

Product Name: Human sL-Selectin/CD62L ELISA Kit

Reviewed on: 8 February 2013

#### 1. Identification of Substance:

Other means of identification: Catalog Number: BBE4B, SBBE4B, PBBE4B

Components: Microplate, Conjugate (contains Proclin 300), Standards (contains Proclin 300), Control, Sample Diluent (contains Proclin 300), Wash Buffer (contains Proclin 300), Substrate (contains Tetramethylbenzidine, nonhazardous concentration), Stop Solution (contains Hydrochloric acid).

- GHS product identifier: Human sL-Selectin/CD62L ELISA Kit
- Application of the substance / the preparation: For Research Use Only
- Manufacturer/Supplier:

R&D Systems Inc. 614 McKinley Place N.E. Minneapolis, MN 55413 USA

1-800-343-7475

■ Emergency information: In case of a chemical emergency, spill, fire, or exposure, call R&D Systems at (612) 379-2956 or (800)-343-7475. In Europe call +44(0)1235-529449.

#### 2. Hazard Identification:

• Classification: Regulation (EC) No. 1272/2008 [CLP/GHS]:

Stop Solution contains Hydrochloric Acid (less than 5%) – not a hazardous substance at this concentration.

Pictogram: noneSignal Word: none

• Hazard statements: none

Precautionary statements: none Response: not needed

Classification according to Directive 67/548/EEC: Not a hazardous substance

Hazard Symbol / R-Phrase / S-Phrase: C-Corrosive, Xi-Irritant / R34-Causes burns, R36-Irritating to eyes, R37-Irritating to respiratory system, R38-Irritating to skin.

Other hazards: none

# 3. Information on Ingredients:

Description: Hydrochloric Acid, Formula: HCI.

Contains	CAS No.	EC-No.	Index-No.	Content
Water	7732-18-5	231-791-2	NA	>95%
Hydrochloric Acid	7647-01-0	231-595-7	017-002-01-X	<5%

#### 4. First Aid Measures:

• IF IN EYES: Rinse thoroughly with water for at least 15 minutes and immediately consult a physician.

• IF ON SKIN (or hair): Immediately take off contaminated clothing or shoes. Wash with plenty of soap and water. Consult a physician.

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

• IF SWALLOWED: Never give anything by mouth to an unconscious person. Rinse mouth with water. Immediately consult a physician.

Potential acute / delayed health effects:

Eye contact: Causes serious eye irritation

Skin contact: Causes skin irritation

**Inhalation:** Inhalation of vapors can cause coughing, choking, inflammation of the nose, throat, and upper respiratory tract and in severe cases, pulmonary edema, circulatory failure, and death. / Long term exposure to vapors may cause erosion of

teeth. Long term exposures seldom occur due to the corrosive properties of this acid.

Ingestion: Harmful if swallowed. Irritating to mouth, throat and stomach

Notes to physician: Consult a physician. Show this safety data sheet to the doctor in attendance.



Product Name: Human sL-Selectin/CD62L ELISA Kit

Reviewed on: 8 February 2013

## 5. Fire Fighting Measures:

- Suitable extinguishing agents: Use water spray or extinguishing measures that are appropriate to local circumstances and the surrounding environment.
- Hazards from the substance or mixture: Hydrogen chloride gas.
- Special precautions for fire-fighters: Self contained breathing apparatus and full protective clothing must we worn in case of fire.
- Other information: This product does not burn.

#### 6. Accidental Release Measures:

- Person-related safety precautions: Use appropriate personal protective equipment to prevent contamination of skin, eyes and personal clothing. Avoid breathing vapors, mist or gas. Ensure adequate ventilation.
- Measures for environmental protection: Keep away from drains.
- Measures for containment and cleaning: Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.

## 7. Handling and Storage:

- Precautions for safe handling: Avoid inhalation of vapour or mist. Avoid contact with eyes and skin.
- Conditions for safe storage: Store in a cool, dry place. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Do not store in metal containers.

### 8. Exposure Controls and Personal Protection:

Control parameters:

OSHA PEL / NIOSH REL / ACGIH TLV: 5 ppm (7 mg/m³ as a ceiling limit)

EU Commission Directive 2000/39/EC: 8 hours - 5 ppm (8 mg/m<sup>3</sup>) / Short term10 ppm (15 mg/m<sup>3</sup>)

- Appropriate engineering controls: Use with adequate ventilation including local extraction. Ensure that eyewash stations and safety showers are close to the workstation location.
- Individual protection measures: Wash hands thoroughly after handling chemical products and before eating, smoking or using the toilet. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing.

