1. Product and supplier data

2. Hazard recognitio	n data
Name of manufacturer or supplier	
Product category	
Product name/no.	

2. Hazard recognition data

Product hazard	Fourth class of flammable liquid, fifth class of acute toxic substance (swallowing),			
classification	third class of corrosive/irritating to the skin, 2B class of substance with severe			
	injury/irritation to the eye, first class of skin allergic substance, second class of			
	inhaling hazardous substance.			
Designation	tion			
content				
Symbol				
Warning word Hazard warning message Hazard prevention	Exclamation mark, hazard to health. Warning Combustible liquid, swallowing might be hazardous, irritation to the eye might be caused, mild irritation to the skin might be caused, allergy to the skin might be caused, might be hazardous if swallowed and enters the respiratory tract. Put the container in well ventilated place. Keep away from fire and smoking is prohibited. Prevent direct contact with eye and skin.			
action	Please wear appropriate personal protection tool. If you feel not good, please ask for			
	medical support.			
Other hazard				

*Please refer to the material safety data sheet as provided by the raw material supplier and the data "Hazard data information database of hazardous substance" as provided by Council of Labor Affairs.

3. Composition recognition data

Product composition	Wt %	CAS No.	
Epoxy Resin	40-50	Proprietary	
Epoxy Hardener	30-40	Proprietary	
Diluent	10-20	Proprietary	
Titanium Oxide	1-5	13463-67-7	
Thixotropic Agent	0-2	Proprietary	

4. First aid action

First aid method for	Inhaling: Please bring the poisoned person away from the work site and			
different exposure	move the person to quiet, cool and well ventilated place.			
paths	Skin contact: Please use soap water to clean the contaminated area and			
	clothes. If any stinging pain occurs, please send the patient to the doctor			
	for medical help immediately.			
	Eye contact: Please use warm water to wash the eye for at least 15			
	minutes and then use sterilized and dry gauze on the eye gently, then			
	send the patient to an eye doctor for first aid.			
	· Swallowing: Wash the mouth first, then drink massive amount of water for			
	dilution, then perform vomiting and send the patient to a doctor immediately.			
The most important	Vomiting and stinging pain.			
symptom and				
hazardous effect				
Protection to the first	Please wear non-permeable gloves and avoid contacting the contaminated			
aid personnel	substance.			
Hint to the doctor	If dizziness, difficulty of breathing or spasm occurs, please do not do vomiting			
	or give water to the patient.			

or give water to the patient.			
5. Fire extinguishing action			
Applicable fire extinguisher	CO ₂ , foaming or dry powder chemical fire extinguisher.		
Special hazard that might be encountered during the fire fighting period	When resin is heated and gets deteriorated and decomposed, it might generate CO, acetone, aldehyde, ammonia and other organic compounds.		
Special fire-extinguishing procedures	Move the bucket with resin away immediately to safe area.		
Special protection tool for fire-fighting personnel	Fire-fighting personnel should wear air ventilator, fire-fighting suit and protection gloves.		

6. Leaking handling procedures

Personal	Please wear appropriate personal protection tool. But the ground might be			
precautions	slippery after cleaning, please wipe it clean and avoid falling down.			
Environmental	Perform air circulation on that area. Extinguish or remove all the fire sources.			
precautions	Avoid the entrance of leaked substance into the sewage system to contaminate			
	the water source. That is, it needs to be completely recycled.			
Cleaning method	Avoid the continuous occurrence of leaking first. Then take the leaked substance			
	in a container, then recycle it and send it to qualified and professional supplier for			
	incineration or hygiene landfill treatment.			

7. Safe handling and storage method

Handli	Please use personal protection tool and handle the container with resin carefully. Please avoid				
ng	severe collision, which might cause container breaking and lead to the leaking of the resin.				
	Please install emergency water showering equipment so as to cope with the situation of				
	contacting skin or eye. Please keep away from light, heat and non-compatible substances.				
	Please keep the environment in well circulation.				
Storag	Store it at a cool place away from fire source. Please avoid direct sunshine exposure, rain and				
е	severe temperature difference.				
	After the can is opened, please avoid sunshine exposure. Please keep the air well circulated at				
	operation site. Please close the cover if it is not in use.				

8. Exposure prevention action

Engineering control: Provide air ventilation and circulation equipment and keep the operation at good air circulation. It is strongly prohibited to smoke or eat at the work site, please keep the work site clean.

