SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product name : ELPAC THB-170N

Chemical description : Photosensitizers and resin solution.

Product code : S570141

Contains : TMPTA; Acrylates

1.2. Relevant identified uses of the substance or mixture and uses advised against

Intended use / Generic name : Photoresist

Main use category : Industrial use

1.3. Details of the supplier of the safety data sheet

JSR Micro Singapore Branch
60 Paya Lebar Road, Paya Lebar Square #07-18, Singapore 409051
TEL: +65 6775-0031

1.4. Emergency telephone number

Emergency number : Emergency phone number Belgium: +32-(0)70-245245

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Flam. Liq. 3	H226
Skin Irrit. 2	H315
Eye Irrit. 2	H319
Skin Sens. 1	H317
Aquatic Chronic 3	H412

Full text of classification categories and H statements : see section 16

Adverse physicochemical, human health and environmental effects

No supplementary major concern known. For more information, please see section 9 -> 12.

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :

GHS02 GHS07

Signal word (CLP) : Warning

Hazard statements (CLP) : H226 - Flammable liquid and vapour
H315 - Causes skin irritation
H317 - May cause an allergic skin reaction
H319 - Causes serious eye irritation
H412 - Harmful to aquatic life with long lasting effects

Precautionary statements (CLP) : P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking
P280 - Wear protective gloves, protective clothing, eye protection, face protection
P302+P352 - IF ON SKIN: Wash with plenty of soap and water water/ soap
P305+P351+P313 - IF IN EYES: Rinse cautiously with water for several minutes. Get medical advice/attention
P333+P313 - If skin irritation or rash occurs: Get medical advice/attention
P403+P235 - Store in a well-ventilated place. Keep cool

Extra phrases : Avoid: Light.

Contains : TMPTA; Acrylates

Unknown toxicity (CLP) : May contain <5% ingred. with unknown (environmental) toxicity.

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.2. Mixture

Name	Product identifier	%	Classification according to Chemical Policy Singapore and CLASS regulation Malaysia 2013
propylene glycol monomethyl ether acetate	(CAS No) 108-65-6	30 - 40	Flam. Liq. 3, H226
TMPTA	(CAS No) 15625-89-5	5 - 15	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317 Aquatic Chronic 3, H412
Acrylates		5 - 15	Eye Irrit. 2, H319 Skin Irrit. 2, H315 Skin Sens. 1, H317
Phosphineoxide derivatives		< 2	Skin Sens. 1B, H317 Repr. 2, H361f Aquatic Chronic 2, H411
2-methoxy-1-propylacetate (Impurity)	(CAS No) 70657-70-4	< 0,3	Flam. Liq. 3, H226 Repr. 1B, H360D STOT SE 3, H335
Initiator		< 0,25	Aquatic Acute 1, H400 Aquatic Chronic 1, H410

Full text of H-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : Get medical advice/attention.

First-aid measures after inhalation : Allow victim to breathe fresh air. Allow the victim to rest. Obtain medical attention if breathing difficulty persists.

First-aid measures after skin contact : Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse.

First-aid measures after eye contact : In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

First-aid measures after ingestion : If swallowed, immediately administer water (1/2 liter) only if victim is completely conscious/alert. Do not induce vomiting.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/injuries : More information in section: "Toxicology".

4.3. Indication of any immediate medical attention and special treatment needed

If medical advice is needed, have product container or label at hand.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Foam. Dry chemical. Carbon dioxide. Use extinguishing media appropriate for surrounding fire.

5.2. Special hazards arising from the substance or mixture

Fire hazard : This product is flammable. Heavier than air, vapours may travel long distances along ground, ignite and flash back to source. On exposure to high temperature, may decompose, releasing toxic/flammable vapours.

Reactivity : To our knowledge, the product does not present any particular risk, under normal conditions of use. (See section 7: Handling and Storage).

5.3. Advice for firefighters

Precautionary measures fire : Do not enter fire area without proper protective equipment, including respiratory protection. Pressure demand self-contained breathing apparatus should be provided to fire fighters in building or confined area where the material is stored.

