SAFETY DATA SHEET

ISSUED DATE :	MAY 21, 2014	REVISION :	04	REVISION DATE:	Jun. 01, 2018

1. Chemical product and company identification

Product name : **OLESTER QM532**

Company identification **THAI MITSUI SPECIALTY CHEMICALS CO.,LTD.**

Office address : 12th Fl., Sathorn Thani Bldg. 2, No. 92/28-29 North Sathorn Rd., Silom, Bangrak, Bangkok 10500 Thailand. Tel. :+662-2368898 Fax. : +662-2376834, +662-2376835

Factory address : Wellgrow Industrial Estate 89 Moo 5 , Bangna-Trad Road k.m.36, Bangpakong,Chachoengsao 24180 Thailand Tel: +6638-570120 Fax : +6638-570119

Emergency contact : SHE&Q division , Tel: +6638-570120 Fax : +6638-570119

2. Hazard identification : GHS classification of substance or mixture

Physical hazards :	
Flammable liquids	: Category 3

Health hazards:	
Acute toxicity (oral)	: Category 5
Acute toxicity (Inhalation:vapour)	: Category 3
Acute toxicity (Inhalation:dust,mist)	: Category 3
Skin corrosion / irritation	: Category 2
Serious eye damage / eye irritation	: Category 2A
Carcinogenicity	: Category 2
Reproductive toxicity	: Category 1B
Specific target organs toxicity (single exposure)	: Category 1 (Respiratory system, Liver, Central nervous system, Kidney)
	Category 3 (Narcotic effects)
Specific target organs toxicity (repeated exposure)	: Category 1 (Respiratory system, Central nervous system, Auditory organ)

Environmental hazards :	
Hazardous to the aquatic environment (Acute)	: Category 2
Hazardous to the aquatic environment (Chronic)	: Category 3

Other hazard than mentioned above are Not applicable or Classification not possible.
Although none of hazard statements are applicable, this product should be handled with following precautions.

GHS label elements :

Pictogram

Signal word : **Danger**

Hazard statements :

- Flammable liquid and vapour.
- May be harmful if swallowed.
- Toxic if inhaled.
- Cause skin irritation.
- Cause serious eye irritation.
- Suspected of causing cancer.
- May damage fertility or the unborn child.
- May cause damage to organ.
- Toxic to aquatic life.
- Harmful to aquatic life with long lasting effect.

Precaution statements :

Prevention :
- Avoid breathing dust/fume/gas/mist/vapours/spray.
- Wear suitable protective clothing, gloves and eye/face protection.
- Take precautionary measures against static discharges.
- Avoid exposure - obtain special instructions before use.
- Avoid contact with eyes.
- Avoid release to the environment.

Storage:
- Keep locked up and out of the reach of children.
- Keep container tightly closed
- Keep container under roof and in a well-ventilated place.
- Keep away from sources of ignition - No smoking.
- Keep away from food, drink and animal feeding stuffs.

Response:
- In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
- If swallowed, seek medical advice immediately and show this container or label.
- If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing.
- After contact with skin, wash immediately with plenty of water.
- In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
- In case of fire, use dry chemical , water spray , foam.

Disposal :
Dispose of contents/container to in accordance with local/regional/national/international regulation.

3. Composition / information on ingredients

Chemical name	%	CAS No.	EC No.
Acrylic Resin	65 - 69	-	-
Xylene	16 - 20	1330-20-7	215-535-7
Ethylbenzene	4 - 6	100-41-4	202-849-4
n-Butyl Acetate	5 - 9	123-86-4	204-658-1
PMAc : Propylene glycol monomethyl ethyl acetate	2 - 4	108-65-6	203-603-9

4. First aid measure

4.1 Inhalation :

Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Keep the affected person warm and at rest. Get medical attention immediately.

4.2 Eye contact :

Immediately flush eyes with plenty of water for several minutes and get medical attention. Part eyelids with fingers to assure complete flushing. Check for and remove contact lenses if easily possible.

4.3 Skin contact :

Immediately remove contaminated clothing and shoes. Flush skin with large amounts of water, clean off with soap and water. Get medical attention if symptoms develop.