0)

Control parameters:

Product	Time weighted	Short time weighted	Maximum	Biological
composition and	average allowable	average allowable	allowable	indicator
name	concentration	concentration STEL	concentration	BEIs
	TWA/8hr	OTEL	CEILING	
Personal	Breathing protection: Please use face mask or gas mask.			
protection tool:	Hand protection: Please use latex gloves.			
	Eye protection: Use safety goggles.			
	• Skin and body protection: Please wear clothes with long sleeves during the work			
	and take off contaminated clothes as soon as possible after work. The clothes			
	can be worn again after cleaning.			
Hygiene action:	Before taking foods, please wash hands and face with soap. Keep your body			
	healthy through daily exercise.			
	Take nutritious product with vitamin and mineral. Take periodical health check.			

9. Physical and chemical property

Appearance (Substance state and	Light yellow sticky liquid	
Color)		
Odor	Mild	
PH value		
Flammability (Solid and gas)		
Decomposition temperature		
Self-ignition temperature		

Vapor pressure	< 0.3mmHg (20 ℃)		
Specific gravity	1.18 (Water=1)		
Octanol/ water distribution coefficient			
(log Kow)			
Boiling point/boiling point scope	>250°C		
Flash point/test method	> 88°C / Open cup		
Explosion Limit	Upper Limit (UEL) :		
	Lower Limit (LEL) :		
Vapor density	> 9.5 (Air =1)		
Solubility	<1%		
Evaporation rate			
Translatic	Er cop.		
10. Safety and reaction prop	erty		
Stability It is stable	le when normal operation and storage procedure is followed		

10. Safety and reaction property

Stability 3	It is stable when normal operation and storage procedure is followed.		
Possible hazardous reaction	Possible chemical polymerization reaction for long light and heat		
under special situation	exposure.		
Situation that should be	Please keep way from flammable and combustible substance, heat,		
avoided	spark or flame.		
Substance that should be	Strong oxidant, free radical initiator, peroxide and alkaline substance.		
avoided	Strong oxidant, thee fadical initiator, peroxide and alkaline substance.		
Hazardous decomposition	When it is heated, the deterioration and decomposition reaction might		
substance	generate CO, Acetone, aldehyde and other possible organic		
	compounds.		

11. Toxicity data

· · · · · · · · · · · · · · · ·					
aths to enter human body. Inhaling, skin contact, swallowing and eye contact.					
Acute toxicity	Inhaling: Irritate nose and throat.				
	Skin: It causes light irritation.				
	Eye: Vapor will cause irritation.				
	Swallowing: It might cause headache, nausea, dizziness and				
	tiredness.				
Name of the product	Concentration Wt %	LD ₅₀ Absorption path	LC ₅₀ Absorption path of		
composition		of animal under test	animal under test		
Epoxy Resin	40-50				
Epoxy Hardener	30-40				
Diluent	10-20				
Titanium Oxide	1-5				

Thixotropic Agent	0-2		
Partial effect	When the skin contac caused.	ts the liquid for a long	g term, stinging pain will be
Sensitization			
Chronic toxicity or long ter toxicity	m	.*	
Special effect			
12. Ecological data			

12. Ecological data

12. Ecological data	and the second
Possible influence to	the Avoid the entrance of the leaked substance to the sewage system to
environment/Environmer	tal contaminate the water source or soil. Resin can be disposed only afte
distribution	it is polymerized and cured.

13. Disposal method vation

Disposal method	Waste can be sent to government approved waste treatment center
	for further processing.

14. Transportation information

International transportation	 CFR classification: Not limited.
regulations	 IATA/ICAO classification: Not limited (International Shipping
	Organization).
	 IMDG classification: Not limited (International Shipping
	Organization).
United Nation Number	
Domestic transportation	During the transportation, sealed container is needed to avoid
regulation	leaking.
Special transportation method	
and precautions	

15. Regulation information

Applicable regulation	Road traffic safety regulation.Labor safety and hygiene facility regulation.
	 Designation and common sense regulations of hazardou substance and harmful substance.
	 Allowable concentration standard of harmful substance in the air of labor's operation environment.
	 Storage, disposal and handling method and facility standard of industrial waste.
	Installation standard and safety management method of publ
	hazardous substance and flammable and high pressure gas.

16. Other information

Preparation enterprise	
Preparation department	Technical Department
Preparation date	12 12
Elegant Trans	Service Sample ation Service MARINE Pation Service MARINE Anot CORN