Firefighting instructions : Avoid fire-fighting water to enter environment. Exercise caution when fighting any chemical fire. Water should be used to keep exposed containers cool.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Supply fresh air. Equip cleanup crew with proper protection. No naked lights. No smoking. Use special care to avoid static electric charges.

Protective equipment : Respiratory protection equipment may be necessary.

Emergency procedures : Remove ignition sources.

6.2. Environmental precautions

Avoid release to the environment. Prevent entry to sewers and public waters.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Clean up any spills as soon as possible, using an absorbent material to collect it. Use suitable disposal containers.

6.4. Reference to other sections

No additional information available

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Both local exhaust and good general room ventilation must be provided not only to control exposure but also to prevent formation of flammable mixtures. Take precautionary measures against static discharge during blending and transfer operations. Close container tightly after use.

Hygiene measures : Avoid all unnecessary exposure. Handle in accordance with good industrial hygiene and safety procedures. Wear suitable protective clothing. Ensure prompt removal from eyes, skin and clothing. Do not eat, drink or smoke when using this product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Maintain the storage temperature below 40°C. This storage temperature is intended to cover HSE-purposes and is valid within the period: shelflife + 3 months. For the technical application, see the specifications and the label. Store in a well-ventilated place. Keep container tightly closed. Keep away from heat, sparks, open flames. - No smoking.

Incompatible products : Store separately from oxidising agents and strongly alkaline and strongly acidic materials.

Storage temperature : 0 - 10 °C

Storage area : Store in a dry, cool area.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Acrylates

OEL	15 min (mg/m³)	15 min (ppm)	8 h (mg/m³)	8 h (ppm)
This chemical is not listed in the EU OEL list.				

This chemical is not listed in the Singapore PEL list.

TMPTA (15625-89-5)

OEL	15 min (mg/m³)	15 min (ppm)	8 h (mg/m³)	8 h (ppm)
This chemical is not listed in the EU OEL list.				

This chemical is not listed in the Singapore PEL list.

Phosphineoxide derivatives

OEL	15 min (mg/m³)	15 min (ppm)	8 h (mg/m³)	8 h (ppm)
This chemical is not listed in the EU OEL list.				

This chemical is not listed in the Singapore PEL list.

Initiator

OEL	15 min (mg/m³)	15 min (ppm)	8 h (mg/m³)	8 h (ppm)
This chemical is not listed in the EU OEL list.				

This chemical is not listed in the Singapore PEL list.

propylene glycol monomethyl ether acetate (108-65-6)

OEL	15 min (mg/m³)	15 min (ppm)	8 h (mg/m³)	8 h (ppm)
EU	550 mg/m³	100 ppm	275 mg/m³	50 ppm

This chemical is not listed in the Singapore PEL list.

2-methoxy-1-propylacetate (70657-70-4)

OEL	15 min (mg/m³)	15 min (ppm)	8 h (mg/m³)	8 h (ppm)
This chemical is not listed in the EU OEL list.				

This chemical is not listed in the Singapore PEL list.

8.2. Exposure controls

Appropriate engineering controls	:	Use explosion proof ventilation equipment. Laboratory samples should be handled in a fumehood. Local exhaust and general ventilation must be adequate to meet exposure standards.
Hand protection	:	Chemical resistant protective gloves (EN374). Suitable materials for splash contact, e.g nitril (0.1 mm). For prolonged, direct contact protective index 6, corresponding to > 480 minutes of permeation time, is recommended. Examples, subordinate to previous recommendation: nitrile rubber (0.4 mm), latex (0.5mm), butyl (0.7mm).Take new gloves when they are dirty.
Eye protection	:	Safety glasses. Wear eye-protectors conformed to EN166.
Skin and body protection	:	If skin contact or contamination of clothing is possible, protective clothing should be worn. Wear shoes conformed to EN345 type min S2.
Respiratory protection	:	Where exposure through inhalation may occur from use, approved respiratory protection equipment is recommended. Use a mask EN140/136 + thread fitting EN148-1 + filter EN14387 type A or mask EN405 with filter EN141 type A.

SECTION 9: Physical and chemical properties

If no information is available on the mixture, please consult information on ingredients.

