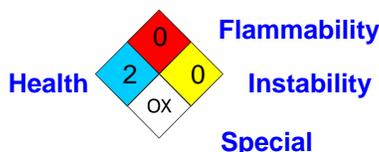




# Tompkins Industries

## Material Safety Data Sheet

**Emergency phone:** US & Canada: 800 424-9300  
Mexico: 01 800 022 1400, (55) 5559 1588



Health	2
Flammability	0
Physical hazards	0
Personal protection	

### 1. Product and company identification

**Product name** : PERMA PASS® 3082 (TP)  
**Product Code** : 309987  
**Material uses** : Specialty chemicals for the electronics and surface finishing industries.  
**Manufacturer** : Enthone Inc Enthone OMI de Mexico S.A. de C.V.  
350 Frontage Road Norte 59 No. 896  
West Haven, CT 06516 Col. Industrial Vallejo  
Phone: (203) 799-4917 Mexico, D.F. 02300  
Fax: (203) 799-8179 Mexico  
www.cooksonelectronics.com Phone: 52 55 5078 3904  
Fax: 52 555 567 6326  
www.cooksonelectronics.com

**Validation date** : 4/28/2009. **Supersedes Date** : 2/23/2009  
**Prepared by** : T. Valverde  
(203)-799-4917

### 2. Hazards identification

**Physical state** : Liquid.  
**Odor** : Pungent. [Slight]  
**OSHA/HCS status** : This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).  
**Emergency overview** : WARNING!  
Toxic by inhalation and if swallowed. Irritating to eyes, respiratory system and skin. May cause sensitization by inhalation and skin contact. Do not breathe vapor or mist. Do not ingest. Do not get on skin or clothing. Avoid contact with eyes. Contains material that may cause target organ damage, based on animal data. Contains material which may cause cancer. Risk of cancer depends on duration and level of exposure. Contains material which may cause heritable genetic effects. Contains material which may cause developmental abnormalities, based on animal data. Avoid exposure during pregnancy. Contains material which may impair male fertility, based on animal data. Contains material which may impair female fertility, based on animal data. Use only with adequate ventilation. Keep container tightly closed and sealed until ready for use. Wash thoroughly after handling.  
**Routes of entry** : Dermal contact. Eye contact. Inhalation. Ingestion.  
**Potential acute health effects**

*Continued on next page*

## 2. Hazards identification

- Inhalation** : Toxic by inhalation. Can cause target organ damage. Irritating to respiratory system. May cause sensitization by inhalation. Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels. Adverse symptoms may include the following: wheezing and breathing difficulties asthma anaphylactic shock Persons with a history of asthma, allergies or chronic or recurrent respiratory disease should not be employed in any process in which this product is used. Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure. The exposed person may need to be kept under medical surveillance for 48 hours.
- Ingestion** : Toxic if swallowed. Can cause target organ damage. Ingestion may cause gastrointestinal irritation and diarrhea.
- Skin** : Irritating to skin. May cause sensitization by skin contact. Skin inflammation is characterized by itching, scaling, reddening or, occasionally, blistering. Prolonged or repeated contact may cause dermatitis. Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels. In the event of any complaints or symptoms, avoid further exposure. Persons with a history of skin sensitization problems should not be employed in any process in which this product is used.
- Eyes** : Irritating to eyes. Adverse symptoms may include the following: redness, itching, swelling, pain
- Potential chronic health effects**
- Chronic effects** : Contains material that can cause target organ damage. Adverse symptoms may include the following:
- Sodium Salt.:** Other adverse effects: convulsive seizures, methemoglobinemia. Production of nitrites in the digestive tract may cause nausea or vomiting, dizziness/vertigo, heartbeat increase, loss of consciousness or coma, death. The carcinogen status of this chemical is based on exposure to the chemical once ingested and undergoes metabolic synthesis. Under normal use conditions, exposure to this chemical is not expected.
- ChromiumSalt.:** Prolonged or repeated contact may cause dermatitis.
- Cobalt Compounds:** Prolonged or repeated exposure may cause flushing of face, ringing in the ears and blood pressure elevation. Ingestion of significant amounts of soluble cobalt salts has been reported to have the potential for causing blood, heart, thyroid and pancreas damage.
- Target organs** : Contains material which may cause damage to the following organs: blood, lungs, the reproductive system, heart, upper respiratory tract, skin, eyes, bone marrow, pancreas, stomach, thyroid.
- Carcinogenicity** : Contains material which may cause cancer. Risk of cancer depends on duration and level of exposure.
- Mutagenicity** : Contains material which may cause heritable genetic effects.
- Developmental effects** : Contains material which may cause developmental abnormalities, based on animal data.
- Fertility effects** : Contains material which may impair male fertility, based on animal data. Contains material which may impair female fertility, based on animal data.
- California Prop. 65** : **WARNING:** This product contains a chemical known to the State of California to cause cancer.  
**WARNING:** This product contains less than 1% of a chemical known to the State of California to cause birth defects or other reproductive harm.
- Medical conditions aggravated by over-exposure** : Pre-existing respiratory, skin and digestive disorders and disorders involving any other target organs mentioned in this MSDS as being at risk may be aggravated by over-exposure to this product. Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Persons suffering from respiratory problems or allergic responses should not be exposed to or handle powder coatings.

