Section 1. Identification of the substance/preparation and of the company/undertaking

Product name:
LOCTITE ECCOBOND FP 5201

Other means of identification:
LOCTITE ECCOBOND FP 5201

Product code:
IDH2780691

Recommended use of the chemical and restrictions on use

Intended use:
Die attach adhesive

Manufacturer/Importer/Distributor Representative Company

Henkel Thailand Ltd. The Offices at Centralworld,
35th Floor, 999/9 Rama 1 Rd.,
Kwang Patumwan, Khet Patumwan,
10330 Bangkok

Thailand

Phone: +66 (2209) 8000
Fax-no.: +66 (2209) 8008

E-mail address of person responsible for Safety Data Sheet:
ap-ua-psra.sea@henkel.com

Emergency Telephone for Chemical Accidents:
FOR EMERGENCIES ONLY (Spill, major leak, Fire, Exposure, or Accident). Call: +662 209 8008

Section 2. Hazards identification

GHS Classification:

Hazard Class	Hazard Category
Skin sensitizer	Category 1
Carcinogenicity	Category 2
Acute hazards to the aquatic environment	Category 1
Chronic hazards to the aquatic environment	Category 2

GHS label elements:

Hazard pictogram:



Signal word:
Warning

Hazard statement:
H317 May cause an allergic skin reaction.
H351 Suspected of causing cancer.
H400 Very toxic to aquatic life.
H411 Toxic to aquatic life with long lasting effects.

Precaution:

Prevention:
P201 Obtain special instructions before use.
P261 Avoid breathing dust.
P272 Contaminated work clothing should not be allowed out of the workplace.
P273 Avoid release to the environment.
P280 Wear protective gloves/protective clothing/eye protection/face protection.

Response:
P302+P352 IF ON SKIN: Wash with plenty of water.
P308+P313 IF exposed or concerned: Get medical attention.
P333+P313 If skin irritation or rash occurs: Get medical attention.
P362+P364 Take off contaminated clothing and wash it before reuse.
P391 Collect spillage.

Disposal:
P501 Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

Section 3. Composition / information on ingredients

Substance or Mixture:
Mixture

Declaration of hazardous chemical:

Hazard component CAS-No.	Content	GHS Classification
Silica 7631-86-9	60- 100 %	
(Octahydro-4,7-methano-1H-indenediyl)bis(methylene) diacrylate 42594-17-2	10- 30 %	Skin sensitizer 1B H317 Acute hazards to the aquatic environment 2 H401 Chronic hazards to the aquatic environment 2 H411
4,4'-isopropylidenediphenol-, polymer with (chloromethyl)oxirane, acrylate 55818-57-0	1- 10 %	Skin sensitizer 1 H317 Chronic hazards to the aquatic environment 2 H411
Amines, C36-alkylenedi-, maleated 682800-79-9	1- 10 %	Acute toxicity 4; Oral H302 Acute toxicity 4; Dermal H312 Skin corrosion/irritation 2 H315 Acute hazards to the aquatic environment 1 H400 Chronic hazards to the aquatic environment 1 H410
Trimethylolpropane triacrylate 15625-89-5	1- 10 %	Skin corrosion/irritation 2 H315 Serious eye damage/eye irritation 2A H319 Skin sensitizer 1 H317 Carcinogenicity 2 H351 Acute hazards to the aquatic environment 1 H400 Chronic hazards to the aquatic environment 1 H410
Tert-butyl perbenzoate 614-45-9	0.1- 1 %	Organic peroxides C H242 Acute toxicity 5; Oral H303 Acute toxicity 4; Inhalation H332 Acute toxicity 5; Dermal H313 Skin corrosion/irritation 2 H315 Skin sensitizer 1 H317 Acute hazards to the aquatic environment 1 H400 Chronic hazards to the aquatic environment 3 H412

Section 4. First aid measures

Inhalation:
Should not be a problem as product is of low volatility. However, if feeling unwell remove patient to fresh air.

Skin contact:
Rinse with running water and soap.
Obtain medical attention if irritation persists.

Eye contact:
Rinse immediately with plenty of running water (for 10 minutes), seek medical attention from a specialist.

Ingestion:
Rinse mouth, drink 1-2 glasses of water, do not induce vomiting, consult a doctor.