9.1. Information on basic physical and chemical properties

Physical state	:	Liquid
Colour	:	Colourless to light yellow.
Odour	:	No data available
pH	:	No data available
Flash point	:	No data available
Flammability (solid, gas)	:	Not applicable
Explosive limits	:	No data available
Vapour pressure	:	No data available
Relative density	:	0,8 - 1,1
Solubility	:	No data available
Log Pow	:	No data available

Acrylates

Physical state	:	Liquid

TMPTA(15625-89-5)

Physical state	:	Liquid
Melting point	:	-46 °C
Boiling point	:	> 390 °C
Flash point	:	194,5 °C
Vapour pressure	:	<= 0,1 Pa
Relative vapour density	:	> 1
Relative density	:	1,1086 at 20 °C
Solubility in water	:	100 - 1000 mg/l
Log Pow	:	0,67
Auto-ignition temperature	:	385 °C
Viscosity, dynamic	:	122 mPa.s
Explosive properties	:	Not explosive.
Oxidising properties	:	No oxidizing properties.

Phosphineoxide derivatives

Physical state	:	Solid
pH	:	6,4 - 6,9 (OECD 105)
Melting point	:	93 °C (OECD 102)
Boiling point	:	Decomposition.
Vapour pressure	:	< 0,0000001 hPa (20 °C)
Relative density	:	1,218 (20 °C; OECD 109)
Solubility in water	:	3,4 - 11 mg/l (20 °C; OECD 105)
Log Pow	:	3,1 (23 °C; OECD 117)
Auto-ignition temperature	:	> 400 °C (1013 hPa; EU A.16)

Decomposition temperature	:	> 200 °C

Initiator

Physical state	:	Solid
Melting point	:	96 °C
Relative density	:	1,2
Solubility in water	:	0,013 mg/l

propylene glycol monomethyl ether acetate(108-65-6)

Physical state	:	Liquid
Odour		Ester-like
pH	:	6,8 (198 g/l; 20 °C)
Melting point	:	-66 °C (EU A.1)
Boiling point	:	145,8 °C (1013 hPa; OECD 103)
Flash point	:	46 °C
Relative evaporation rate (butylacetate=1)	:	0,3 (ASTM D3539)
Flammability (solid, gas)	:	Not applicable
Explosive limits (vol %)	:	1,5 - 7 vol % (EU A.11)
Vapour pressure	:	3,55 hPa (20 °C; OECD 104)
Relative vapour density	:	4,6
Relative density	:	0,967 (20 °C)
Solubility	:	soluble in most organic solvents
Solubility in water	:	198 g/l (20 °C; EU A.6)
Log Pow	:	1,2 (20 °C; OECD 117)
Auto-ignition temperature	:	333 °C (1013 hPa; ASTM D 286-58 T)
Viscosity, kinematic	:	1,23 mm²/s (20 °C)

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

To our knowledge, the product does not present any particular risk, under normal conditions of use. (See section 7: Handling and Storage).

10.2. Chemical stability

Polymerisation can occur.

10.3. Possibility of hazardous reactions

No additional information available

10.4. Conditions to avoid

Light. Heat. Flame.

10.5. Incompatible materials

Strong acids, strong bases.

10.6. Hazardous decomposition products

Smoke. Carbon dioxide. Carbon monoxide.

SECTION 11: Toxicological information

If no information is available on the mixture, please consult information on ingredients.

11.1. Information on toxicological effects

Acute toxicity	:	Not classified
Skin corrosion/irritation	:	Causes skin irritation.
Serious eye damage/irritation	:	Causes serious eye irritation.
Respiratory or skin sensitisation	:	May cause an allergic skin reaction.
Germ cell mutagenicity	:	Not classified
Carcinogenicity	:	Not classified

Reproductive toxicity	:	Not classified
Specific target organ toxicity (single exposure)	:	Not classified May cause (slight) respiratory irritation. May cause headache, nausea.
Specific target organ toxicity (repeated exposure)	:	Not classified
Aspiration hazard	:	Not classified

