| 07/22/2022   | Kit Components                |                               |  |  |
|--------------|-------------------------------|-------------------------------|--|--|
| Product code | Description                   |                               |  |  |
| H5121        | Tris-HCL (Tris-Hydrochloride) |                               |  |  |
| Components:  |                               |                               |  |  |
| H512         | Tris-HCl (Tris-Hydrochloride) | Tris-HCl (Tris-Hydrochloride) |  |  |



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## Safety Data Sheet acc. to OSHA HCS

Reviewed on 07/22/2022 Printing date 07/22/2022

### 1 Identification

Product identifier Trade name: Tris-HCl Article number: H512

CAS Number: 1185-53-1 EC number: 214-684-5

Application of the substance / the mixture For Laboratory Use

Details of the supplier of the safety data sheet

Manufacturer/Supplier:

Promega Corporation 2800 Woods Hollow Road Madison, WI 53711 U.S.A.

1-800-356-9526 or (608)-274-4330

Information department: SDS author: chemicalregulatory@promega.com

Emergency telephone number:

For Chemical Emergency Spill, Leak, Fire, Exposure, or Accident Call CHEMTREC Day or Night Within USA

and Canada: 1-800-424-9300

Outside USA and Canada: +1 703-527-3887 (collect calls accepted)

## 2 Hazard(s) identification

### Classification of the substance or mixture

The substance is not classified as hazardous according to the Globally Harmonized System (GHS).

Label elements

GHS label elements Not applicable

Hazard pictograms Not applicable

Signal word Not applicable

Hazard statements Not applicable

Classification system:

NFPA ratings (scale 0 - 4)

Health = 1

Fire = 0

Reactivity = 0

HMIS-ratings (scale 0 - 4)

Health = 1Fire

Reactivity = 0

OSHA Hazard Overview (Criteria according to 29CFR1910.1200): Not applicable

Target Organ(s): Not applicable or unknown

Other hazards

Results of PBT and vPvB assessment

**PBT:** Not applicable.

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Trade name: Tris-HCl

vPvB: Not applicable.

(Contd. of page 1)

## 3 Composition/information on ingredients

Chemical characterization: Substances

CAS No. Description 1185-53-1 Tris HCl EC number: 214-684-5

#### 4 First-aid measures

Description of first aid measures

General information: No special measures required.

After inhalation: If the patient feels unwell or is concerned, obtain medical advice.

After skin contact: Generally the product does not irritate the skin.

After eye contact: Rinse opened eye for several minutes under running water.

After swallowing: If the patient feels unwell or is concerned, obtain medical advice.

Information for doctor:

Most important symptoms and effects, both acute and delayed

None

No further relevant information available.

Indication of any immediate medical attention and special treatment needed

No further relevant information available.

## 5 Fire-fighting measures

Extinguishing media

Suitable extinguishing agents:

CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

Special hazards arising from the substance or mixture

None known

No further relevant information available.

Advice for firefighters No special advice

**Protective equipment:** No special measures required.

### 6 Accidental release measures

Personal precautions, protective equipment and emergency procedures Not required.

Environmental precautions: Do not allow to enter sewers/ surface or ground water.

Methods and material for containment and cleaning up: Pick up mechanically.

Reference to other sections

No dangerous substances are released.

See Section 7 for information on safe handling.

See Section 13 for disposal information.

## 7 Handling and storage

Handling:

**Precautions for safe handling** No special measures required.

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Trade name: Tris-HCl

(Contd. of page 2)

Information about protection against explosions and fires: The product is not flammable.

Conditions for safe storage, including any incompatibilities

Storage:

Requirements to be met by storerooms and receptacles: Do not store below -20°C. Protected from light.

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.

### 8 Exposure controls/personal protection

Control parameters

Components with limit values that require monitoring at the workplace: Not required. Additional information: The lists that were valid during the creation were used as basis.

Exposure controls

Personal protective equipment:

General protective and hygienic measures:

The usual precautionary measures for handling chemicals should be followed.

**Breathing equipment:** Not required. **Protection of hands:** Not required.

Material of gloves

Please observe the instructions regarding permeability and breakthrough time which are provided by the manufacturer/supplier of the gloves. Ensure gloves are suitable for the task which includes, but is not limited to, chemical compatibility, dexterity, operational conditions, user susceptibility, e.g., sensitization effects. Consider specific local conditions under which the product is used such as the danger of cuts and abrasion. Remove gloves with care to avoid skin contamination.

Eye protection: Not required.