4.4 Ingestion :

Do not induce vomiting. Rinse mouth with water. Never give anything by mouth to an unconscious person. Keep the affected person warm and at rest. Get medical attention immediately.

4.5 Most important symptoms / effects, acute and delayed :

Not available

5. Fire fighting measures :

Extinguishing media :

Initial fire: dry chemical, CO2, dry sand.

Large fire: water fog, foam.

Special hazards :

Flammable liquid. Vapors may cause flash fire.

Fire fighting instructions :

- Keep unnecessary and unprotected personnel away.
- Shut off supply if possible.
- Remove containers to safe place if possible.
- Keep surrounding areas cool by spraying water. Fight fire from an upwind position.

Fire fighting equipment :

- Respiratory and eye protection required for fire-fighting personnel.
- Full protective equipment and self-contained breathing apparatus (SCBA) should be used for all indoor fires and any significant outdoor fires.

Hazardous combustion products :

- Carbon oxides, Nitrogen oxides.

6. Accidental release measures :

Personal precautions, Protective equipment and emergency procedures :

- Evacuate immediate area. Warn personnel of fire, explosion and health hazard.
- Remove all sources of ignition. Keep unnecessary and unprotected personnel away.
- Wear appropriate personal protective equipment as specified in Section 8.
- Keep upwind, evacuate downwind.

Environmental Precautions :

Do not let this chemical enter the environment. Do not flush into sewer, river or any body of water.

Containment / clean up methods :

- Absorb or cover with dry earth, sand or other non-combustible material and transfer to sealable containers.
- Large spills: Dike far ahead of liquid spill for later disposal.
- Use non-sparking tools and equipment.
- Stop leak if possible without personal risk.
- Avoid run off to sewers or waterways.

7. Handling and storage

Handling

- Technical measures :

Use only in well-ventilated area. Keep away from heat, sparks, and flame. Use explosion-proof electrical equipment. Take precautions against build-up ofelectrostatic charges. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material.This material can form explosive mixture with air. Beware of vapor leaks. Avoid contact with eyes, skin, and clothing. Avoid ingestion and inhalation.Wear appropriate personal protective equipment. Provide hand and eye wash station near work area.Wash thoroughly after handling.

- Ventilation :

Use only under local exhaust or general ventilation.

- Safe handling advice :

- Do not handle until all safety precautions have been read and understood.
- Take precautions against build-up of electrostatic charges.
- Use explosion proof (ventilating, lighting and material handling) equipments.
- Avoid vapour formation.
- Do not fall, drop, shock or drag the container.
- Avoid contact with eye, skin or clothing.
- Avoid inhalation and ingestion.
- Use only in well-ventilated area or outdoors.
- Prevent leak and spill.

Storage :

- Storage conditions :

- Protect from direct sunlight.
- Store in dark and well-ventilated area.
- Keep away from heat, flame, and all sources of ignition.
- Ground and bond containers and equipment to prevent build-up of electrostatic charges.
- Keep container tightly closed. Keep away from strong oxidizers.
- Store locked up. Store in a segregated and approved area.

- Packaging material :

Use UN approved containers or containers approved by local and national authorities. Stainless steel, or polyethylene, FRP and other plastics.

8. Exposure controls / Personal protection :

Exposure limits :

Xylene	ACGIH-TLV	100 ppm (TWA)	150 ppm (STEL)
	OSHA-PEL	100 ppm (TWA)	
n-Butyl Acetate	ACGIH-TLV	150 ppm (TWA)	200 ppm (Ceiling)

Engineering controls :

Provide general ventilation. Use closed system or local exhaust ventilation. Provide safety shower and eye wash station near working area.

Personal protective equipment :

- Respiratory protection : Chemical cartridge respirator with organic vapor cartridge.
- Hand protection : Chemical protective gloves.
- Eye protection : Safety glasses, goggles, face shield.
- Skin and body protection : Safety helmet, protective clothing, safety boots, apron or coveralls to prevent skin contact.

