single Exposure (STOT - SE):** No further relevant information available

**Repeated Exposure (STOT - RE):** No further relevant information available

**Aspiration Hazard:** No further relevant information available

**Other information (about experimental toxicology):** No further relevant information available

**Subacute to Chronic Toxicity:** No further relevant information available

**Carcinogenic categories**

**IARC (International Agency for Research on Cancer)**
None of the ingredients is listed.

**NTP (National Toxicology Program)**
None of the ingredients is listed.

**OSHA-Ca (Occupational Safety & Health Administration)**
None of the ingredients is listed.

**Additional toxicological information:**
Contact with small quantities of material for short periods is not expected to result in pharmacologic or toxic effects.
At therapeutic doses, sincalide causes reversible pharmacological effects on the gallbladder, pancreas and intestinal smooth muscle.
Exposure to therapeutic doses may cause small gallbladder stones to be evacuated, leading to blockage of the bile duct. It may also cause aggravation of pre-existing pancreatitis or of the symptoms of pre-existing bowel inflammation or obstruction. Sincalide should not be administered to pregnant women near term; due to its effects on smooth muscle, it may induce labor.
### 12 Ecological information

#### Toxicity

**Aquatic toxicity:**

<table>
<thead>
<tr>
<th>Compound</th>
<th>LC50</th>
</tr>
</thead>
<tbody>
<tr>
<td>1310-73-2 sodium hydroxide</td>
<td>180 mg/l (Fish)</td>
</tr>
</tbody>
</table>

**Persistence and degradability** No further relevant information available.

**Bioaccumulative potential** No further relevant information available.

**Mobility in soil:** No further relevant information available.

**General notes:**

- Generally not hazardous for water
- Avoid transfer into the environment.

**Results of PBT and vPvB assessment**

- **PBT:** Not applicable.
- **vPvB:** Not applicable.

**Other adverse effects** No further relevant information available.

**Additional Information:** Use according to good working pratice.

### 13 Disposal considerations

**Waste treatment methods:**

**Recommendation:**

- Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
- Reutilise if possible or contact a waste processors for recycling or safe disposal.

**Uncleaned packagings:**

**Recommendation:** Dispose in accordance with national, state, local or applicable country regulations.

**Recommended cleansing agent:** Water, if necessary with cleansing agents.

### 14 Transport information

<table>
<thead>
<tr>
<th>UN-Number</th>
<th>Void</th>
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</thead>
<tbody>
<tr>
<td>DOT, ADR, ADN, IMDG, IATA</td>
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</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>UN proper shipping name</th>
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<tbody>
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<th>Transport hazard class(es)</th>
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<thead>
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<th>Void</th>
</tr>
</thead>
<tbody>
<tr>
<td>DOT, ADR, IMDG, IATA</td>
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</tr>
</tbody>
</table>

**Environmental hazards:**

- **Marine pollutant:** No
**Safety Data Sheet**  
acc. to OSHA HCS

Printing date 12/05/2015  
Version 2  
Reviewed on 12/05/2015

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**Trade name:** Kinevac (5 µg / vials)

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**Special precautions for user**  
Not applicable.

**Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**  
Not applicable.

**UN "Model Regulation":**  
- 

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**15 Regulatory information**

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

**Sara Section 355 (extremely hazardous substances):**  
None of the ingredients is listed.

**Sara Section 313 (Specific toxic chemical listings):**  
None of the ingredients is listed.

**TSCA (Toxic Substances Control Act):**

<table>
<thead>
<tr>
<th>CAS Number</th>
<th>Chemical Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>69-65-8</td>
<td>D-mannitol</td>
</tr>
<tr>
<td>1119-34-2</td>
<td>(+)-L-arginine hydrochloride</td>
</tr>
<tr>
<td>7758-11-4</td>
<td>dipotassium hydrogenorthophosphate</td>
</tr>
<tr>
<td>59-51-8</td>
<td>DL-methionine</td>
</tr>
<tr>
<td>657-27-2</td>
<td>L-(+)-Lysine hydrochloride</td>
</tr>
<tr>
<td>7681-57-4</td>
<td>sodium metabisulphite</td>
</tr>
<tr>
<td>67-43-6</td>
<td>Pentetic acid</td>
</tr>
<tr>
<td>9005-64-5</td>
<td>Polysorbate 20</td>
</tr>
<tr>
<td>1310-73-2</td>
<td>sodium hydroxide</td>
</tr>
</tbody>
</table>

