1. PRODUCT AND COMPANY IDENTIFICATION

Product Name	: TOA POLYURETHANE SEALANT
Product Use	: Mixture of emulsion based on Polyurethane, filler and additives.
Company Name	: TOA PAINT (THAILAND) PUBLIC COMPANY LIMITED
Address	: 31/2 Moo 3, Bangna-Trad Road, Bang Sao Thong Sub-District, Bang Sao Thong District, Samut Prakarn Province 10570, Thailand
Telephone No.	: +662 335 5777
Fax No.	: +662 312 8927
Emergency Call	: +662 335 5999

2. HAZARDS IDENTIFICATION

[GHS Classification]		Hazard Category
Physical Hazard	: -	-
Health Hazard	: Respiratory sensitization	Category 1
	: Skin sensitization	Category 1
	: Carcinogenicity	Category 1A

Pictograms

Signal word DANGER

Hazard statements

H317 May cause an allergic skin reaction.
H334: May cause allergy or asthma symptoms or breathing difficulties inhaled.
H350: May cause cancer.

Precautionary Statements

Prevention : P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P261 Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray.
P272 Contaminated work clothing should not be allowed out of the workplace.
P280 Wear protective gloves.
P281 Use personal protective equipment as required.
P285 In case of inadequate ventilation wear respiratory protection.

Response : P302+P352 IF ON SKIN: Wash with plenty of soap and water.
P304+P341 IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.
P308+P313 IF exposed or concerned: Get medical advic attention.
P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
P363 Wash contaminated clothing before reuse.

Storage : P405 Store locked up.Disposal:
P501 Dispose of contents/ container to an approved waste
P501 Dispose of contents/ container to an approved waste disposal plant.

Warning : Reports have associated repeated and prolonged exposure to some of the chemicals in this product with permanent brain, liver, kidney and nervous system damage. International misuse by deliberate concentration and inhalation of vapors may be harmful or fatal.

3. COMPOSITION / INFORMATION ON INGREDIENTS

No.	Component / Chemical Name	CAS Number	EC Number	%
1	PU prepolymer	68092-58-0	-	45
2	DIDP	26761-40-0	-	25
3	PVC resin	9002-86-2	-	10
4	Clacium carbonate	471-34-1	-	19.5

4. FIRST AID MEASURES

After Eye Contact : Flush eyes with water for at least 15 minutes. If irritation develops, consult a physician.

After Skin Contact : Remove contaminated clothing and shoes. Wash affected area with soap and water. If irritation develops, consult a physician. Wash contaminated clothing separately before reuse.

After Ingestion : Do not induce vomiting. Seek medical attention. Do not give any thing by mouth if the person is drowsy, unconscious, or has no gag reflex. Ingestion creates a high risk of aspiration and subsequent chemical pneumonitis. However, if more than one mililiter per kilogram of body weight of the hydrocarbon was ingested, careful emesis or lavage is recommended because of the toxic effects produced by the hydrocarbon.

After Inhalation : Remove to fresh air. If symptoms develop, seek immediate medical attention. If not breathing, give artificial respiration, preferably mouth to mouth.

5. FIRE – FIGHTING MEASURES

Flashpoint : > 83deg.C Test method: setaflash closed cup

Explosive limits : Not established

Auto ignition temperature : Not established

Extinguishing media

Small fires : Use agents approved for class B hazards (e.g. dry chemical, carbon dioxide, halon) or water fog.

Large fires : Use water spray, fog, or alcohol foam.

Special fire fighting procedures : Fire fighters and others who may be exposed to the products of combustion should be equipped with NIOSH approved positive pressure self-contained breathing apparatus (SCBA) and full protective clothing.

Unusual fire and explosion hazards : When exposed to flames or high temperatures encountered during fire conditions, sealed containers may rupture because of the build up of internal pressure. Cool containers with water.

6. ACCIDENTAL RELEASE MEASURES

Response to spills : Shovel or scoop spilled product and place in closed containers for further handling and disposal.

Precautions: : If the airborne concentration exceeds established exposure limits (TLV or PEL), or if high airborne concentrations can occur, evacuate employees and ventilate the area. A supplied air respirator or self-contained breathing apparatus (SCBA) should be used for entry into enclosed spaces, or in areas with in adequate ventilation.