Section 5. Fire fighting measures

Suitable extinguishing media:
Foam, extinguishing powder, carbon dioxide.
Fine water spray

Improper extinguishing media:
High pressure waterjet

Specific hazards arising from the chemical:
In the event of a fire, carbon monoxide (CO), carbon dioxide (CO2) and nitrogen oxides (NOx) can be released.
The product may undergo spontaneous polymerization at high temperatures. Polymerization is exothermic and may cause damage to the container and/or release of thermal decomposition products.

Special protection equipment and precautions for firefighters:
Wear self-contained breathing apparatus and full protective clothing, such as turn-out gear.

Additional fire fighting advice:
In case of fire, keep containers cool with water spray.

Section 6. Accidental release measures

Personal precautions:
Avoid contact with skin and eyes.
Ensure adequate ventilation.
Wear protective equipment.

Environmental precautions:
Do not empty into drains / surface water / ground water.

Clean-up methods:
For small spills wipe up with paper towel and place in container for disposal.
For large spills absorb onto inert absorbent material and place in sealed container for disposal.

Section 7. Handling and storage

Handling:
Avoid skin and eye contact.
Use only in well-ventilated areas.
Do not spray onto flames or red-hot objects.
Keep away from sources of ignition - no smoking.
See advice in section 8

Storage:
Store in a cool place in closed original container.
Must be stored in a room with spill collection facilities.
Keep away from heat and direct sunlight.
Keep container tightly sealed.

Section 8. Exposure controls / personal protection

Components with specific control parameters for workplace:

Silica 7631-86-9	**Value type**	Time Weighted Average (TWA):
	mg/m³	3
Silica 7631-86-9	**Value type**	Time Weighted Average (TWA):
	mg/m³	6
Particles (insoluble or poorly soluble) not otherwise specified, respirable particles 7631-86-9	**Value type**	Time Weighted Average (TWA):
	mg/m³	3
	Remarks	ACGIH
Particles (insoluble or poorly soluble) not otherwise specified, inhalable particles 7631-86-9	**Value type**	Time Weighted Average (TWA):
	mg/m³	10
	Remarks	ACGIH

Respiratory protection:
Ensure adequate ventilation.
An approved mask or respirator fitted with an organic vapour cartridge should be worn if the product is used in a poorly ventilated area
Filter type: A (EN 14387)

Hand protection:
Chemical-resistant protective gloves (EN 374).
Suitable materials for short-term contact or splashes (recommended: at least protection index 2, corresponding to > 30 minutes permeation time as per EN 374):
nitrile rubber (NBR; >= 0.4 mm thickness)
Suitable materials for longer, direct contact (recommended: protection index 6, corresponding to > 480 minutes permeation time as per EN 374):
nitrile rubber (NBR; >= 0.4 mm thickness)
This information is based on literature references and on information provided by glove manufacturers, or is derived by analogy with similar substances. Please note that in practice the working life of chemical-resistant protective gloves may be considerably shorter than the permeation time determined in accordance with EN 374 as a result of the many influencing factors (e.g. temperature). If signs of wear and tear are noticed then the gloves should be replaced.

Eye protection:
Safety glasses with sideshields or chemical safety goggles should be worn if there is a risk of splashing.
Protective eye equipment should conform to EN166.

Body protection:
Wear suitable protective clothing.
apron
Protective clothing should conform to EN 14605 for liquid splashes or to EN 13982 for dusts.

Engineering controls:
Provide local and general exhaust ventilation to effectively remove and prevent buildup of any vapors or mists generated from the handling of this product.

General protection and hygiene measures:
The workplace should be equipped with an emergency shower and eye-rinsing facility.

Hygienic measures:
Wash hands before work breaks and after finishing work.
Do not eat, drink or smoke while working.
Take off contaminated clothing and wash before reuse.

