

Version 1.5 Revision Date: 04-17-2019

Date of last issue: 06-19-2018 Date of first issue: 10-20-2015 Roche

SECTION 1. IDENTIFICATION

Product name	:	Tris-HCI	
Product code	:	10812846001	
Manufacturer or supplier's	deta	ails	
Company name of supplier	:	Roche Diagnostics Deutschlar	nd GmbH
Address	:	Sandhoferstrasse 116 68305 Mannheim Germany	
Telephone Telefax Emergency telephone	:	+496217590 +496217592890	
In case of emergencies:	:	CHEMTREC	+1 703-741-5970 / 1-800-424-9300
Bacommonded use of the a	hor	nical and restrictions on use	

Recommended use of the chemical and restrictions on use

Restrictions on use

: For professional users only.

SECTION 2. HAZARDS IDENTIFICATION

GHS classification in accordance with 29 CFR 1910.1200

Not a hazardous substance or mixture.

GHS label elements

Not a hazardous substance or mixture.

Other hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

: 1185-53-1

Substance / Mixture	:	Substance
---------------------	---	-----------

Substance name : Tris hydrochloride

CAS-No.

Components

No hazardous ingredients

SECTION 4. FIRST AID MEASURES

General advice

: Do not leave the victim unattended.





Version Revision Date: 04-17-2019 Date of last issue: 06-19-2018 Date of first issue: 10-20-2015 If inhaled : Move to fresh air. If unconscious, place in recovery position and seek medi advice. If symptoms persist, call a physician. In case of skin contact : If on skin, rinse well with water. In case of eye contact : If on skin, rinse well with vater. In case of eye contact : Immediately flush eye(s) with plenty of water. Remove contact lenses. Protect unharmed eye. If eye irritation persists, consult a specialist. If swallowed : Keep respiratory tract clear. Do not give milk or alcoholic beverages. Never give anything by mouth to an unconscious person If symptoms persist, call a physician. Rinse mouth with water. Most important symptoms and effects, both acute and delayed : None known. Rinse mouth with water. Notes to physician : The first aid procedure should be established in consulta with the doctor responsible for industrial medicine.	1113-1101		
If unconscious, place in recovery position and seek med advice. If symptoms persist, call a physician.In case of skin contact:In case of eye contact:In case of eye contact:In case of eye contact:In case of eye contact:If swallowed:If swallowed:Keep respiratory tract clear. Do not give milk or alcoholic beverages. Never give anything by mouth to an unconscious person If symptoms persist, call a physician. Rinse mouth with water.Most important symptoms and effects, both acute and delayed:Notes to physician:The first aid procedure should be established in consulta			
In case of eye contact: Immediately flush eye(s) with plenty of water. Remove contact lenses. Protect unharmed eye. If eye irritation persists, consult a specialist.If swallowed: Keep respiratory tract clear. Do not give milk or alcoholic beverages. Never give anything by mouth to an unconscious person If symptoms persist, call a physician. Rinse mouth with water.Most important symptoms and effects, both acute and delayed: None known.Notes to physician: The first aid procedure should be established in consulta	If inhaled	lf unconsci advice.	ious, place in recovery position and seek medica
Remove contact lenses. Protect unharmed eye. If eye irritation persists, consult a specialist. If swallowed : Keep respiratory tract clear. Do not give milk or alcoholic beverages. Never give anything by mouth to an unconscious person If symptoms persist, call a physician. Rinse mouth with water. Most important symptoms and effects, both acute and delayed Notes to physician : The first aid procedure should be established in consultation	In case of skin contac	t : If on skin, i	rinse well with water.
Do not give milk or alcoholic beverages. Never give anything by mouth to an unconscious person If symptoms persist, call a physician. Rinse mouth with water.Most important symptoms 	In case of eye contac	Remove co Protect unl	ontact lenses. harmed eye.
and effects, both acute and delayed Notes to physician : The first aid procedure should be established in consulta	If swallowed	Do not give Never give If symptom	e milk or alcoholic beverages. e anything by mouth to an unconscious person. ns persist, call a physician.
	and effects, both acut		vn.
	Notes to physician		

SECTION 5. FIRE-FIGHTING MEASURES

Suitable extinguishing media	:	Use extinguishing measures that are appropriate to local cir- cumstances and the surrounding environment.
Specific hazards during fire fighting	:	No information available.
Hazardous combustion prod- ucts	:	No hazardous combustion products are known
Further information	:	Standard procedure for chemical fires. Use extinguishing measures that are appropriate to local cir- cumstances and the surrounding environment.
Special protective equipment for fire-fighters	:	Wear self-contained breathing apparatus for firefighting if necessary.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protec- tive equipment and emer- gency procedures	:	Avoid dust formation.
Environmental precautions	:	Local authorities should be advised if significant spillages cannot be contained.