7. HANDLING AND STORAGE

Recommended storage practice and conditions	: Store in cool, dry, well ventilated area. Do not store above: 95 °F, 35 °C
Container use procedures	: No special precautions are needed. Follow good manufacturing and handling practices.
Empty container precautions	: This container can be hazardous when empty, because it can retain product residues. Therefore, do not reuse container for food, clothing, or products for human or animal consumption or where skin contact may occur

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Eye protection	: Wear chemical splash goggles. An eye wash facility should be readily available.
Skin Protection	: Wear protective clothing and appropriate impervious gloves. Because a variety of protective gloves exist, always consult glove manufacturer to determine the proper type for specific operation.
Respiratory protection	: Avoid breathing vapor and/or mist. When established airborne exposure limits are surpassed (see airborne exposure limits in this section), wear NIOSH/MSHA approved equipment. Determine the appropriate type equipment for specific application by consulting the respirator manufacturer. Observe the respirator use limitations specified by NIOSH/MSHA or the manufacturer. High airborne concentrations may necessitate the use of self-contained breathing apparatus (SCBA) or a supplied air respirator. In addition, respiratory protection programs must be in compliance with 29 CFR1910.134.
Ventilation	: Maintain airborne concentration below the established exposure limits (See airborne exposure limits in this section). General (dilution) ventilation may be acceptable. However, local exhaust ventilation is recommended when vapors, mists, or dusts can be released.
Personal hygiene	: Wash thoroughly after handling, especially before eating, drinking, smoking, or using restroom facilities. Wash contaminated goggles, faceshield, and gloves. Professionally launder contaminated clothing. Discard contaminated shoes.

9. PHYSICAL & CHEMICAL PROPERTIES

% Non volatile (by weight)	: 98
pH	: Not Applicable
Vapor density (air=1)	: Not Established
Solubility in water	: Insoluble
Evaporation rate	: Not Established
Vapor pressure (mmHg@25 °C)	: Not Established
Specific gravity (Water=1)	: > 1
Approximate boiling point	: Not Established

Note : The physical data presented above are typical values and should not be construed as a specification.

10. STABILITY AND REACTIVITY

Stable under normal conditions of storage and use	: yes
Materials to avoid	: Amines, Oxidizing agents, Water, Acids, Strong bases.
Hazardous polymerization	: Hazardous polymerization will not occur.

11. TOXICOLOGICAL INFORMATION

Cassification according the GHS

Acute toxicity

Product

Acute oral toxicity	: No data available
Acute inhalation toxicity	: No data available
Acute dermal toxicity	: No data available

Ingredients

Aromatic polyisocyanate :	: Acute oral toxicity : LD50 Oral rat : >5,000 mg/kg
Carbon black :	: Acute oral toxicity : LD50 Oral rat : >8,000 mg/kg
4,4㎡methylenediphenyl diisocyanate :	: Acute inhalation toxicity : Acute toxicity estimate : 1.5 mg/l Test atmosphere : dust/mist Method : Expert judgment
Skin corrosion/irritation	: No data available
Serious eye damage/eye irritation	: No data available
Respiratory or skin sensitiza	: May cause an allergic skin reaction. May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Germ cell mutagenicity	
Mutagenicity	: No data available
Carcinogenicity	
Carcinogenicity	: May cause cancer.
IARC	: Group 2B : Possibly carcinogenic to humans Titaniumdioxxide 13463-67-7 Ethylbenzene 100-41-4 Carbon black 1333-86-4 : Group 1 : Carcinogenic to humans Quartz (SiO_2) 14808-60-7
NTP	: Known to be human carcinogen Quartz (SiO_2) 14808-60-7
Reproductive Toxicity/Fertility	
Reproductive toxicity	: No data available
Reproductive Toxicity/Development/	
Teratogenicity	: No data available
STOT single exposure	: No data available
STOT repeated exposure	: No data available Reports have associated repeated and prolonged exposure to some of the chemicals in this product with permanent brain, liver, kidney and nervous system damage. Intentional misure by deliberate concentration and inhalation of vapors may be harmful or fatal. Once sensitized, a severe allergic reaction may occer when subsequently exposed to very low levels.
Aspiration toxicity	: No data available

12. ECOLOGICAL INFORMATION

Hazardous to the aquatic environmener	: No data avaliable
Hazardous to the ozone layer	: No data avaliable

13. DISPOSAL CONSIDERATIONS

Disposal methods:	: If discarded in its original unused form, this product should be managed (stored/ treated/disposed/ etc.) at an authorized facility, in compliance with all applicable federal, state, and local requirements. Be sure to contact appropriate government environmental agencies if further disposal guidance is required.

14. TRANSPORT INFORMATION

DOT shipping name	: Non-regulated
DOT label	: Not applicable
DOT identification No.	: Not applicable
Supplemental section 12 information	
HM 181, IATA/ICAO, IMO-non-regulated	

15. REGULATORY INFORMATION

Thai regulation	: HAZARDOUS SUBSTANCE ACT, B.E. 2535 (1992) : Notification of Ministry of Industry Subject : Hazard Classification and 2555 (2012) Communication System of Hazardous Substances B.E.

16. OTHER INFORMATION

: The information in this SDS is based on the present state of our knowledge and on current laws.
The product is not to be used for purposes other than those specified under section 1 without first obtaining written handling instructions.
It is always the responsibility of the user to take all necessary steps to fulfill the demands set out in the local rules and legislation.
The information in this SDS is meant to be a description of the safety requirements for our product. It is not to be considered a guarantee of the product's properties.