INTI EVERSPRING

SAFETY DATA SHEET

PROPOXUR 98 TC

SDS No	:	SDS - 022B
Revision	:	3
Date of Issue	:	March 08th, 2019

SECTION 1 - IDENTIFICATION

Product Name	:	PROPOXUR 98 TC
Active Ingredients	:	Propoxur
Synonim	:	*2-isopropoxyphenyl methylcarbamate*
Recommended use and restrictions on use	:	Used for Active ingredients of Insecticide
Company Identification	:	PT Inti Everspring Indonesia Wisma UIC 4th floor, JL. Gatot Subroto Kav. 6-7 Jakarta 12930, Indonesia Tel. 62-21-57905245 ; Fax. 62-21-57905244
Emergency Telephone Number	:	62-254-5750064 / 62-254-5750049

SECTION 2 - HAZARDS IDENTIFICATION

GHS Classification :

Acute Toxicity (Oral)	Category 2
Acute Toxicity (Dermal)	Not Classified
Acute Toxicity (Inhalation)	Category 3
Serious Eye Damage/Eye Irritation	Category 2B
Germ Cell Mutagenicity	Category 2
Carcinogenicity	Category 2
Reproductive Toxicity	Category 2
Specific Target Organ Toxicity (Single Exposure)	Category 1
Specific Target Organ Toxicity (Single Exposure)	Category 3
Specific Target Organ Toxicity (Repeated Exposure)	Category 2
Acute Aquatic Toxicity	Category 1
Chronic Aquatic Toxicity	Category 1

GHS Labelling Symbol (s) :

Signal Word : Danger

Hazard statements

H300	Fatal if swallowed
H331	Toxic if inhaled
H320	Causes eye irritation
H341	Suspected of causing genetic defects
H351	Suspected of causing cancer
H361	Suspected of damaging fertility or the unborn child
H370	Causes damage to organs (nervous and circulatory system)
H336	May cause drowsiness or dizziness
H373	May cause damage to organs (nervous system) through prolonged or repeated exposure
H400	Very toxic to aquatic life

	H410	Very toxic to aquatic life with long lasting effects
Precautionary Statements	**Prevention**	
	P264	Wash thoroughly after handling
	P270	Do not eat, drink, or smoke when using this product
	P260	Do not breathe dust/fume/gas/mist/vapours/spray
	P271	Use only outdoors or in well ventilated area
	P201	Obtain special instructions before use
	P202	Do not handle until all safety precautions have been read and understood
	P280	Wear protective gloves/protective clothing/eye protection/face protection/hearing protection
	P273	Avoid release to the environment
Precautionary Statements	**Respons**	
	P301+P310	IF SWALLOWED: Immediately Call a POISON CENTER/doctor
	P321	Specific treatment (see on this label)
	P330	Rinse mouth
	P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing
	P311	Call a POISON CENTER/doctor
	P312	Call a POISON CENTER/doctor if you feel unwell
	P305+P351 +P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
	P337+P313	If eye irritation persist: Get medical advice/attention
	P308+P313	IF exposed or concerned : Get medical advice/attention
	P308+P311	IF exposed or concerned : call a POISON CENTER/doctor
	P314	Get medical advice/attention if you feel unwell
	P391	Collect spillage
Precautionary Statements	**Storage**	
	P405	Store locked up
	P403+P233	Store in welll ventilated place. Keep container tightly closed.
	Disposal	
	P501	Dispose of contents/container in accordance with local/ national/ international regulation
	Other Hazard	
	-	

SECTION 3 - COMPOSITION / INFORMATION ON INGREDIENTS

CHEMICAL NAME	CAS NO	CONCENTRATION (%)
2-isopropoxyphenyl methylcarbamate	114-26-1	98

SECTION 4 - FIRST- AID MEASURES

Eye : IF IN EYES, rinse cautiously with water for 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Skin	:	IF SPILT ON THE SKIN, remove contaminated clothing and wash affected areas of skin immediately. DO NOT Scrub the skin. Remove and wash contaminated clothing before re-use. Call a poison center/DOCTOR/ if you feel unwell.
Ingestion	:	IF SWALLOWED DO NOT induce vomiting. For advice, contact the National Poisons Centre or a doctor immediately.
Inhalation	:	IF INHALED, remove from exposure and have patient lie down and keep quiet. If patient is not breathing, start artificial respiration immediately. Never give anything by mouth to an unconscious person. Call a physician if necessary.