Section 9. Physical and chemical properties

Appearance:	Off white solid, paste
Odor:	characteristic
Odor threshold (CA):	No data available.
pH:	Not available.
Melting point / freezing point:	Not available.
Specific gravity:	1.65
Boiling point:	No data available.
Flash point:	> 93 °C (> 199.4 °F)
Evaporation rate:	No data available.
Flammability (solid, gas):	The product is not flammable.
Lower explosive limit:	No data available.
Upper explosive limit:	No data available.
Vapor pressure:	Not available.
Vapor density:	Not applicable, Product is a solid
Density:	1.65 g/cm3
Solubility:	Negligible
Partition coefficient: n-octanol/water:	No data available.
Auto ignition:	No data available.
Decomposition temperature:	No data available.
Viscosity:	No data available.
VOC content: (2010/75/EC)	< 3 %

Section 10. Stability and reactivity

Reactivity/Incompatible materials:
Reacts with oxidants, acids and lyes
Reaction with reducing agents.
Heavy metals.
Polymerization may occur at elevated temperature or in the presence of incompatible materials.
Chemical stability:
Stable under recommended storage conditions.
Conditions to avoid:
Danger of decomposition if exposed to heat.
Do not heat mixed adhesive unless you plan to use immediately.
Failure to observe these precautions may result in excessive heat build-up causing an exotherm.
Hazardous decomposition products:
Hydrocarbons
Irritating vapors.
At higher temperature carbon oxides and nitrogen oxides may be generated.
Oxides of silicon.
May produce fumes when heated to decomposition. Fumes may contain carbon monoxide and other toxic fumes.

Section 11. Toxicological information

Oral toxicity:	Acute toxicity estimate (ATE) : > 2,000 mg/kg Method: Calculation method
Dermal toxicity:	Acute toxicity estimate (ATE) : > 2,000 mg/kg Method: Calculation method

Health Effects:
Skin: May cause allergic skin reaction.
Symptoms of Overexposure**:** None known.

Acute oral toxicity:

Silica 7631-86-9	Value type	LD50
	Value	> 5,000 mg/kg
	Species	rat
	Method	OECD Guideline 401 (Acute Oral Toxicity)
(Octahydro-4,7-methano-1H-indenediyl)bis(methylene) diacrylate 42594-17-2	Value type	LD50
	Value	> 2,000 mg/kg
	Species	rat
	Method	OECD Guideline 423 (Acute Oral toxicity)
4,4'-isopropylidenediphenol-, polymer with (chloromethyl)oxirane, acrylate 55818-57-0	Value type	LD0
	Value	> 2,000 mg/kg
	Species	rat
	Method	OECD Guideline 401 (Acute Oral Toxicity)
4,4'-isopropylidenediphenol-, polymer with (chloromethyl)oxirane, acrylate 55818-57-0	Value type	LD50
	Value	> 2,000 mg/kg
	Species	rat
	Method	OECD Guideline 401 (Acute Oral Toxicity)
Amines, C36-alkylenedi-, maleated 682800-79-9	Value type	Acute toxicity estimate (ATE)
	Value	500 mg/kg
	Species	
	Method	Expert judgement
Trimethylolpropane triacrylate 15625-89-5	Value type	LD50
	Value	> 5,000 mg/kg
	Species	rat
	Method	not specified
Tert-butyl perbenzoate 614-45-9	Value type	LD50
	Value	4,838 mg/kg
	Species	rat
	Method	not specified

Acute inhalative toxicity:

Silica 7631-86-9	Value type	LC50
	Value	> 5.01 mg/l
	Exposure time	4 h
	Species	rat
	Method	OECD Guideline 436 (Acute Inhalation Toxicity: Acute Toxic Class (ATC) Method)
Tert-butyl perbenzoate 614-45-9	Value type	LC50
	Value	1.01 mg/l
	Exposure time	4 h
	Species	not specified
	Method	OECD Guideline 436 (Acute Inhalation Toxicity: Acute Toxic Class (ATC) Method)

Acute dermal toxicity:

Silica 7631-86-9	Value type	LD50
	Value	> 5,000 mg/kg
	Species	rabbit
	Method	not specified
(Octahydro-4,7-methano-1H-indenediyl)bis(methylene) diacrylate 42594-17-2	Value type	LD50
	Value	> 2,000 mg/kg
	Species	rat
	Method	OECD Guideline 402 (Acute Dermal Toxicity)
4,4'-isopropylidenediphenol-, polymer with (chloromethyl)oxirane, acrylate 55818-57-0	Value type	LD0
	Value	> 2,000 mg/kg
	Species	rat
	Method	OECD Guideline 402 (Acute Dermal Toxicity)
4,4'-isopropylidenediphenol-, polymer with (chloromethyl)oxirane, acrylate 55818-57-0	Value type	LD50
	Value	> 2,000 mg/kg
	Species	rat
	Method	OECD Guideline 402 (Acute Dermal Toxicity)
Amines, C36-alkylenedi-, maleated 682800-79-9	Value type	Acute toxicity estimate (ATE)
	Value	1,100 mg/kg
	Species	
	Method	Expert judgement
Trimethylolpropane triacrylate 15625-89-5	Value type	LD50
	Value	7,050 mg/kg
	Species	rabbit
	Method	not specified
Tert-butyl perbenzoate 614-45-9	Value type	LD50
	Value	3,817 mg/kg
	Species	rat
	Method	not specified

