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**【3】 COMPOSITION/INFORMATION ON INGREDIENTS**

Substance/Mixture	: Mixture
Chemical name or commercial name	: Water solution contains below substaces.
Ingredients and composition	: Tris (Hydroxymethyl) aminomethane. The content is not disclosed Bovine serum albumin. The content is not disclosed Polyoxyethylene sorbitan monolaurate. The content is not disclosed
Formula	: (HOCH <sub>2</sub> ) <sub>3</sub> CNH <sub>2</sub> -
CAS-No.	: C <sub>11</sub> H <sub>23</sub> COOC <sub>6</sub> H <sub>8</sub> [O(CH <sub>2</sub> CH <sub>2</sub> O) <sub>n</sub> H] <sub>3</sub> 77-86-1 9048-46-8 9005-64-5

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**【4】 FIRST AID MEASURES**

Inhalation	: Remove the victim to fresh air. Blow nose and gargle
Skin contact	: Wash the affected areas under running water.
Eye contact	: Wash the affected areas under running water.
Ingestion	: Give the victim one or two glasses of water or saline and induce vomiting. Get medical treatment.

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**【5】 FIRE-FIGHTING MEASURES**

Extinguishing media	: This product is noncombustible.
Prohibited extinguishing media	: None
Particular fire fighting	: Move containers from fire area if it can be done without risk, if not possible, apply water from a safe distance to cool and protect surrounding area.
Protection for firefighters	: Firefighters should wear protective equipment.

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**【6】 ACCIDENTAL RELEASE MEASURES**

Cautions for personnel	: Wear proper equipment and avoid contact with skin and inhalation of vapor.
Cautions for enviromental	: Attention should be given not to cause damage to the enviroment by flowing of spillage to rivers. : In case of the dilution of copious water, do not cause damage to the enviroment by untreated wastewater.
Removal measures	: Absorb spill with paper or cloth. : Wash thoroughly with water

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**【7】 HANDLING AND STORAGE**

Handling	
Engineering measures	: Wear proper protective equipment not to contact with skin or inhale the vapor.
Cautions for safety handling	: Handle not to generate aerosol or vapor.
Storage	
Adequate storage conditon	: Store in a dark, cool place and tightly closed.
Safety adequate container materials	: Glass, polyethylene, polypropylene

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**【8】 EXPOSURE CONTROL/PERSONAL PROTECTION**

Engineering measures	: Use only with adequate ventilation and in closed systems.
Control parameters	
ACGIH(2009)	: Not applicable
Protective equipment	
Respiration protective equipment	: Not necessary
Hands protective equipment	: Impervious protective gloves
Eyes protective equipment	: Safety goggles

**【9】 PHYSICAL AND CHEMICAL PROPERTIES**

Appearance	: Liquid
Colour	: Colourless
Odor	: Odorless
pH	: Weak alkalinity
Boiling point	: Approx. 100°C
Melting point	: Approx. 0°C
Flash point	: Noncombustible
Specific gravity	: Approx. 1.0 g/mL
Solubility	: Water: Freely soluble

**【10】 STABILITY AND REACTIVITY**

Stability	: Stable under normal usage
Reactivity	: May react with strong oxidizing substances.
Incompatible conditions	: Light, heat

**【11】 TOXICOLOGICAL INFORMATION**

Acute toxicity, Oral	Out of category
Acute toxicity, Dermal	Not possible to classify because of insufficient data
Inhalation (gas)	: Not possible to classify because of insufficient data
Inhalation (dust, mist)	: Not possible to classify because of insufficient data
	Rat oral LD50=5900mg/kg (as Tris (Hydroxymethyl) aminomethane)
	Rat oral LD50=37g/kg (as Polyoxyethylene sorbitan monolaurate)
Skin corrosiveness	: Causes skin irritation. (Category2)
Irritation to skin, eyes	: Causes serious eye damage. (Category2A)
Respiratory sensitization or skin sensitization	
Respiratory sensitization	: Not possible to classify because of insufficient data
Skin sensitization	: Not possible to classify because of insufficient data
Mutagenicity	: Not possible to classify because of insufficient data
Carcinogenic effects	: Not possible to classify because of insufficient data
Effects on the reproductive system	
	: Not possible to classify because of insufficient data
Specific target organ systemic toxicity(Single exposure)	
	: Not possible to classify because of insufficient data
Specific target organ systemic toxicity(repeated exposure)	
	: Not possible to classify because of insufficient data
Aspiration hazard	: Not possible to classify because of insufficient data

**【12】 ECOLOGICAL INFORMATION**

Ecotoxicity

Fish toxicity

Acute aquatic toxicity : Not possible to classify because of insufficient data

Chronic aquatic toxicity : Not possible to classify because of insufficient data

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**【13】 DISPOSAL CONSIDERATIONS**

Residual disposal : Dilute with copious water and adjust the pH of the solution, after flush in drains.

: Or entrust approved waste disposal companies with the disposal

Containers : In case of disposal of empty bottles, dispose bottles after removing the content thoroughly.

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**【14】 TRANSPORT INFORMATION**

UN class : Not applicable

UN-Number: : Not applicable

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**【15】 REGULATORY INFORMATION**

Ensure this material in compliance with federal requirements and ensure conformity to local regulations.

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**【16】 OTHER INFORMATION**

References : Encyclopaedia Chemica, Kyoritsu Shuppan Co., Ltd.

The information contained herein is based on several references and the present state of our knowledge. However, the SDS does not always cover all information about the product, handle the product carefully. The information is intended to ordinary usage, in case of particular handlings, conduct appropriate safety measurements. The information herein is only provision of information , and it does not represent a guarantee the properties of the product