SECTION 5 - FIRE FIGHTING MEASURES

General Information	:	Firefighters must consider the nature of the product and use the poison face shields, full breathing apparatus and flame resistant clothing
Extinguishing Media	:	Foam, dry chemical, carbon dioxide, or water spray
Specific Hazard of Fire	:	Irritating and toxic gas

SECTION 6 - ACCIDENTAL RELEASE MEASURES

If container is ruptured or begins to leak, place in a well-ventilated area free of sparks and ignition sources.

Use Personal protective equipment as recommended in section 8.

Prevent product from entering drains or water courses. Shovel or sweep up spills. Never return to container for reuse. Scoop into bags or boxes using plastic or aluminium shovel. Pesticide that cannot be used according to label instructions must be disposed of according to all applicable Local, procedures.

SECTION 7 - HANDLING AND STORAGE

Handling	:	Do not handle until all safety precautions have been read and understood. Do not breathe dust, vapour or mist. This product causes mild irritation to eyes. Do not get in eyes. Wash thoroughly after handling. Wash clothing after use. Do not store or consume food, drink or tobacco in areas where they may become contaminated with this material. This product must be under the control of an approved handler at all times. This product must be tracked.
Storage	:	Do not store near sources of sparks, flame or heat. Keep under lock and keep out of reach of unauthorised persons, children and animals. Store in its original labeled container in isolated, dry, cool and well-ventilated area. Not to be stored next to foodstuffs and water supplies. Local regulations should be complied with.

SECTION 8 - EXPOSURE CONTROL / PERSONAL PROTECTION

Engineering control	:	Use only with adequate ventilation. Apply grounding system for power tools to prevent static electric charge.
Threshold Limit Value (TLV)	:	0.5 mg/m^3 – 8 h (TLV-TWA ACGIH, 2017)

Personal Protective Equipment

Eye Protection	:	Safety glasses or face shield
Gloves	:	Chemical resistant gloves
Clothing Protection	:	Wear clothing with long sleeve
Respiratory Protection	:	Mask, in case of inadequate ventilation wear respiratory protection that recommended by NIOSH

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

1	Physical Appearance	:	Crystalline Powder
2	Color	:	White
3	Odor	:	Not available
4	Odor Threshold	:	Not available

5	pH (1%)	:	4-7
6	Melting Point	:	>86.3 ^{0}C
7	Freezing Point	:	Not available
8	Boiling Point	:	Not available
9	Flash Point	:	Not available
10	The rate of Evaporation	:	Not available
11	Flammability	:	Not available
12	Lower Explosive Limit (LEL)	:	Not available
13	Vapour Pressure	:	1,74 x 10^{-2} mPa (20^{0}C)
14	Molecular weight	:	Not available
15	Decomposition temperature	:	Not available
16	Autoignition temperature	:	Not available
17	Viscocity	:	Not available
18	Bulk Density	:	Not available
19	Density relative	:	Not available
20	Solubility in water	:	174 mg/l (distillated water 20 ^{0}C) in water
21	Koefisien partition : n-octanol/water	:	Not available

SECTION 10 - STABILITY AND REACTIVITY

Reactivity	:	None known
Stability	:	Stable
Hazardous Reaction under Specific Condition	:	Not available
Condition to Avoid	:	Open flames and very hot surfaces can cause thermal decomposition
Incompatible material to avoid	:	Avoid caustics, amines, alkanolamines, Aldehydes, strong oxidizing agents and chlorinated compounds.
Hazardous Product of Decomposition	:	Carbon dioxide, carbon monoxide,and methyl amine
Hazardous Polymerization	:	Will not occur

SECTION 11 - TOXICOLOGICAL INFORMATION

Acute Toxicity (oral) LD_{50}	:	50 mg/kg for male and female rats (Pesticide Manual, 2009) Single oral dose acute toxicity studies using rats, decreases in cholinesterase activity in the plasma, erythrocytes and brain, convulsions, muscle spasm, dyspnea and salivation were observed (NITE, 2016).
Acute Toxicity (dermal) LD_{50}	:	>5000 mg/kg for male and female rats (Pesticide Manual, 2009)
Acute Toxicity (inhalation) LC_{50}	:	0.654 mg/l (aerosol) for rat / 4 hour (Pesticide Manual, 2009)
Subchronic toxicity (90 days) - Technical Material	:	16-week repeated dose toxicity study using rats by dietary administration, histopathological changes in the liver and depression of cholinesterase activity in the brain are reported at 1,000 ppm converted guidance value: 50 mg/kg/day (NITE, 2016)
Chronic Toxicity (2 years) -Technical Material	:	In a 2-year repeated dose toxicity study using rats by dietary administration, hyperplasia of the urinary bladder is reported at 1,000 ppm converted guidance value: 50 mg/kg/day (NITE,