### 3. Composition/information on ingredients

<u>Name</u>	<u>CAS number</u>	<u>% by weight</u>
Sodium Salt.	-	10-20
ChromiumSalt.	-	5-10
Cobalt Compounds	-	1-5

A Trade Secret exemption was filed on November 20, 2006 and is pending with the HMIRC for one or more ingredients in this product under Registry No: 6782

**Any ingredient not listed in Section 3 is non-regulated or present in the product in concentrations below legal disclosure limits.**

### 4. First aid measures

- Eye contact** : Check for and remove any contact lenses. Get medical attention if irritation occurs. Immediately flush eyes with running water for at least 30 minutes, keeping eyelids open.
- Skin contact** : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Continue to rinse for at least 15 minutes. Get medical attention. May cause sensitization by skin contact. Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels. Wash contaminated clothing before reuse. Clean shoes thoroughly before reuse. In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.
- Inhalation** : Get medical attention immediately. Move exposed person to fresh air. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours. In the event of any complaints or symptoms, avoid further exposure.
- Ingestion** : Get medical attention immediately. Wash out mouth with water. Remove dentures if any. Move exposed person to fresh air. Keep person warm and at rest. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wear suitable protective clothing, gloves and eye/face protection. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

### 5. Fire-fighting measures

**Flammability of the product** : In a fire or if heated, a pressure increase will occur and the container may burst. Reacts violently when water is added to this product.

**Extinguishing media**

- Suitable** : Use an extinguishing agent suitable for the surrounding fire.
- Not suitable** : None known.

**Special exposure hazards** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

## 5 . Fire-fighting measures

- Hazardous combustion products** : carbon oxides  
nitrogen oxides  
sulfur oxides  
halogenated compounds  
metal oxide/oxides
- Special remarks on explosion hazards** : not available
- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

## 6 . Accidental release measures

- Personal precautions** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see section 8).
- Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
- Large spill** : Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see section 13). The spilled material may be neutralized with sodium carbonate, sodium bicarbonate or sodium hydroxide. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see section 1 for emergency contact information and section 13 for waste disposal.
- Small spill** : Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble or absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

## 7 . Handling and storage

- Handling** : Put on appropriate personal protective equipment (see section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Persons with a history of skin sensitization problems or asthma, allergies or chronic or recurrent respiratory disease should not be employed in any process in which this product is used. Avoid exposure during pregnancy. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or approved alternative container. Containers should be kept closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container. Always add acids to water and basic solutions slowly and cautiously. Never add water to acids. The extreme heat generated can cause a violent reaction.
- Storage** : Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10) and food and drink. Separate from alkalis. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. Avoid contamination by any source including metals, dust and organic materials. Provide a readily-accessible eyewash facility and quick-drench safety shower.

## 7 . Handling and storage

Keep container tightly closed. Keep container in a cool, well-ventilated area. Separate from acids, alkalis, reducing agents and combustibles. See NFPA 430, Code for the Storage of Liquid and Solid Oxidizers. Do not store below the following temperature: 0°C (32°F).