**Eye/face protection:** Wear approved safety goggles.

**Skin/hand protection:** Handle with protective gloves, plastic or rubber. 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**: Wear suitable protective clothing as protection against splashing or contamination.

Other skin protection: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved.

Respiratory protection: In case of inadequate ventilation, use a suitable respirator. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

### 9. Physical and Chemical Properties:

Appearance: Colorless liquid

Odor: Pungent

Odor threshold: Not available

• **pH:** ~1 - 2

Melting point/freezing point: Not available.
Boiling point/Boiling range: Not available

Flash point: Not available

Evaporation rate: Not available

• Flammability (solid, gas): Not available

Upper/lower flammability or explosive limits: Not available

Vapor density: Not available Vapor pressure: Not available Relative density: Not available

Solubility in/Miscibility with Water: Soluble
Partition coefficient: noctanol/water: Not available

Auto igniting: Not available

**Decomposition temperature:** Not available

Viscosity: Not available



Product Name: Human sL-Selectin/CD62L ELISA Kit

Reviewed on: 8 February 2013

# 10. Stability and Reactivity:

- Reactivity: No data available
- Chemical Stability: Stable under recommended storage conditions.
- Possibility of hazardous reactions: Under normal conditions of storage and use, hazardous reactions will not occur.
- Conditions to avoid: Hydroxides, amines, alkalis and metals.
- Incompatible materials: Hydroxides, amines, alkalis or metals such as copper, brass, zinc, potassium and sodium should be avoided.
- Hazardous decomposition products: Products formed under fire conditions: toxic gasses and vapors such as chlorine.

## 11. Toxicological Information:

- Acute toxicity: Irritating and corrosive to eyes, skin, and mucous membranes. Can cause severe burns upon contact while the
  vapors or mist are corrosive and can cause severe irritation or damage to the nose, throat and lungs. Ingestion of this product
  causes severe burns to the mouth, esophagus, and stomach, with consequent pain, nausea and vomiting.
- Skin corrosion/irritation: Can cause burns of the skin and mucous membranes.
- Serious eye damage/irritation: Can cause burns, reduced vision or blindness.
- Respiratory or skin sensitization: No data available
- Germ cell mutagenicity: No data available
- Carcinogenicity: IARC: 3 Group 3: Not classifiable as to its carcinogenicity to humans (Hydrochloric acid)
- Reproductive toxicity: No data available
- Specific target organ toxicity (STOT) -single exposure: 3
- Specific target organ toxicity (STOT) -repeated exposure: No data available
- Aspiration hazard: Can cause severe burns. Causes respiratory tract irritation.
- Information on likely routes of exposure: Routes of entry anticipated; oral, dermal, inhalation.
- Symptoms related to the physical, chemical and toxicological characteristics:

**Inhalation:** May be harmful if inhaled. Material is extremely destructive to the tissue of the mucous membranes and upper respiratory tract.

Ingestion: May be harmful if swallowed. Causes burns.

**Skin contact:** May be harmful if absorbed through skin. Causes burns.

Eve contact: Causes eve burns.

Delayed and immediate effects and also chronic effects from short and long term exposure:

Short term exposure: Potential immediate effects: Exposure to vapor or aerosol produces inflammation and may cause ulceration of the nose, throat, and larynx; laryngeal spasm or. Eye and skin burns occur at high concentrations. Burns of the skin and mucous membranes result from contact with the solution.

**Potential delayed effects:** Burns may progress to ulcerations and to keloid and retractile scarring. Pulmonary edema may occur on rare occasions.

**Long term (chronic) exposure: Potential immediate effects:** Chronic exposure by skin contact with aqueous solutions may result in dermatitis and photosensitization. Dental discoloration and erosion. **Potential delayed effects:** Not available.

- Numerical measures of toxicity: Not available
- Other Information: NA

# 12. Ecological Information:

- Ecotoxicity: High concentrations may be toxic to aquatic life.
- Biodegradability: When released into the soil, this material is not expected to degrade without pretreatment and may leach into groundwater.
- Bioaccumulative potential: No data available.
- Mobility in soil: Liquid may leach into groundwater.
- Other adverse effects: No data available.