Acrylates

Acute toxicity	:	Not classified
Skin corrosion/irritation	:	Causes skin irritation.
Serious eye damage/irritation	:	Causes serious eye irritation.
Respiratory or skin sensitisation	:	May cause an allergic skin reaction.
Germ cell mutagenicity	:	Not classified
Carcinogenicity	:	Not classified
Reproductive toxicity	:	Not classified
Specific target organ toxicity (single exposure)	:	Not classified
Specific target organ toxicity (repeated exposure)	:	Not classified
Aspiration hazard	:	Not classified

TMPTA (15625-89-5)

Acute toxicity	:	Not classified
LD50 oral rat	:	> 5000 mg/kg
LD50 dermal rabbit	:	> 5000 mg/kg
Skin corrosion/irritation	:	Causes skin irritation.
Serious eye damage/irritation	:	Causes serious eye irritation.
Respiratory or skin sensitisation	:	May cause an allergic skin reaction.
Germ cell mutagenicity	:	Not classified Ames test: positive In vitro mammalian cell gene mutation test: positive Chromosome aberration: positive In vivo micronucleus test: negative
Carcinogenicity	:	Not classified IARC: not listed
Reproductive toxicity	:	Not classified
Specific target organ toxicity (single exposure)	:	Not classified
Specific target organ toxicity (repeated exposure)	:	Not classified
Aspiration hazard	:	Not classified

Phosphineoxide derivatives

Acute toxicity	:	Not classified
LD50 oral rat	:	> 5000 mg/kg (OECD 401)
LD50 dermal rat	:	> 2000 mg/kg (EU B.3; OECD 402)
Skin corrosion/irritation	:	Not classified Not irritating to skin
Serious eye damage/irritation	:	Not classified Not irritating to eyes
Respiratory or skin sensitisation	:	May cause an allergic skin reaction. Local lymph node assay: positive (EU B.42) (OECD 429)

Phosphineoxide derivatives

Germ cell mutagenicity	:	Not classified Ames test: negative (OECD 471) Chromosome aberration: negative (OECD 473) In vitro mammalian cell gene mutation test: negative (EU B.17) (OECD 476)
Carcinogenicity	:	Not classified IARC: not listed
Reproductive toxicity	:	Suspected of damaging fertility. (OECD 408)
Specific target organ toxicity (single exposure)	:	Not classified
Specific target organ toxicity (repeated exposure)	:	Not classified
Aspiration hazard	:	Not classified

Initiator

Acute toxicity	:	Not classified
LD50 oral rat	:	> 2000 mg/kg
Skin corrosion/irritation	:	Not classified
Serious eye damage/irritation	:	Not classified
Respiratory or skin sensitisation	:	Not classified Local lymph node assay: negative
Germ cell mutagenicity	:	Not classified Ames test: negative Chromosome aberration: positive In vivo micronucleus test: negative
Carcinogenicity	:	Not classified IARC: not listed
Reproductive toxicity	:	Not classified
Specific target organ toxicity (single exposure)	:	Not classified
Specific target organ toxicity (repeated exposure)	:	Not classified
Aspiration hazard	:	Not classified

propylene glycol monomethyl ether acetate (108-65-6)

Acute toxicity	:	Not classified
LD50 oral rat	:	> 2000 mg/kg (OECD 401)
LD50 dermal rat	:	> 2000 mg/kg (OECD 402)
LD50 dermal rabbit	:	> 2000 mg/kg (OECD 402)
LC50 inhalation rat (4 h)	:	> 23,92 mg/l (OECD 403)
Skin corrosion/irritation	:	Not classified Not irritating to skin (OECD 404)
Serious eye damage/irritation	:	Not classified Not irritating to eyes (OECD 405)
Respiratory or skin sensitisation	:	Not classified Guinea pig maximisation test: negative (OECD 406)
Germ cell mutagenicity	:	Not classified Ames test: negative (OECD 471) Chromosome aberration: negative
Carcinogenicity	:	Not classified IARC: not listed
Reproductive toxicity	:	Not classified Based on available data, the classification criteria are not met (OECD 422)
Specific target organ toxicity (single exposure)	:	Not classified May cause Central Nervous System (CNS) depression.
Specific target organ toxicity (repeated exposure)	:	Not classified
Aspiration hazard	:	Not classified