**Proposition 65**

**Chemicals known to cause cancer:**  
None of the ingredients is listed.

**Chemicals known to cause reproductive toxicity for females:**  
None of the ingredients is listed.

**Chemicals known to cause reproductive toxicity for males:**  
None of the ingredients is listed.

**Chemicals known to cause developmental toxicity:**  
None of the ingredients is listed.

**Carcinogenic categories**

**EPA (Environmental Protection Agency)**  
None of the ingredients is listed.

**TLV (Threshold Limit Value established by ACGIH)**

<table>
<thead>
<tr>
<th>CAS Number</th>
<th>Chemical Name</th>
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<tr>
<td>7681-57-4</td>
<td>sodium metabisulphite</td>
</tr>
</tbody>
</table>

**NIOSH-Ca (National Institute for Occupational Safety and Health)**  
None of the ingredients is listed.

**GHS label elements**

The product is classified and labeled according to the Globally Harmonized System (GHS).

**Hazard pictograms** GHS07

**Signal word** Warning

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(Contd. on page 11)
Trade name: Kinevac (5 µg / vials)

Hazard statements
Causes serious eye irritation.

Precautionary statements
If medical advice is needed, have product container or label at hand.
Keep out of reach of children.
Read label before use.
Wash thoroughly after handling.
Wear protective gloves/protective clothing/eye protection/face protection.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
If eye irritation persists: Get medical advice/attention.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Significant Dangers:
Relevant phrases
H302 Harmful if swallowed.
H314 Causes severe skin burns and eye damage.
H318 Causes serious eye damage.
H335 May cause respiratory irritation.

Training Hints:
All persons handling this product should be informed on the existence of the hazard, on any possible risk they might be subjected to and about all required protective measures to prevent such a damage or to reduce the exposition.

WARNINGS:
Diagnostic agents are intended for use under direction of a physician and/or under the conditions of use described on the label and in the product’s package insert. As a general precaution, personnel who handle drug substances should avoid contact (ingestion, inhalation, skin and eye contact) with these substances.

Department issuing SDS:
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WTC, 5 Place Robert Schuman, BP 1516
38025 Grenoble, FRANCE
Tel: +33 476 295 869
Fax: +33 476 295 870
services@reachteam.eu
www.reachteam.eu

Date of preparation / last revision 10/13/2014

Abbreviations and acronyms:
RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
ICAO: International Civil Aviation Organisation
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
ACGIH: American Conference of Governmental Industrial Hygienists
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
NFPA: National Fire Protection Association (USA)
HMIS: Hazardous Materials Identification System (USA)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
Acute Tox. 4: Acute toxicity, Hazard Category 4
Skin Corr. 1A: Skin corrosion/irritation, Hazard Category 1A
### Trade name: Kinevac (5 µg / vials)

<table>
<thead>
<tr>
<th>Hazard Category</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>1B</td>
<td>Skin corrosion/irritation, Hazard Category 1B</td>
</tr>
<tr>
<td>1</td>
<td>Serious eye damage/eye irritation, Hazard Category 1</td>
</tr>
<tr>
<td>2A</td>
<td>Serious eye damage/eye irritation, Hazard Category 2A</td>
</tr>
<tr>
<td>3</td>
<td>Specific target organ toxicity - Single exposure, Hazard Category 3</td>
</tr>
</tbody>
</table>

*Data compared to the previous version altered.*

- Data updating on the basis of the latest amendments.
- Adaptation of the form according to Regulation 1907/2006/CE.