Product Name: Human sL-Selectin/CD62L ELISA Kit

Reviewed on: 8 February 2013

# 13. Disposal Considerations:

- **Disposal methods:** Dispose of waste in accordance to applicable national, regional, or local regulations. This material should be handled as hazardous waste by a licensed disposal company.
- Contaminated packaging: Dispose in the same manner as unused product.
- Special precautions: Dispose of small amounts of spilled material as described in section 6. Large spills must be dealt with separately by qualified disposal personnel. Avoid dispersal of spilt material to soil, waterways, drains and sewers.

### 14. Transport Information:

- UN Number: None
- DOT regulations: ·Hazard class: None
- Land transport ADR/RID (cross-border): Not regulated.
- Maritime transport IMDG: Not regulated.
- Marine pollutant: No
- Air transport ICAO-TI and IATA-DGR: Not regulated.
- Transport/Additional information: Not dangerous according to the above specifications.

### 15. Regulations:

- US Federal and State Regulations
- TCA (Toxic Substances Control Act): Hydrochloric Acid is listed.
   SARA 313 Components: Hydrochloric Acid (acid aerosols) is listed.

SARA 311/312 Hazards: Acute Health Hazard CERCLA Reportable Quantity: 5,000 lbs

California Proposition 65: Hydrochloric Acid is not listed on California's listing of known or potential carcinogens.

#### 16. Other Information:

- Hazard Symbol: C-Corrosive, Xi-Irritant
- R-Phrase: R34-Causes burns, R36-Irritating to eves, R37-Irritating to respiratory system, R38-Irritating to skin.
- S-Phrase: S26, In case of contact with eyes, rinse immediately with plenty of water and see medical advice.
- STOT SE 3
- Notice to reader: To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

#### 2. Hazard Identification:

Classification: Regulation (EC) No. 1272/2008 [CLP/GHS]

Some components indicated above contain Proclin 300: Skin Sens. 1; H317 – May cause an allergic skin reaction.

Signal Word: WARNING

#### Precautionary statements:

P261: Avoid breathing mist.

P272: Contaminated work clothing should not be allowed out of the workplace.

P280: Wear protective gloves.

Response:

IF ON SKIN: Wash with plenty of soap and water. If skin irritation or rash occurs: get medical attention. Wash

contaminated clothing before reuse.



Product Name: Human sL-Selectin/CD62L ELISA Kit

Reviewed on: 8 February 2013

- Classification according to Directive 67/548/EEC: The product is classified as a skin sensitizer according to Directive 1999/45/EC and
  its amendments.
- Hazard Symbol / R-Phrase / S-Phrase: R43: May cause sensitization by skin contact.

Other hazards: none

### 3. Information on Ingredients:

**Description:** Proclin 300

Contains	CAS No.	EC-No.	Index-No.	Content
Modified Alkyl Carboxylate	-	-	-	<0.01%
Mixture of 5-Cloro-2-	55965-84-9	-	613-167-00-5	<0.01%
Methyl-4-Isothiazolin-3-				
One (26172-55-4) and -				
Methyl-4-Isothiazolin-3-				
One (2682-20-4)				
Modified Glycol	-	-	-	≤1.6%

### 4. First Aid Measures:

IF IN EYES: Rinse thoroughly with water for at least 15 minutes and immediately consult a physician.

• IF ON SKIN (or hair): Immediately take off contaminated clothing or shoes. Wash with plenty of soap and water. Consult a physician.

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

• IF SWALLOWED: Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water.

Immediately consult a physician.

# 5. Fire Fighting Measures:

- Suitable extinguishing agents: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
- Special precautions for fire-fighters: Self contained breathing apparatus and full protective clothing must we worn in case of fire.

#### 6. Accidental Release Measures:

- Person-related safety precautions: Use appropriate personal protective equipment to prevent contamination of skin, eyes and personal clothing. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas.
- Measures for environmental protection: Keep away from drains.
- Measures for containment and cleaning: Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.

### 7. Handling and Storage:

- Precautions for safe handling: Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Use normal measures for preventive fire protection.
- Conditions for safe storage: Store in a cool, dry place. Containers which are opened must be carefully resealed and kept upright to
  prevent leakage.

#### 8. Exposure Controls and Personal Protection:

- Control parameters: Contains no substances with occupational exposure limit values.
- Individual protection measures: Wash hands thoroughly after handling chemical products and before eating, smoking or using the toilet.
   Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing.
   Eye/face protection: Wear approved safety goggles.



#### Product Name: Human sL-Selectin/CD62L ELISA Kit

Reviewed on: 8 February 2013

**Skin/hand protection:** Handle with protective gloves, plastic or rubber. 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**: Wear suitable protective clothing as protection against splashing or contamination.