2-methoxy-1-propylacetate (70657-70-4)

Acute toxicity	:	Not classified

2-methoxy-1-propylacetate (70657-70-4)

Skin corrosion/irritation	:	Not classified
Serious eye damage/irritation	:	Not classified
Respiratory or skin sensitisation	:	Not classified
Germ cell mutagenicity	:	Not classified
Carcinogenicity	:	Not classified
Reproductive toxicity	:	May damage the unborn child.
Specific target organ toxicity (single exposure)	:	May cause respiratory irritation.
Specific target organ toxicity (repeated exposure)	:	Not classified
Aspiration hazard	:	Not classified

SECTION 12: Ecological information

12.1. Toxicity

TMPTA (15625-89-5)

LC50 fish (96 h)	:	1,47 mg/l EU C.1
EC50 crustacea (48 h)	:	19,9 mg/l EU C.2
ErC50 algae or other aquatic plants (72-96 h)	:	4,86 mg/l EU C.3
NOEC chronic algae or other aquatic plants	:	< 1 mg/l
Water hazard class (WGK)	:	1

Phosphineoxide derivatives

LC50 fish (96 h)	:	< 6,53 mg/l (Oryzias latipes; 48h)
EC50 crustacea (48 h)	:	3,53 mg/l (Daphnia magna; OECD 202)
EC50 microorganisms	:	> 1000 mg/l (activated sludge; 3 h; OECD 209)
ErC50 algae or other aquatic plants (72-96 h)	:	> 2,01 mg/l (Pseudokirchnerella subcapitata; OECD 201)
Water hazard class (WGK)	:	2

Initiator

LC50 fish (96 h)	:	> 0,59 mg/l (zebra fish)
EC50 crustacea (48 h)	:	0,37 mg/l (daphnia magna)
ErC50 algae or other aquatic plants (72-96 h)	:	0,209 mg/l
NOEC chronic algae or other aquatic plants	:	0,036 mg/l
Water hazard class (WGK)	:	2

propylene glycol monomethyl ether acetate (108-65-6)

LC50 fish (96 h)	:	134 mg/l (Oncorhynchus mykiss; OECD 203)
EC50 crustacea (48 h)	:	> 500 mg/l (Daphnia magna; EU C.2)
EC50 microorganisms	:	> 1000 mg/l (activated sludge; 0,5 h; OECD 209)
ErC50 algae or other aquatic plants (72-96 h)	:	> 1000 mg/l (Pseudokirchnerella subcapitata; OECD 201)
NOEC chronic fish	:	47,5 mg/l (Oryzias latipes; 14 d; OECD 204)
NOEC chronic crustacea	:	100 mg/l (Daphnia magna; 21 d; OECD 211)
Water hazard class (WGK)	:	1

12.2. Persistence and degradability

TMPTA (15625-89-5)

Persistence and degradability	:	Readily biodegradable.

Phosphineoxide derivatives

Persistence and degradability	:	Not readily biodegradable. (OECD 301F).

Initiator

Persistence and degradability	:	Not readily biodegradable.

propylene glycol monomethyl ether acetate (108-65-6)

Persistence and degradability : Readily biodegradable. (OECD 301F).

12.3. Bioaccumulative potential

TMPTA (15625-89-5)

Log Pow : 0,67

Phosphineoxide derivatives

BCF fish : 18 - 72 (Cyprinus carpio)

Log Pow : 3,1 (23 °C; OECD 117)

Initiator

Bioaccumulative potential : No data available.

propylene glycol monomethyl ether acetate (108-65-6)

Log Pow : 1,2 (20 °C; OECD 117)

12.4. Mobility in soil

TMPTA (15625-89-5)

Surface tension : 49,9 mN/m

Phosphineoxide derivatives

Log Koc : 2,9

propylene glycol monomethyl ether acetate (108-65-6)

Surface tension : 29,4 mN/m (20 °C; EU A.5)

12.5. Results of PBT and vPvB assessment

Phosphineoxide derivatives

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII

This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

propylene glycol monomethyl ether acetate (108-65-6)

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII

This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

12.6. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product/Packaging disposal recommendations : Avoid release to the environment. Dispose in a safe manner in accordance with local/national regulations.