## 9 Physical and chemical properties

| Information on basic physical and chemical properties |   |  |  |  |
|---|---|--|--|--|
| General Information                                   | 1 1   |  |  |  |
| Appearance:   |   |  |  |  |
| Form:   | Crystalline                                   |  |  |  |
| Color:  | White   |  |  |  |
| Odor:   | Odorless                                      |  |  |  |
| Odor threshold:                                       | Not determined.                               |  |  |  |
| pH-value:   | Not applicable.                               |  |  |  |
| Change in condition                                   |   |  |  |  |
| Melting point/Melting range:                          | 148-150 °C (298.4-302 °F)                     |  |  |  |
| Boiling point/Boiling range:                          | Undetermined.                                 |  |  |  |
| Flash point:  | Not applicable.                               |  |  |  |
| Flammability (solid, gaseous):                        | Product is not flammable.                     |  |  |  |
| Decomposition temperature:                            | Not determined.                               |  |  |  |
| Auto igniting:  | Not determined.                               |  |  |  |
| Danger of explosion:                                  | Product does not present an explosion hazard. |  |  |  |
| Explosion limits:                                     | -   |  |  |  |
| Lower:  | Not determined.                               |  |  |  |
| Upper:  | Not determined.                               |  |  |  |

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Trade name: Tris-HCl

(Contd. of page 3) Vapor pressure: Not applicable. Density at 20 °C (68 °F): 0.55 g/cm³ (4.58975 lbs/gal) Relative density Not determined. Not applicable. Vapor density Evaporation rate Not applicable. Solubility in / Miscibility with Water: Soluble. Partition coefficient (n-octanol/water): Not determined. Viscosity: Dynamic: Not applicable. Kinematic: *Not applicable.* 0.00 % **VOC** content: Solids content: 100.0 %

No further relevant information available.

## 10 Stability and reactivity

Reactivity No further relevant information available.

Chemical stability

Other information

Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.

**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 dangerous decomposition products known.

### 11 Toxicological information

Information on toxicological effects

Acute toxicity:

LD/LC50 values that are relevant for classification:

1185-53-1 Tris HCl

Oral LD50 <1,000 mg/kg (Rabbit)

Primary irritant effect:

on the skin: No irritant effect. on the eye: No irritating effect.

Sensitization:

In case of skin contact: not sensitising In case of inhalation: not sensitising

Additional toxicological information: The substance is not subject to classification.

Carcinogenic categories

IARC (International Agency for Research on Cancer)

Substance is not listed.

NTP (National Toxicology Program)

Substance is not listed.

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Trade name: Tris-HCl

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#### OSHA-Ca (Occupational Safety & Health Administration)

Substance is not listed.

## 12 Ecological information

**Toxicity** 

Aquatic toxicity: Not harmful to the aquatic environment

Persistence and degradability

Not available

No further relevant information available.

Bioaccumulative potential

Not known

No further relevant information available.

*Mobility in soil* No further relevant information available.

Ecotoxicological effects: Remark: Not available

Additional ecological information:

*General notes:* Not known to be hazardous to water.

Results of PBT and vPvB assessment

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

Other adverse effects No further relevant information available.

## 13 Disposal considerations

#### Waste treatment methods

#### Recommendation:

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Refer to Section 7: Handling and Storage and Section 8: Exposure Control/Personal Protection for additional handling information and protection of employees.

Uncleaned packagings:

**Recommendation:** Disposal must be made according to official regulations. **Recommended cleansing agent:** Water, if necessary with cleansing agents.

## 14 Transport information

| UN-Number                          | Not hazardous for transportation |
|------------------------------------|----------------------------------|
| DOT, ADR, ADN, IMDG, IATA          | Not applicable                   |
| UN proper shipping name            | None                             |
| DOT, ADR, ADN, IMDG, IATA          | Not applicable                   |
| Transport hazard class(es)         | None                             |
| DOT, ADR, ADN, IMDG, IATA<br>Class | Not applicable                   |
| Packing group                      | None                             |
| DOT, ADR, IMDG, IATA               | Not applicable                   |

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Trade name: Tris-HCl

(Contd. of page 5)

Environmental hazards:

Marine pollutant: No

**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": Not applicable

## 15 Regulatory information

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

Section 355 (extremely hazardous substances):

Substance is not listed.

Section 313 (Specific toxic chemical listings):

Substance is not listed.

TSCA (Toxic Substances Control Act) Inventory:

Substance is listed.

Hazardous Air Pollutants

Substance is not listed.

**Proposition 65** 

Chemicals known to cause cancer:

Substance is not listed.

Chemicals known to cause reproductive toxicity for females:

Substance is not listed.

Chemicals known to cause reproductive toxicity for males:

Substance is not listed.

Chemicals known to cause developmental toxicity:

Substance is not listed.

New Jersey Right-to-Know List:

Substance is not listed.

Pennsylvania Right-to-Know List:

Substance is not listed.

Cancerogenity categories

EPA (Environmental Protection Agency)

Substance is not listed.

TLV (Threshold Limit Value)

Substance is not listed.

NIOSH-Ca (National Institute for Occupational Safety and Health)

Substance is not listed.

GHS label elements Not applicable

**Signal word** Not applicable

Hazard statements Not applicable

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Trade name: Tris-HCl

(Contd. of page 6)

#### Chemical safety assessment

Water hazard class: Water hazard class 1 (Assessment by list): slightly hazardous for water. Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

### 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.

#### Department issuing SDS:

Promega Corporation Chemical Regulatory Department 2800 Woods Hollow Road Madison, WI

Ph:(608)274-4330

chemicalregulatory@promega.com

#### Contact:

Date of preparation / last revision 07/22/2022 / 5.0

#### 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: Internation Civil Aviation Organization

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International

Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

EINECS: European Inventory of Existing Commercial Chemical Substances

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

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

VOC: Volatile Organic Compounds (USA, EU)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety & Health

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit

US