## 8 . Exposure controls/personal protection

<u>Product name</u>	<u>CAS number</u>	<u>Exposure limits</u>
ChromiumSalt.	-	<p><b>NIOSH REL (United States, 6/2008). Notes: as CR</b> TWA: 0.5 mg/m<sup>3</sup>, (as CR) 10 hour(s).</p> <p><b>OSHA PEL (United States, 11/2006). Notes: as Cr</b> TWA: 0.5 mg/m<sup>3</sup>, (as Cr) 8 hour(s).</p> <p><b>OSHA PEL 1989 (United States, 3/1989).</b> TWA: 1 mg/m<sup>3</sup> 8 hour(s).</p> <p><b>ACGIH TLV (United States, 1/2008). Notes: measured as Cr</b> TWA: 0.5 mg/m<sup>3</sup>, (measured as Cr) 8 hour(s). Form: Inorganic</p>
Cobalt Compounds	-	<p><b>NIOSH REL (United States, 2001). Notes: As Cobalt</b> TWA: 0.05 mg/m<sup>3</sup> 10 hour(s). Form: Dust and fumes</p> <p><b>OSHA PEL 1989 (United States, 1989). Notes: As Cobalt</b> TWA: 0.1 mg/m<sup>3</sup> 8 hour(s). Form: Dust and fumes</p> <p><b>ACGIH TLV (United States, 1/2008). Notes: as Co</b> TWA: 0.02 mg/m<sup>3</sup>, (as Co) 8 hour(s). Form: Inorganic</p>

### Consult local authorities for acceptable exposure limits.

**Recommended monitoring procedures** : If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment.

**Engineering measures** : Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. Processes should be designed to minimize airborne and skin exposure to hazardous substances.

**Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location. Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Remove/Take off immediately all contaminated clothing. Contaminated work clothing should not be allowed out of the workplace.

### Personal protection

**Respiratory** : Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

**Hands** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. The user must check that the final choice of type of glove selected for handling this product is the most appropriate and takes into account the particular conditions of use, as included in the user's risk assessment.

**Eyes** : Avoid contact with eyes. Safety eyewear should be used when there is a likelihood of exposure. Use safety eyewear designed to protect against splash of liquids.

**Skin** : Avoid contact with skin and clothing. Wear protective clothing. Body garments used should be based upon the task being performed (e.g., lab coat, chemical resistant protective suit, sleevelets, synthetic apron, gauntlets) to avoid exposed skin surfaces. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

## 8 . Exposure controls/personal protection

**Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

## 9 . Physical and chemical properties

**Physical state** : Liquid.  
**Flash point** : Not available.  
**Auto-ignition temperature** : Not available.  
**Flammable limits** : Not available.  
**Color** : Green. [Dark]  
**Odor** : Pungent. [Slight]  
**pH** : 1.6  
**Boiling/condensation point** : 101.11°C (214°F)  
**Melting/freezing point** : 0°C (32°F)  
**Relative density** : 1.129  
**Vapor pressure** : Not available.  
**Vapor density** : Not available.  
**Odor threshold** : Not available.  
**Evaporation rate** : Not available.  
**VOC** : 9.1 g/l  
**Solubility** : Easily soluble in the following materials: cold water and hot water.

## 10 . Stability and reactivity

**Stability** : The product is stable.  
**Conditions to avoid** : No specific data.  
**Incompatibility with various substances** : Highly reactive with alkalis.  
 Reactive with reducing agents, organic materials.  
 Slightly reactive to reactive with metals.  
**Hazardous decomposition products** : Under normal conditions of storage and use, hazardous decomposition products should not be produced.  
**Hazardous polymerization** : Under normal conditions of storage and use, hazardous polymerization will not occur.

## 11 . Toxicological information

### Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Sodium Salt.	LD	Rat	>181 mg/kg	-
	Intraperitoneal			
	LD50 Oral	Rat	1267 mg/kg	-
	TDL <sub>o</sub> Oral	Rat	1600 mg/kg	-
ChromiumSalt.	LD50 Oral	Rat	7760 mg/kg	-
	Cobalt Compounds	LD50	Rat	31600 ug/kg
Intraperitoneal				
LD50		Rat	18200 ug/kg	-
	Intravenous			
	LD50 Oral	Rat	424 mg/kg	-

### Carcinogenicity

#### Classification

Product/ingredient name	ACGIH	IARC	EPA	NIOSH	NTP	OSHA

## 11 . Toxicological information

Sodium Salt.	-	2A	-	-	-	-
ChromiumSalt.	A4	3	-	-	-	-
Cobalt Compounds	A3	2B	-	-	Possible	-

### Mutagenicity

Product/ingredient name	Test	Experiment	Result
Sodium Salt.	-	In vivo; Mammalian-Animal; Somatic	Positive
Cobalt Compounds	-	Bacteria	Positive

### Reproductive toxicity

Product/ingredient name	Maternal toxicity	Fertility	Development toxin	Species	Dose	Exposure
Sodium Salt.	-	Equivocal	-	Mouse - Male	Oral: 16800 mg/kg TDLo	-

Enthone has not conducted specific studies on the toxicity of this product.