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

14.1. UN number : 1866

14.2. UN proper shipping name : RESIN SOLUTION

14.3. Transport hazard class(es) : 3

Hazard labels :

14.4. Packing group : III

14.5. Environmental hazards

No additional information available

14.6. Special precautions for user

Overland transport:

Orange plates : 

Tunnel restriction code (ADR) : D/E

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

No additional information available

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

15.1.1. EU-Regulations

Contains no REACH Annex XIV substances

15.1.2. National regulations

Other information, restriction and prohibition regulations : Ensure all national/local regulations are observed.

Fire Safety Act (Singapore)

Phosphineoxide derivatives

Class (ADR) : 9 - Miscellaneous dangerous substances and articles

Initiator

Class (ADR) : 9 - Miscellaneous dangerous substances and articles

HS code : 3707.90.90

propylene glycol monomethyl ether acetate (108-65-6)

Class (ADR) : 3 - Flammable liquids

HS code : 2915.39.00

SG Product code (Fire Safety Act) : SCDPEA3272L1

Quantities of flammable material not requiring storage licence (Singapore)

propylene glycol monomethyl ether acetate (108-65-6)

General manufacturing etc., purpose : 20L

Medical or laboratory purpose : 20L

Toxic industrial waste (Singapore)

Organic compounds not containing halogen

	Prescribed quantity for generation per year	Prescribed quantity for transportation per trip
Spent non –halogenated organic solvents e.g. benzene, toluene, xylene, turpentine, petroleum, thiner, kerosene , methanl, ethanol, isobutanol, isopropanol, methyl ethyl ketone,methyl isobutylketone,isopropyleter, diethylether, hexane, dimethylsulfide and dimethylsulfoxide	1000 L	250 L
Residue from recover of non halogenated organic solvents	7500kg	1500kg

15.2. Chemical safety assessment

No Chemical Safety Assessment has been carried out.

SECTION 16: Other information

Classification

Available information on the ingredients and/or on the mixture is used for the purpose of classification of the mixture. Classifying the mixture is done in accordance with Chemical Policy Singapore (SS 586 : 2014) and CLASS regulation Malaysia 2013 on classification, labelling and packaging of substances and mixtures.

Full text of R-, H- and EUH-statements

Aquatic Acute 1 Hazardous to the aquatic environment — Acute Hazard, Category 1

Aquatic Chronic 1	Hazardous to the aquatic environment — Chronic Hazard, Category 1
Aquatic Chronic 2	Hazardous to the aquatic environment — Chronic Hazard, Category 2
Aquatic Chronic 3	Hazardous to the aquatic environment — Chronic Hazard, Category 3
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Flam. Liq. 3	Flammable liquids, Category 3
Repr. 1B	Reproductive toxicity, Category 1B
Repr. 2	Reproductive toxicity, Category 2
Skin Irrit. 2	Skin corrosion/irritation, Category 2
Skin Sens. 1	Sensitisation — Skin, category 1
Skin Sens. 1B	Sensitisation — Skin, category 1B
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation
H226	Flammable liquid and vapour
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H319	Causes serious eye irritation
H335	May cause respiratory irritation
H360D	May damage the unborn child
H361f	Suspected of damaging fertility
H400	Very toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects
H411	Toxic to aquatic life with long lasting effects
H412	Harmful to aquatic life with long lasting effects
	Avoid: Light.

The contents and format of this SDS are in accordance with Chemical Policy Singapore (SS 586 : 2014) and CLASS regulation Malaysia 2013.

DISCLAIMER OF LIABILITY. The information in this safety datasheet is based on our current best knowledge. This sheet describes our product in relation to safety requirements and takes into account a normal handling, storage, use or disposal of the product. It is not meant to guarantee specific determined qualities of the product. It was prepared and is to be used only for this product. If the product is used as a component in another product, the information contained in this data sheet may not be applicable.