Skin corrosion/irritation:

Silica 7631-86-9	Result	not irritating
	Exposure time	4 h
	Species	rabbit
	Method	OECD Guideline 404 (Acute Dermal Irritation / Corrosion)
(Octahydro-4,7-methano-1H-indenediyl)bis(methylene) diacrylate 42594-17-2	Result	not irritating
	Exposure time	
	Species	In vitro
	Method	OECD Guideline 439 (In Vitro Skin Irritation: Reconstructed Human Epidermis (RHE) Test Method)
4,4'-isopropylidenediphenol-, polymer with (chloromethyl)oxirane, acrylate 55818-57-0	Result	not irritating
	Exposure time	4 h
	Species	rabbit
	Method	OECD Guideline 404 (Acute Dermal Irritation / Corrosion)
Amines, C36-alkylenedi-, maleated 682800-79-9	Result	irritating
	Exposure time	
	Species	not specified
	Method	Expert judgement

Serious eye damage/irritation:

Silica 7631-86-9	Result	not irritating
	Exposure time	
	Species	rabbit
	Method	OECD Guideline 405 (Acute Eye Irritation / Corrosion)
(Octahydro-4,7-methano-1H-indenediyl)bis(methylene) diacrylate 42594-17-2	Result	not irritating
	Exposure time	
	Species	In vitro
	Method	OECD Guideline 437 (BCOP)
4,4'-isopropylidenediphenol-, polymer with (chloromethyl)oxirane, acrylate 55818-57-0	Result	not irritating
	Exposure time	
	Species	rabbit
	Method	OECD Guideline 405 (Acute Eye Irritation / Corrosion)

Respiratory or skin sensitization:

(Octahydro-4,7-methano-1H-indenediyl)bis(methylene) diacrylate 42594-17-2	Result	Sub-Category 1B (sensitising)
	Test type	Freund's complete adjuvant test
	Species	guinea pig
	Method	OECD Guideline 406 (Skin Sensitisation)
4,4'-isopropylidenediphenol-, polymer with (chloromethyl)oxirane, acrylate 55818-57-0	Result	sensitising
	Test type	Mouse local lymphnode assay (LLNA)
	Species	mouse
	Method	OECD Guideline 429 (Skin Sensitisation: Local Lymph Node Assay)
4,4'-isopropylidenediphenol-, polymer with (chloromethyl)oxirane, acrylate 55818-57-0	Result	sensitising
	Test type	Mouse local lymphnode assay (LLNA)
	Species	mouse
	Method	OECD Guideline 429 (Skin Sensitisation: Local Lymph Node Assay)

Germ cell mutagenicity:

Silica 7631-86-9	Result	negative
	Type of study / Route of administration	bacterial reverse mutation assay (e.g Ames test)
	Metabolic activation / Exposure time	with and without
	Method	OECD Guideline 471 (Bacterial Reverse Mutation Assay)
Silica 7631-86-9	Result	negative
	Type of study / Route of administration	mammalian cell gene mutation assay
	Metabolic activation / Exposure time	with and without
	Method	OECD Guideline 476 (In vitro Mammalian Cell Gene Mutation Test)
Silica 7631-86-9	Result	negative
	Type of study / Route of administration	in vitro mammalian chromosome aberration test
	Metabolic activation / Exposure time	with and without
	Method	OECD Guideline 473 (In vitro Mammalian Chromosome Aberration Test)
Silica 7631-86-9	Result	negative
	Type of study / Route of administration	inhalation
	Metabolic activation / Exposure time	
	Species	rat
	Method	not specified
(Octahydro-4,7-methano-1H-indenediyl)bis(methylene) diacrylate 42594-17-2	Result	negative
	Type of study / Route of administration	bacterial reverse mutation assay (e.g Ames test)
	Metabolic activation / Exposure time	with and without
	Method	OECD Guideline 471 (Bacterial Reverse Mutation Assay)