## 12 . Ecological information

### Aquatic ecotoxicity

Product/ingredient name	Test	Result	Species	Exposure
Sodium Salt.	-	Acute LC50 1121.4 mg/L Fresh water	Fish - Lake trout, siscowet - Salvelinus namaycush - FRY	96 hours
	-	Acute LC50 1310000 to 1494000 ug/L Fresh water	Fish - Chinook salmon - Oncorhynchus tshawytscha - Fingerling - 52 to 95 mm - 0.978 to 9.66 g	96 hours
	-	Acute LC50 1261000 ug/L Fresh water	Fish - Guadalupe bass - Micropterus treculi - 6.5 g	96 hours
	-	Acute LC50 1050000 to 1107000 ug/L Marine water	Fish - Rainbow trout,donaldson trout - Oncorhynchus mykiss - Fingerling - 76 to 115 mm - 2 to 21 g	96 hours
	-	Acute LC50 1000000 ug/L Marine water	Fish - Florida pompano - Trachinotus carolinus - 6.9 to 11.5 cm	96 hours
	-	Acute LC50 994000 to 1054000 ug/L Marine water	Fish - Chinook salmon - Oncorhynchus tshawytscha - Fingerling - 67 to 100 mm - 2.733 to 9.89 g	96 hours
	-	Acute LC50 573000 ug/L	Fish - Planehead Filefish -	96 hours

## 12 . Ecological information

hispidus - 3.9 to  
5.5 cm

	-	Acute LC50 5600000 ug/L	Crustaceans - Penaeidean shrimp - Penaeus sp. - 500 to 1500 mg	48 hours
	-	Acute LC50 3581000 ug/L Fresh water	Daphnia - Water flea - Daphnia magna	48 hours
	-	Acute LC50 3400000 ug/L	Crustaceans - Penaeidean shrimp - Penaeus sp. - 500 to 1500 mg	48 hours
	-	Chronic NOEC 800 mg/L Fresh water	Fish - Lake whitefish - Coregonus clupeaformis - FRY	96 hours
	-	Chronic NOEC 720 mg/L Fresh water	Fish - Rainbow trout,donaldson trout - Oncorhynchus mykiss - Juvenile (Fledgling, Hatchling, Weanling) - 251 mg	96 hours
Cobalt Compounds	-	Acute LC50 5.15 mg/L Fresh water	Daphnia - Water flea - Daphnia magna - Neonate - 12 hours	48 hours
	-	Acute LC50 3.75 mg/L Fresh water	Fish - Fathead minnow - Pimephales promelas - Juvenile (Fledgling, Hatchling, Weanling) - 8 weeks - 12 to 16 mm	96 hours
	-	Acute LC50 3.46 to 4.57 mg/L Fresh water	Fish - Fathead minnow - Pimephales promelas - Juvenile (Fledgling, Hatchling, Weanling) - 8 weeks - 12 to 16 mm	96 hours
	-	Acute LC50 2380 to 2887 ug/L Fresh water	Daphnia - Water flea - Daphnia pulicaria	48 hours
	-	Acute LC50 1765 to 2255 ug/L Fresh water	Daphnia - Water flea - Daphnia pulicaria	48 hours

## 12 . Ecological information

-	Acute LC50 1619 to 1808 ug/L Fresh water	Daphnia - Water flea - Daphnia pulicaria	48 hours
-	Acute LC50 1498 to 1728 ug/L Fresh water	Daphnia - Water flea - Daphnia pulicaria	48 hours
-	Acute LC50 689 to 769 ug/L Fresh water	Daphnia - Water flea - Daphnia pulicaria	48 hours
-	Acute LC50 524 to 584 ug/L Fresh water	Daphnia - Water flea - Daphnia pulicaria	48 hours
-	Acute LC50 397 to 437 ug/L Fresh water	Daphnia - Water flea - Daphnia pulicaria	48 hours
-	Acute LC50 52500 ug/L Marine water	Fish - Tigerfish, crescent perch - Terapon jarbua - Juvenile (Fledgling, Hatchling, Weanling) - 2.4 to 3.6 cm - 0.2 to 0.7 g	96 hours
-	Acute LC50 6000 ug/L Fresh water	Daphnia - Water flea - Daphnia magna	48 hours
-	Acute LC50 3037 to 3542 ug/L Fresh water	Daphnia - Water flea - Daphnia pulicaria	48 hours