Other skin protection: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved.

Respiratory protection: In case of inadequate ventilation, use a suitable respirator. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

# 9. Physical and Chemical Properties:

Appearance: Clear Liquid

Odor: Not available

Odor threshold: Not available

• pH: Not available

Melting point/freezing point: -40° C
 Boiling point/Boiling range: 189° C
 Flash point: 118° C - closed cup

Flash point: 118° C – closed cup
 Evaporation rate: Not available

• Flammability (solid, gas): Not available

Upper/lower flammability or explosive limits: Not available

Vapor density: Not available Vapor pressure: Not available Relative density: 1.03 g/cm<sup>3</sup>

Solubility in/Miscibility with Water: Soluble
Partition coefficient: noctanol/water: Not available

Auto igniting: Not available

**Decomposition temperature:** Not available

Viscosity: Not available

# 10. Stability and Reactivity:

- Chemical Stability: Stable under recommended storage conditions.
- Conditions to avoid: Strong oxidizing agents, reducing agents, Amines, Mercaptans
- Hazardous decomposition products: Hazardous decomposition products formed under fire conditions Carbon oxides, nitrogen oxides (NOx), Sulphur oxides, Hydrogen chloride gas.

## 11. Toxicological Information:

Acute toxicity: LD50 Oral – rat – 862 mg/kg

LD50 Dermal - rabbit- 2800 mg/kg

- Skin corrosion/irritation: Can cause severe burns. Skin rabbit Corrosive
- Serious eye damage/irritation: Rabbit Corrosive to eyes
- Respiratory or skin sensitization: May cause allergic skin reaction.
- Germ cell mutagenicity: No data available
- Carcinogenicity: No data available
- Reproductive toxicity: No data available
- Specific target organ toxicity (STOT) -single exposure: No data available
- Specific target organ toxicity (STOT) -repeated exposure: No data available
- Aspiration hazard: Can cause severe burns.
- Information on likely routes of exposure: Routes of entry anticipated; oral, dermal, inhalation.
- Symptoms related to the physical, chemical and toxicological characteristics:

**Inhalation:** Harmful if inhaled. Material is extremely destructive to the tissue of the mucous membranes and upper respiratory tract. **Ingestion:** Harmful if swallowed. Causes burns.

Skin contact: Harmful if absorbed through skin. Causes burns.

Eye contact: Causes eye burns.

- Delayed and immediate effects and also chronic effects from short and long term exposure:
  - Short term exposure: Potential immediate effects: Not available. Potential delayed effects: Not available.
  - Long term exposure: Potential immediate effects: Not available. Potential delayed effects: Allergic contact dermatitis.
- Effects of chronic exposure: Proclin 300 at levels greater than or equal to 0.1% is not identified as probable, possible or a confirmed human carcinogen by IARC.
- Numerical measures of toxicity: Not available
- Other Information: NA



Product Name: Human sL-Selectin/CD62L ELISA Kit

Reviewed on: 8 February 2013

# 12. Ecological Information:

- Ecotoxicity: No data available
- Biodegradability: No data available.
- Bioaccumulative potential: No data available.
- Mobility in soil: No data available.
- Other adverse effects: Toxic to aquatic organisms.

## 13. Disposal Considerations:

- Disposal methods: Dispose of waste in accordance to applicable national, regional, or local regulations.
- Contaminated packaging: Dispose in the same manner as unused product.
- Special precautions: Dispose of small amounts of spilled material as described in section 6. Large spills must be dealt with separately by
  qualified disposal personnel. Avoid dispersal of spilled material to soil, waterways, drains and sewers.

## 14. Transport Information:

- UN Number: None
- DOT regulations: Hazard class: None
- Land transport ADR/RID (cross-border): Not regulated.
- Maritime transport IMDG: Not regulated.
- Marine pollutant: No
- Air transport ICAO-TI and IATA-DGR: Not regulated.
- Transport/Additional information: Not dangerous according to the above specifications.

### 15. Regulations:

US Federal and State Regulations

TSCA (Toxic Substances Control Act): On TSCA Inventory

SARA 313 Components: Not listed

SARA 311/312 Hazards: Acute Health Hazard CERCLA Reportable Quantity: Not listed California Proposition 65: Not listed.

#### 16. Other Information:

- Hazard Symbol / R-Phrase / S-Phrase: R43 May cause sensitization by skin contact.
- Notice to reader: To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.