Repeated dose toxicity:

Silica 7631-86-9	Result	NOAEL=> 4,000 - 4,500 mg/kg
	Route of application	oral: feed
	Exposure time / Frequency of treatment	13 weeksdaily
	Species	rat
	Method	equivalent or similar to OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents)
Silica 7631-86-9	Result	NOAEL=1.3 mg/m3
	Route of application	inhalation
	Exposure time / Frequency of treatment	13 w6 h/d, 5 d/w
	Species	rat
	Method	equivalent or similar to OECD Guideline 413 (Subchronic Inhalation Toxicity: 90-Day)
(Octahydro-4,7-methano-1H-indenediyl)bis(methylene) diacrylate 42594-17-2	Result	NOAEL=1,000 mg/kg
	Route of application	oral: gavage
	Exposure time / Frequency of treatment	
	Species	rat
	Method	OECD Guideline 407 (Repeated Dose 28-Day Oral Toxicity in Rodents)

Section 12. Ecological information

General ecological information: Do not empty into drains / surface water / ground water.

Ecotoxicity: H400 Very toxic to aquatic life.
H411 Toxic to aquatic life with long lasting effects.

Toxicity:

Silica 7631-86-9	Value type	LC50
	Value	> 10,000 mg/l
	Acute Toxicity Study	Fish
	Exposure time	96 h
	Species	Brachydanio rerio (new name: Danio rerio)
	Method	OECD Guideline 203 (Fish, Acute Toxicity Test)
Silica 7631-86-9	Value type	EL50
	Value	> 1,000 mg/l
	Acute Toxicity Study	Daphnia
	Exposure time	24 h
	Species	Daphnia magna
	Method	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
Silica 7631-86-9	Value type	NOELR
	Value	10,000 mg/l
	Acute Toxicity Study	Algae
	Exposure time	72 h
	Species	Desmodesmus subspicatus
	Method	OECD Guideline 201 (Alga, Growth Inhibition Test)
	Value type	EL50
	Value	> 10,000 mg/l
	Acute Toxicity Study	Algae
	Exposure time	72 h
	Species	Desmodesmus subspicatus
	Method	OECD Guideline 201 (Alga, Growth Inhibition Test)
Silica 7631-86-9	Value type	EC0
	Value	10,000 mg/l
	Acute Toxicity Study	Bacteria
	Exposure time	30 min
	Species	Pseudomonas putida