Tris-HCI

Version	Revision Date:	Date of last issue: 06-19-2018
1.5	04-17-2019	Date of first issue: 10-20-2015
Methods and material containment and clear	ning up Sweep up and	rrange disposal without creating dust. d shovel. ble, closed containers for disposal.

SECTION 7. HANDLING AND STORAGE

Advice on protection against fire and explosion	:	Provide appropriate exhaust ventilation at places where dust is formed.
Advice on safe handling	:	For personal protection see section 8. Smoking, eating and drinking should be prohibited in the ap- plication area.
Conditions for safe storage	:	Electrical installations / working materials must comply with the technological safety standards.
Further information on stor- age conditions	:	See label, package insert or internal guidelines
Materials to avoid	:	No materials to be especially mentioned. Keep away from oxidizing agents, strongly alkaline and strongly acid materials in order to avoid exothermic reactions.
Further information on stor- age stability	:	No decomposition if stored and applied as directed.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredients with workplace control parameters

Contains no substances with occupational exposure limit values.

Personal protective equipment

Respiratory protection :		No personal respiratory protective equipment normally required.
--------------------------	--	---

Hand protection

riana protoction		
		In case of full contact:
Material	:	Nitrile rubber
Break through time	:	480 min
Glove thickness	:	0.11 mm
		In case of contact through splashing:
Material	:	Nitrile rubber
Break through time	:	480 min
Glove thickness	:	0.11 mm
Remarks	:	Wear appropriate protective gloves to prevent skin contact.
		Replace torn or punctured gloves promptly.
Eye protection	:	Safety glasses
Skin and body protection	:	Protective suit
Hygiene measures	:	Handle in accordance with good industrial hygiene and safety
		practice.



Tris-HCI

Version 1.5 Revision Date: 04-17-2019

Date of last issue: 06-19-2018 Date of first issue: 10-20-2015

SECTION 9. PHYSICAL AND CHE	SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES						
Appearance	:	solid					
Color	:	colorless					
Odor	:	none					
Odor Threshold	:	Not applicable					
рН	:	4.2 (20 °C / 20 °C) Concentration: 100 g/l (as aqueous solution)					
Melting point/range	:	152 °C / 152 °C					
Boiling point/boiling range	:	No data available					
Flash point	:	Not applicable					
Evaporation rate	:	Not applicable					
Flammability (solid, gas)	:	Sustains combustion					
Flammability (liquids)	:	Sustains combustion					
Self-ignition	:	No data available					
Upper explosion limit / Upper flammability limit	:	No data available					
Lower explosion limit / Lower flammability limit	:	No data available					
Vapor pressure	:	No data available					
Relative vapor density	:	Not applicable					
Relative density	:	No data available					
Solubility(ies) Water solubility	:	soluble					
Solubility in other solvents	:	No data available					
Partition coefficient: n- octanol/water	:	Remarks: Not applicable					
Autoignition temperature	:	No data available					
Decomposition temperature	:	No data available					
Viscosity Viscosity, dynamic	:	Not applicable					



Tris-HCI

Version 1.5 Revision Date: 04-17-2019

Date of last issue: 06-19-2018 Date of first issue: 10-20-2015

Viscosity, kinematic	:	Not applicable
Oxidizing properties	:	The substance or mixture is not classified as oxidizing.
Molecular weight	:	157.6 g/mol

SECTION 10. STABILITY AND REACTIVITY

Reactivity	:	No dangerous reaction known under conditions of normal use.
Chemical stability	:	Stable under normal conditions.
Possibility of hazardous reac- tions	:	No data available Stable under recommended storage conditions. No hazards to be specially mentioned.
Conditions to avoid	:	Exposure to moisture.
Incompatible materials	:	Bases Oxidizing agents
Hazardous decomposition products	:	No decomposition if stored and applied as directed.

SECTION 11. TOXICOLOGICAL INFORMATION

Acute toxicity

Not classified based on available information.

Skin corrosion/irritation

Not classified based on available information.

Serious eye damage/eye irritation

Not classified based on available information.

Respiratory or skin sensitization

Skin sensitization

Not classified based on available information.

Respiratory sensitization

Not classified based on available information.

Germ cell mutagenicity

Not classified based on available information.

Carcinogenicity

Not classified based on available information.

- **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.
- **OSHA** No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.
- NTP No ingredient of this product present at levels greater than or equal to 0.1% is



Tris-HCI

Version 1.5 Revision Date: 04-17-2019

Date of last issue: 06-19-2018 Date of first issue: 10-20-2015

identified as a known or anticipated carcinogen by NTP.

Reproductive toxicity Not classified based on available information.

STOT-single exposure Not classified based on available information.

STOT-repeated exposure Not classified based on available information.