9. Physical and chemical properties :

Physical state	: Liquid	**Flash point**	: 29 ^{0}C (Closed cup)
Appearance	: Clear, viscous pale-yellow	**Autoignition temperature**	: Not available
Odor	: Organic solvent odor	**Flammable limits**	: Not available
Odor threshold	: Not available	**Vapor pressure**	: Not available
pH	: Not available	**Specific gravity**	: Not available
Boiling point	: 126 ^{0}C (as n-Butyl Acetate)	**Solubility**	: Insoluble in water, Soluble in organic solvent.
Melting point	: Not available	**Log pow**	: Not available

10. Stability and reactivity

Stability : Stable at room temperature for normal storage and handling.
Hazardous reactions : Polymerization will not occur.
Material to avoid : Not available
Conditions to avoid : Heat, flame, and ignition source.
Hazardous decomposition products : Carbon oxides in fire.

11. Toxicological information

Acute toxicity

Oral	:	Xylene	: Rat	LD50 = 3500 mg/kg.
		Ethylbenzene	: Rat	LD50 = 3500 mg/kg.
		n-Butyl Acetate	: Rat	LD50 = 14130 mg/kg,
Inhalation	:	Xylene	: Rat	LC50 = 6700 mg/L.
		Ethylbenzene	: Rat	LC50 = 17.20 mg/L.
		n-Butyl Acetate	: Rat	LC50 = 0.74 mg/L.
Skin	:	Xylene	: Rabbit	LD50 = >4350 mg/kg.
		Ethylbenzene	: Rabbit	LD50 = 15400 mg/kg.
		n-Butyl Acetate	: Rabbit	LD50 = >17600 mg/kg,

Skin corrosion / irritation :

This chemical contains one or more raw materials with make corrosion.

Serious eye damage / eye irritation :

This chemical contains one or more raw materials which make serious eye damage.

Respiratory sensitization :

Not available.

Germ cell mutagenicity :

Not available.

Carcinogenicity :

This chemical contains one or more raw materials that may cause cancer.

Reproductive toxicity :

This chemical contains one or more raw materials that may cause reproductive defect.

Specific target organ toxicity :

Single exposure : May cause damage to organs.

Repeated exposure : May cause damage to organs.

Aspiration hazard :

Not available.

12. Ecological information

Hazardous to the aquatic environment (Acute) :

Toxic to aquatic life.

n-Butyl Acetate : Fish(Fathead minnow) 96hrs. LC50 = 18 mg/l

Hazardous to the aquatic environment (Chronic) :

Harmful to aquatic life with long lasting effects.

Hazardous to the ozone layer :

All component in this chemical are not listed in Annexes to the Montreal Protocol.

13. Disposal considerations

Waste from residue :

Whatever cannot be saved for recovery may be burned in an approved incinerator or disposed in approved waste facility. Ensure compliance with local, state and federal regulations.

Contaminated packaging :

Empty container completely before disposed.

14. Transport information :

Land transport

UN number	:	1866
Hazard class	:	3
Hazard label	:	3 (Flammable liquid)
Packing group	:	III
Proper shipping name	:	Resin solution, Flammable

Sea transport (IMDG)

UN number	:	1866
Hazard class	:	3
Hazard label	:	3 (Flammable liquid)
Packing group	:	III
Marine pollutant	:	No
Proper shipping name	:	Resin solution, Flammable

Air transport (IATA)

UN number	:	1866
Hazard class	:	3
Hazard label	:	3 (Flammable liquid)
Packing group	:	III
Proper shipping name	:	Resin solution, Flammable

15. Regulatory information

United state :

This product is hazardous under the criteria of Federal OSHA Hazard Communication Standard 29 CFR 1910.1200.

TSCA :

All components of this product are listed on the TSCA Inventory.

CERCLA Reportable quantity :

Xylene	100lbs	(45.36 kg)
n-Butyl Acetate	5000lbs	(2268 kg)

European union :

All component of this product are listed on EINECS or exempt from EINECS registration.

Labelling according to EC directive : Hazard symbols :

16. Other information

To the best of our knowledge, the information contained herein accurate. However, we cannot assume any liability whatever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards which exist.

Definition :

Classification not possible : Due data insufficient to classify hazard as GHS criteria.

Not applicatble : Physical property and physical appearance not on GHS definition.

Not classified : There are / is sufficient information(s) avilable to classify but the substance is least to hazardous level of GHS category.