	Method	DIN 38412, part 27 (Bacterial oxygen consumption test)
(Octahydro-4,7-methano-1H-indenediyl)bis(methylene) diacrylate 42594-17-2	Value type	LC50
	Value	1.65 mg/l
	Acute Toxicity Study	Fish
	Exposure time	96 h
	Species	Danio rerio
	Method	OECD Guideline 203 (Fish, Acute Toxicity Test)
(Octahydro-4,7-methano-1H-indenediyl)bis(methylene) diacrylate 42594-17-2	Value type	EC50
	Value	2.36 mg/l
	Acute Toxicity Study	Daphnia
	Exposure time	48 h
	Species	Daphnia magna
	Method	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
(Octahydro-4,7-methano-1H-indenediyl)bis(methylene) diacrylate 42594-17-2	Value type	EC50
	Value	1.6 mg/l
	Acute Toxicity Study	Algae
	Exposure time	72 h
	Species	Pseudokirchneriella subcapitata
	Method	OECD Guideline 201 (Alga, Growth Inhibition Test)
	Value type	EC10
	Value	0.64 mg/l
	Acute Toxicity Study	Algae
	Exposure time	72 h
	Species	Pseudokirchneriella subcapitata
	Method	OECD Guideline 201 (Alga, Growth Inhibition Test)
4,4'-isopropylidenediphenol-, polymer with (chloromethyl)oxirane, acrylate 55818-57-0	Value type	LL50
	Value	> 100 mg/l
	Acute Toxicity Study	Fish
	Exposure time	96 h
	Species	Cyprinus carpio
	Method	OECD Guideline 203 (Fish, Acute Toxicity Test)
	Value type	NOEC
	Value	0.25 mg/l
	Acute Toxicity Study	Fish
	Exposure time	33 d
	Species	Pimephales promelas
	Method	OECD Guideline 210 (fish early lite stage toxicity test)
4,4'-isopropylidenediphenol-, polymer with (chloromethyl)oxirane, acrylate 55818-57-0	Value type	EC50
	Value	> 100 mg/l
	Acute Toxicity Study	Daphnia
	Exposure time	48 h
	Species	Daphnia magna
	Method	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
4,4'-isopropylidenediphenol-, polymer with (chloromethyl)oxirane, acrylate 55818-57-0	Value type	EC50
	Value	105 mg/l
	Acute Toxicity Study	Algae
	Exposure time	72 h
	Species	Pseudokirchneriella subcapitata
	Method	OECD Guideline 201 (Alga, Growth Inhibition Test)
	Value type	NOEC
	Value	1.2 mg/l
	Acute Toxicity Study	Algae
	Exposure time	72 h
	Species	Pseudokirchneriella subcapitata
	Method	OECD Guideline 201 (Alga, Growth Inhibition Test)
Amines, C36-alkylenedi-, maleated 682800-79-9	Value type	LC0
	Value	> 0.354 mg/l
	Acute Toxicity Study	Fish
	Exposure time	96 h
	Species	Danio rerio
	Method	OECD Guideline 203 (Fish, Acute Toxicity Test)
Amines, C36-alkylenedi-, maleated 682800-79-9	Value type	EC50
	Value	0.056 mg/l
	Acute Toxicity Study	Algae
	Exposure time	72 h
	Species	Raphidocelis subcapitata (new name: Pseudokirchneriella subcapitata)
	Method	OECD Guideline 201 (Alga, Growth Inhibition Test)
	Value type	EC10
	Value	0.015 mg/l
	Acute Toxicity Study	Algae

	Exposure time	72 h
	Species	Raphidocelis subcapitata (new name: Pseudokirchneriella subcapitata)
	Method	OECD Guideline 201 (Alga, Growth Inhibition Test)
Trimethylolpropane triacrylate 15625-89-5	Value type	LC50
	Value	0.87 mg/l
	Acute Toxicity Study	Fish
	Exposure time	96 h
	Species	Danio rerio (reported as Brachydanio rerio)
	Method	OECD Guideline 203 (Fish, Acute Toxicity Test)
Trimethylolpropane triacrylate 15625-89-5	Value type	EC50
	Value	19.9 mg/l
	Acute Toxicity Study	Daphnia
	Exposure time	48 h
	Species	Daphnia magna
	Method	EU Method C.2 (Acute Toxicity for Daphnia)
Trimethylolpropane triacrylate 15625-89-5	Value type	EC50
	Value	18.8 mg/l
	Acute Toxicity Study	Algae
	Exposure time	72 h
	Species	Desmodesmus subspicatus
	Method	EU Method C.3 (Algal Inhibition test)
	Value type	EC10
	Value	1.9 mg/l
	Acute Toxicity Study	Algae
	Exposure time	72 h
	Species	Desmodesmus subspicatus
	Method	EU Method C.3 (Algal Inhibition test)
Trimethylolpropane triacrylate 15625-89-5	Value type	EC20
	Value	625 mg/l
	Acute Toxicity Study	Bacteria
	Exposure time	30 min
	Species	activated sludge, domestic
	Method	ISO 8192 (Test for Inhibition of Oxygen Consumption by Activated Sludge)
Tert-butyl perbenzoate 614-45-9	Value type	LC50
	Value	1.6 mg/l
	Acute Toxicity Study	Fish
	Exposure time	96 h
	Species	Brachydanio rerio (new name: Danio rerio)
	Method	OECD Guideline 203 (Fish, Acute Toxicity Test)
Tert-butyl perbenzoate 614-45-9	Value type	EC50
	Value	11 mg/l
	Acute Toxicity Study	Daphnia
	Exposure time	48 h
	Species	Daphnia magna
	Method	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
Tert-butyl perbenzoate 614-45-9	Value type	NOEC
	Value	0.72 mg/l
	Acute Toxicity Study	Algae
	Exposure time	72 h
	Species	Pseudokirchneriella subcapitata
	Method	OECD Guideline 201 (Alga, Growth Inhibition Test)
	Value type	EC50
	Value	0.8 mg/l
	Acute Toxicity Study	Algae
	Exposure time	72 h
	Species	Pseudokirchneriella subcapitata
	Method	OECD Guideline 201 (Alga, Growth Inhibition Test)
Tert-butyl perbenzoate 614-45-9	Value type	EC10
	Value	6 mg/l
	Acute Toxicity Study	Bacteria
	Exposure time	30 min
	Species	activated sludge of a predominantly domestic sewage
	Method	OECD Guideline 209 (Activated Sludge, Respiration Inhibition Test)