Aspiration toxicity Not classified based on available information.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity No data available Persistence and degradability No data available Bioaccumulative potential

No data available

Mobility in soil

No data available

Other adverse effects

Product:

Ozone-Depletion Potential : Regulation: 40 CFR Protection of Environment; Part 82 Protection of Stratospheric Ozone - CAA Section 602 Class I Substances Remarks: This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods Waste from residues	÷	Can be disposed as waste water, when in compliance with
	•	local regulations.
Contaminated packaging	:	Empty containers should be taken to an approved waste handling site for recycling or disposal. Do not re-use empty containers.

SECTION 14. TRANSPORT INFORMATION

International Regulations

Tris-HCI

Version 1.5 Revision Date: 04-17-2019

Date of last issue: 06-19-2018 Date of first issue: 10-20-2015 Roche

UNRTDG Not regulated as a dangerous good

IATA-DGR Not regulated as a dangerous good

IMDG-Code

Not regulated as a dangerous good

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable

Domestic regulation

49 CFR

Not regulated as a dangerous good

SECTION 15. REGULATORY INFORMATION

EPCRA - Emergency Planning and Community Right-to-Know

CERCLA Reportable Quantity

This material does not contain any components with a CERCLA RQ.

SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

SARA 302 Extremely Hazardous Substances Threshold Planning Quantity

Components	CAS-No.	Component TPQ (lbs)
SARA 311/312 Hazards	: No SARA Hazards	

Clean Air Act

This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 112 (40 CFR 61).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 111 SOCMI Intermediate or Final VOC's (40 CFR 60.489).

Clean Water Act

This product does not contain any Hazardous Substances listed under the U.S. CleanWater Act, Section 311, Table 116.4A.

This product does not contain any Hazardous Chemicals listed under the U.S. CleanWater Act, Section 311, Table 117.3.

This product does not contain any toxic pollutants listed under the U.S. Clean Water Act Section 307

US State Regulations

Massachusetts Right To Know

Pennsylvania Right To Know

1,3-Propanediol, 2-amino-2-(hydroxymethyl)-, hydrochloride 1185-53-1

Tris-HCI

Version 1.5 Revision Date: 04-17-2019

Date of last issue: 06-19-2018 Date of first issue: 10-20-2015 Roche

(1:1)

Maine Chemicals of High Concern

Vermont Chemicals of High Concern

Washington Chemicals of High Concern

The ingredients of this product are reported in the following inventories:DSL:All components of this product are on the Canadian DSL				
AICS	:	On the inventory, or in compliance with the inventory		
NZIoC	:	On the inventory, or in compliance with the inventory		
ENCS	:	Not in compliance with the inventory		
ISHL	:	Not in compliance with the inventory		
KECI	:	On the inventory, or in compliance with the inventory		
PICCS	:	On the inventory, or in compliance with the inventory		
IECSC	:	On the inventory, or in compliance with the inventory		
TCSI	:	On the inventory, or in compliance with the inventory		
TSCA	:	All substances listed as active on the TSCA inventory		

TSCA list

No substances are subject to a Significant New Use Rule.

No substances are subject to TSCA 12(b) export notification requirements.

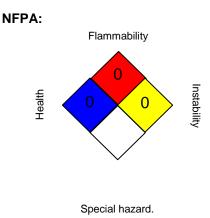
Tris-HCI

Version 1.5 Revision Date: 04-17-2019

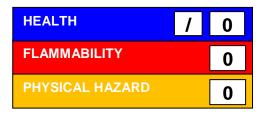
Date of last issue: 06-19-2018 Date of first issue: 10-20-2015 Roche

SECTION 16. OTHER INFORMATION

Further information



HMIS® IV:



HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. The "*" represents a chronic hazard, while the "/" represents the absence of a chronic hazard.

Distributor

MilliporeSigma 3050 Spruce Street SAINT LOUIS MO 63103 USA

Full text of other abbreviations

AICS - Australian Inventory of Chemical Substances; ASTM - American Society for the Testing of Materials; bw - Body weight; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DOT - Department of Transportation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; EHS - Extremely Hazardous Substance: ELx - Loading rate associated with x% response: EmS - Emergency Schedule: ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; HMIS - Hazardous Materials Identification System; IARC -International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; MSHA - Mine Safety and Health Administration; n.o.s. - Not Otherwise Specified; NFPA - National Fire Protection Association; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; RCRA - Resource Conservation and Recovery Act;



Tris-HCI

Version 1.5 Revision Date: 04-17-2019

Date of last issue: 06-19-2018 Date of first issue: 10-20-2015

REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RQ - Reportable Quantity; SADT - Self-Accelerating Decomposition Temperature; SARA - Superfund Amendments and Reauthorization Act; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG -United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

Revision Date : 04-17-2019

The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

US / Z8 / 1805