## 13 . Disposal considerations

**Waste disposal** : The generation of waste should be avoided or minimized wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe way. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

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 CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees.

## 14 . Transport information

Regulatory information	UN number	Proper shipping name	Classes	PG* Label	Additional information
DOT Classification	UN3139	Oxidizing Liquid, n.o.s. (Sodium Nitrate)	5.1	III 	ERG# 140

PG\* : Packing group

## 15 . Regulatory information

### United States

**HCS Classification** : Toxic material  
Irritating material  
Sensitizing material  
Carcinogen  
Target organ effects

**U.S. Federal regulations** All ingredients comply with applicable rules or orders under United States TSCA.  
All components are listed or exempted.  
TSCA 5(a)2 proposed significant rules: No products were found.  
TSCA 5(a)2 final significant rules: No products were found.  
TSCA 12(b) one-time export: No products were found.

### SARA 313

**Form R - Reporting requirements**

**Product name**  
: Sodium Salt.  
ChromiumSalt.  
Cobalt Compounds

**Supplier notification**

: Sodium Salt.  
ChromiumSalt.  
Cobalt Compounds

### California Prop. 65

**WARNING:** This product contains a chemical known to the State of California to cause cancer.

**WARNING:** This product contains less than 1% of a chemical known to the State of California to cause birth defects or other reproductive harm.

### Canada

**WHMIS (Canada)** : Class D-1B: Material causing immediate and serious toxic effects (Toxic).  
Class D-2A: Material causing other toxic effects (Very toxic).  
Class D-2B: Material causing other toxic effects (Toxic).  
Class E: Corrosive material

**Canada inventory** : All components are listed or exempted.

### International lists

**China inventory (IECSC)** : All components are listed or exempted.

**Europe inventory** : All components are listed or exempted.

**Australia inventory (AICS)** : All components are listed or exempted.

**Japan inventory (ENCS)** : Not determined.

Not determined.

**Korea inventory (KECI)** : All components are listed or exempted.

**Philippines inventory (PICCS)** : All components are listed or exempted.

## 16 . Other information

### Definition of Terms

ACGIH	American Conference of Governmental Industrial Hygienists
Ceiling	Maximum exposure limit defined by OSHA
CAS	Chemical Abstract Service
IARC	International Agency for Research on Cancer
NIOSH	National Institute for Occupational Safety and Health
NTP	National Toxicology Program
OSHA	Occupational Safety and Health Administration
PEL	Permissible Exposure Limit
REL	Recommended Exposure Limit
RTK	Right to Know
SARA	Superfund Amendments and Reauthorization Act
STEL	Short Term Exposure Limit

*Continued on next page*

## 16 . Other information

TLV	ACGIH Threshold Limit Value
TLV-C	ACGIH Threshold Limit Value, Ceiling
TRADE SECRET	Claimed as allowed under 29CFR§1910.1200
TSCA	Toxic Substances Control Act
PPE	Personal Protection Equipment
CEPA	Canadian Environmental Protection Act
DSL	Domestic Substance List
NDSL	Non-Domestic Substance List
NSN	New Substance Notification Rules

### Disclaimer

This Material Safety Data Sheet may be used to comply with OSHA's Hazard Communication Standard, 29CFR§1910.1200. This Material Safety Data Sheet may also be used to comply with the requirements of Workplace Hazardous Materials Information System, of the Controlled Products Regulations, under the Hazardous Products Act. Enthone furnishes the data contained herein in good faith without liability or legal responsibility for same whatsoever, and no warranty or guarantee, express or implied, is made with respect to such data; nor does Enthone grant permission, recommendation, or inducement to infringe any patent whether owned by Enthone or others. The data is offered solely for your information and consideration. Since conditions of use are beyond Enthone's control, user assumes all responsibility and risk.