		2016).
Mutagenicity in germ cells	:	Multiple positive results of chromosome damage in mouse bone marrow/peripheral blood have been reported (NITE, 2016).
Reproductive Toxicity	:	Study of high doses, decreases in the number of implantation sites/dam and the number of pups/dam in F1 females were observed at 2,500 ppm (228 - 239 mg/kg/day), where a decrease in red blood cell acetyl cholinesterase activity (males: at 100 ppm or above), body weight reductions (at 500 ppm or above) and urothelial hyperplasia were observed in F0 and F1 parental animals (NITE, 2016)
Carcinogenicity	:	ACGIH classified this substance as A3. In a one-year carcinogenicity study using rats dosed by feeding, there was an increase in the incidence of urinary bladder papillomas and carcinomas (NITE, 2016)
Eye Irritation	:	Slightly irritant (Pesticide Manual, 2009)
Skin Irritation	:	Not irritant (Pesticide Manual, 2009)

SECTION 12 - ECOLOGICAL INFORMATION

Acute Toxicity

Fish	- *Bluegill sunfish* (LC_{50} 96 h)	:	6.2 – 6.6 mg/l (Pesticide Manual, 2009)
Daphnia	- *Daphnia Magna* (LC_{50} 96 h)	:	0.15 mg/l (Pesticide Manual, 2009)
Bird	- *Mallard Duck* (LC_{50}) 5 days	:	5 g/kg (Pesticide Manual, 2009)
Bio accumulation		:	Not available
Persistence and degradation by environment		:	Reliable chronic toxicity data were not obtained. Due to being not rapidly degradable (a degradation rate by BOD (NH3): 1%, 9%, 6%.
Soil Mobility		:	Mobility of the Propoxur in the soil is relatively high. The compound readily degradable in different soils.
Others adverse effect		:	Highly toxic for bees

SECTION 13 - DISPOSAL CONSIDERATIONS

Disposal, storage or cleaning equipment should not be used to contaminate food, animal feed or water. Read extermination instructions listed on the product label. Products are very toxic to aquatic life with long lasting effects. Do not contaminate domestic water or other water sources.

Disposal Containers / Packaging: Destroy empty container and dispose of / destroyed in accordance with local regulations. Never use second-hand containers for any purpose.

SECTION 14 - TRANSPORT INFORMATION

DOT (US)

Proper shipping name	:	CARBAMATE PESTICIDE, SOLID, TOXIC (Propoxur Technical)
Class Danger Transport	:	6.1
UN Number	:	UN 2757
Packing Group	:	II

IMDG (INTERNATIONAL MARITIME DANGEROUS GOODS)

UN Number	:	UN 2757
Class and Packing group	:	6.1 and II
Proper shipping name	:	CARBAMATE PESTICIDE, SOLID, TOXIC (Propoxur Technical)

Marine Pollutant	:	Yes (Propoxur)

IATA (INTERNATIONAL AIR TRANSPORT ASSOCIATION)

UN Number	:	UN 2757
Class and Packing group	:	6.1 and II
Proper shipping name	:	CARBAMATE PESTICIDE, SOLID, TOXIC (Propoxur Technical)

SECTION 15 - REGULATORY INFORMATION

Safety Data Sheet / Safety Data Sheet meets the regulations :

1. Regulation of the Minister of Industry of the Republic of Indonesian number 23 / M-INDPER / 4/2013
2. Minister of Indonesian Labour Decree No. Kep. 187/MEN/1999 about Hazardous Chemicals Control in the Workplace
3. Building Blocks seventh revised edition of the GHS

SECTION 16 - OTHER INFORMATION

The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, expressed or implied, is made with respect to the information contained herein.

Reference:

1. Building Blocks seventh revised edition of the GHS
2. Regulation of the Minister of Industry of the Republic of Indonesian number 23 / M-INDPER / 4/2013
3. Manual Pesticide fifteenth Edition, C D S Tomlin, 2009, BCPC
4. National Institute of Technology and Evaluation Chemical Risk Information Platform (NITECHRIP). Propoxur. Japan, 2016
5. American Conference of Governmental Industrial Hygienist (ACGIH). Table of Exposure Limit for Chemical and Biological Substances. 2017