Persistence and degradability:

(Octahydro-4,7-methano-1H-indenediyl)bis(methylene)	Result	not readily biodegradable.
	Route of application	aerobic

diacrylate 42594-17-2	Degradability	28 %
	Method	OECD Guideline 301 F (Ready Biodegradability: Manometric Respirometry Test)
4,4'-isopropylidenediphenol-, polymer with (chloromethyl)oxirane, acrylate 55818-57-0	Result	not readily biodegradable.
	Route of application	aerobic
	Degradability	42 %
	Method	OECD Guideline 301 F (Ready Biodegradability: Manometric Respirometry Test)
Amines, C36-alkylenedi-, maleated 682800-79-9	Result	not readily biodegradable.
	Route of application	aerobic
	Degradability	0 %
	Method	OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test)
Trimethylolpropane triacrylate 15625-89-5	Result	readily biodegradable
	Route of application	aerobic
	Degradability	> 82 - 90 %
	Method	OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test)
	Result	inherently biodegradable
	Route of application	aerobic
	Degradability	> 70 %
	Method	OECD Guideline 302 B (Inherent biodegradability: Zahn-Wellens/EMPA Test)
Tert-butyl perbenzoate 614-45-9	Result	readily biodegradable
	Route of application	aerobic
	Degradability	70 %
	Method	OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test)

Bioaccumulative potential / Mobility in soil:

Silica 7631-86-9	LogPow	0.53
	Temperature	
	Method	QSAR (Quantitative Structure Activity Relationship)
(Octahydro-4,7-methano-1H-indenediyl)bis(methylene) diacrylate 42594-17-2	LogPow	4.6
	Temperature	
	Method	OECD Guideline 117 (Partition Coefficient (n-octanol / water), HPLC Method)
4,4'-isopropylidenediphenol-, polymer with (chloromethyl)oxirane, acrylate 55818-57-0	LogPow	1.6 - 3.8
	Temperature	23 °C
	Method	OECD Guideline 117 (Partition Coefficient (n-octanol / water), HPLC Method)
Amines, C36-alkylenedi-, maleated 682800-79-9	LogPow	> 4
	Temperature	
	Method	
Trimethylolpropane triacrylate 15625-89-5	LogPow	4.35
	Temperature	20 °C
	Method	QSAR (Quantitative Structure Activity Relationship)
Tert-butyl perbenzoate 614-45-9	LogPow	3.00
	Temperature	25 °C
	Method	OECD Guideline 117 (Partition Coefficient (n-octanol / water), HPLC Method)

Section 13. Disposal considerations

Product

Method of disposal:
Dispose of in accordance with local and national regulations.

Packaging

Disposal of uncleaned packages:
Packaging that cannot be cleaned are to be disposed of in the same manner as the product.

Section 14. Transport information

Road transport ADR:
Not dangerous goods

Railroad transport RID:
Not dangerous goods

Inland water transport ADN:
Not dangerous goods

Marine transport IMDG:
Not dangerous goods

Air transport IATA:
Not dangerous goods

Section 15. Regulatory information

Regulatory Information:
Ministry of Industry Notice. The system to classify and communicate the hazard of hazardous material, BE. 2555

Section 16. Other information

Disclaimer:
This Safety Data Sheet has been generated based on Ministry of Industry Notice. The system to classify and communicate the hazard of hazardous material, BE. 2555 only. No warranty or representation of any kind is given with respect to the substantive or export laws of any other jurisdiction or country. Please confirm that the information provided herein conforms to the substantive export or other law of any other jurisdiction prior to export. Please contact Henkel Product Safety and Regulatory Affairs for additional assistance.
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