

# SAFETY DATA SHEET

Version 2.3

## 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

### Product identifier

Product Name Triton X-100  
Product Code CP-100

### Recommended use of the chemical and restrictions on use

For research use only. Not intended for diagnostic or therapeutic use.

### Details of the supplier of the safety data sheet

#### IMT Formosa New Materials Co., Ltd.

Rm. 1, 4F., No. 15, Aly. 15, Ln. 71, Changyu St., Sanmin Dist., Kaohsiung City 807, Taiwan (R.O.C.)

#### Emergency telephone number

+886-926159317

## 2. HAZARDS IDENTIFICATION

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).

### Classification

Acute toxicity - Oral Category 4  
Serious eye damage/eye irritation Category 2A

### Label elements

Signal word Warning  
Hazard statements Harmful if swallowed  
Causes serious eye irritation  
Symbols/Pictograms



Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling  
Do not eat, drink or smoke when using this product  
Wear protective gloves/protective clothing/eye protection/face protection

Precautionary Statements - Response

IF exposed or concerned: Get medical advice/attention  
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  
IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell  
Rinse mouth  
Dispose of contents/container to an approved waste disposal plant

Precautionary Statements - Disposal


### Hazards not otherwise classified (HNOC)

Hazards not otherwise classified (HNOC) Not applicable

### Other Information

Other hazards

Toxic to aquatic life with long lasting effects. Toxic to aquatic life.

<b>NFPA</b>	Health hazards	1		<b>HMIS</b>	Health hazards	1
	Flammability	1			Flammability	1
	Stability	1			Physical hazards	1
	Physical and chemical properties	-			Personal protection	-

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

CAS No 9002-93-1  
Molecular Weight 646.86  
Formula  $C_{34}H_{62}O_{11}$

Chemical name	CAS No.	Weight-%	Oral LD50	Dermal LD50	Inhalation LC50
Triton X-100	9002-93-1	>98	= 1800 mg/kg ( Rat )	-	-

### 4. FIRST AID MEASURES

#### First Aid Measures

General advice	If symptoms persist, call a physician. Do not breathe dust/fume/gas/mist/vapors/spray. Do not get in eyes, on skin, or on clothing.
Eye contact	Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Keep eye wide open while rinsing. If symptoms persist, call a physician. Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.
Skin Contact	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Consult a physician if necessary. Immediate medical attention is not required. If skin irritation persists, call a physician.
Inhalation	Remove to fresh air Call a physician If breathing is irregular or stopped, administer artificial respiration Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation Immediate medical attention is not required Move to fresh air in case of accidental inhalation of vapors If symptoms persist, call a physician
Ingestion	Rinse mouth. Drink plenty of water. If symptoms persist, call a physician. Do NOT induce vomiting. Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Call a physician.
Self-protection of the first aider	Use personal protective equipment as required.

#### Most important symptoms and effects, both acute and delayed

Symptoms No information available.

#### Indication of any immediate medical attention and special treatment needed

Note to physicians Treat symptomatically.

### 5. FIRE-FIGHTING MEASURES

#### Suitable Extinguishing Media

Suitable Extinguishing Media Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media No information available.

#### Specific hazards arising from the chemical

Specific hazards arising from the chemical No information available.

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Hazardous combustion products      Carbon oxides.

**Explosion data**

Sensitivity to Mechanical Impact      No information available.  
Sensitivity to Static Discharge      No information available.

**Protective equipment and precautions for firefighters**

Protective equipment and precautions for firefighters      Wear self contained breathing apparatus for fire fighting if necessary.

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## 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions, protective equipment and emergency procedures**

Personal precautions      Remove all sources of ignition. Evacuate personnel to safe areas. Ensure adequate ventilation, especially in confined areas. Use personal protective equipment as required. Keep people away from and upwind of spill/leak.

**Environmental precautions**

Environmental precautions      Do not flush into surface water or sanitary sewer system. Prevent entry into waterways, sewers, basements or confined areas. Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. See Section 12 for additional Ecological Information.

**Methods and material for containment and cleaning up**

Methods for containment      Prevent further leakage or spillage if safe to do so.  
Methods for cleaning up      Cover liquid spill with sand, earth or other non-combustible absorbent material. Dam up. Use personal protective equipment as required. Take up mechanically, placing in appropriate containers for disposal. Clean contaminated surface thoroughly. Soak up with inert absorbent material. Pick up and transfer to properly labeled containers.

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## 7. HANDLING AND STORAGE

**Precautions for safe handling**

Advice on safe handling      Use personal protective equipment as required. Do not breathe dust/fume/gas/mist/vapors/spray. Avoid contact with skin, eyes or clothing. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Use with local exhaust ventilation. Noxious vapor/odor. Ensure adequate ventilation, especially in confined areas.

**Conditions for safe storage, including any incompatibilities**

Storage Conditions      Keep container tightly closed in a dry and well-ventilated place. Keep out of the reach of children. Keep containers tightly closed in a cool, well-ventilated place. Keep in properly labeled containers. Store at room temperature.  
Incompatible materials      None known based on information supplied.

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## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Control parameters**

Exposure Guidelines      This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

**Appropriate engineering controls**

Engineering Controls      Ensure adequate ventilation, especially in confined areas

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### Individual protection measures, such as personal protective equipment

Eye/face protection	Tight sealing safety goggles. Face protection shield.
Skin and Body Protection	Wear protective gloves and protective clothing.
Respiratory protection	If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.
General Hygiene Considerations	When using do not eat, drink or smoke. Regular cleaning of equipment, work area and clothing is recommended. Do not eat, drink or smoke when using this product. Wash contaminated clothing before reuse.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

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Physical State	liquid
Appearance	No information available
Odor	No information available

<u>Property</u>	<u>Values</u>
pH	No information available
Melting point/freezing point	5 °C
Boiling point	250 °C
Flash point	180 °C
Liquid Density	1.06 g/mL
Evaporation rate	No information available
Upper flammability limits	No information available
Lower flammability limit	No information available
Vapor pressure	1.00 mmHg
Vapor density	No information available
Specific gravity	No information available
Water solubility	No information available
Solubility in other solvents	No information available
Partition coefficient	No information available
Autoignition temperature	No information available
Decomposition temperature	No information available
Kinematic viscosity	No information available
Explosive properties	No information available
Oxidizing properties	No information available

## 10. STABILITY AND REACTIVITY

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Reactivity	Not applicable
Chemical stability	Stable under recommended storage conditions.
Possibility of Hazardous Reactions	None under normal processing.
Hazardous polymerization	No information available.
Conditions to avoid	Heat, flames and sparks.
Incompatible materials	Strong oxidizing agents.
Hazardous Decomposition Products	Carbon oxides.

## 11. TOXICOLOGICAL INFORMATION

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### Information on likely routes of exposure

Inhalation	No data available.
Eye contact	No data available.

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Skin Contact	No data available.
Ingestion	No data available.

### Information on toxicological effects

Symptoms	No information available.
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### Delayed and immediate effects as well as chronic effects from short and long-term exposure

Chronic Toxicity	Avoid repeated exposure.
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### Numerical measures of toxicity - Product Information

Unknown acute toxicity	No information available
The following values are calculated based on chapter 3.1 of the GHS document	
ATEmix (oral)	1800 mg/kg

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## 12. ECOLOGICAL INFORMATION

Ecotoxicity	Toxic to aquatic life with long lasting effects
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0% of the mixture consists of components(s) of unknown hazards to the aquatic environment.

Persistence and degradability	No information available.
Bioaccumulation	No information available.
Mobility	No information available.

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## 13. DISPOSAL CONSIDERATIONS

Disposal of wastes	Disposal should be in accordance with applicable regional, national and local laws and regulations.
Contaminated packaging	Do not reuse container.
Other Information	Waste codes should be assigned by the user based on the application for which the product was used.

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## 14. TRANSPORT INFORMATION

### DOT

UN/ID no	UN3082
Hazard Class	9
Packing Group	III
Proper shipping name	Environmentally hazardous substance, liquid, n.o.s.
Description	UN3082, Environmentally hazardous substance, liquid, n.o.s. (Triton X-100), 9, III, Marine pollutant
Emergency Response Guide Number	171

### IMDG

UN/ID no	UN3082
Hazard Class	9
Packing Group	III
Proper shipping name	Environmentally hazardous substance, liquid, n.o.s.
Description	UN3082, Environmentally hazardous substance, liquid, n.o.s. (Triton X-100), 9, III, Marine pollutant
Special Provisions	274, 335, 969

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EmS-No F-A, S-F

**IATA**

UN/ID no UN3082  
Hazard Class 9  
Packing Group III  
Proper shipping name Environmentally hazardous substance, liquid, n.o.s.  
Description UN3082, Environmentally hazardous substance, liquid, n.o.s. (Triton X-100), 9, III  
ERG Code 9L

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**15. REGULATORY INFORMATION**

**International Inventories**

**All of the components in the product are on the following Inventory lists**

TSCA (United States): Canada (DSL/NDSL) Australia (AICS) South Korea (KECL): China (IECSC) Philippines (PICCS)

Chemical name	TSCA	DSL	NDSL	EINECS	ELINCS	ENCS	IECSC	KECL	PICCS	AICS
Triton X-100	X	X	-	-	-	-	X	X	X	X

**X - Listed**

*TSCA - United States Toxic Substances Control Act Section 8(b) Inventory*

*DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List*

*EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances*

*ENCS - Japan Existing and New Chemical Substances*

*IECSC - China Inventory of Existing Chemical Substances*

*KECL - Korean Existing and Evaluated Chemical Substances*

*PICCS - Philippines Inventory of Chemicals and Chemical Substances*

**US Federal Regulations**

**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

**SARA 311/312 Hazard Categories**

Acute health hazard Yes  
Chronic Health Hazard No  
Fire hazard No  
Sudden release of pressure hazard No  
Reactive hazard Yes

**CWA (Clean Water Act)**

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

**US State Regulations**

**California Proposition 65**

This product does not contain any Proposition 65 chemicals.

**U.S. State Right-to-Know Regulations**

This product does not contain any substances regulated by state right-to-know regulations

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**16. OTHER INFORMATION**

Revision note No information available

**Disclaimer**

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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.

**End of Safety Data Sheet**