SAFETY DATA SHEET

TBPEH

Version	Revision Date:	SDS Number:	Date of last issue: 06/04/2019
3.0	09/18/2019	600000000001	Date of first issue: 09/13/2017

SECTION 1. IDENTIFICATION

Product name	:	TBPEH
Other means of identification	:	No data available

Manufacturer or supplier's details

Company name of supplier	:	United Initiators, Inc.
Address	:	555 Garden Street Elyria OH 44035
Telephone	:	+1-440-323-3112
Telefax	:	+1-440-323-2659
Emergency telephone	:	CHEMTREC US (24h): +1-800-424-9300 CHEMTREC WORLD (24h): +1-703-527-3887
E-mail address of person responsible for the SDS	:	cs-initiators.nafta@united-in.com

Recommended use of the chemical and restrictions on use

Recommended use	:	polymerization initiators

SECTION 2. HAZARDS IDENTIFICATION

GHS classification in accordance with the Hazardous Products Regulations

Flammable liquids	:	Category 4
Organic peroxides	:	Type C
Skin sensitization	:	Category 1
Reproductive toxicity	:	Category 1B
Short-term (acute) aquatic hazard	:	Category 1
Long-term (chronic) aquatic hazard	:	Category 1

GHS label elements

Hazard pictograms :

Signal Word : Danger

Hazard Statements : H227 Combustible liquid.
H242 Heating may cause a fire.
H317 May cause an allergic skin reaction.
H360F May damage fertility.
H410 Very toxic to aquatic life with long lasting effects.

Precautionary Statements :

Prevention:

P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P234 Keep only in original packaging.
P240 Ground and bond container and receiving equipment.
P261 Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray.
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 advice/ attention.
P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention.
P362 + P364 Take off contaminated clothing and wash it before reuse.
P370 + P378 In case of fire: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide to extinguish.
P391 Collect spillage.

Storage:

P403 Store in a well-ventilated place.
P405 Store locked up.
P410 Protect from sunlight.
P411 Store at temperatures not exceeding < 10 °C/ < 50 °F.
P420 Store separately.

Disposal:

P501 Dispose of contents/ container to an approved waste disposal plant.

Other hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Substance

Chemical nature : Organic Peroxide
liquid

Substance name : tert-Butyl 2-ethylperoxyhexanoate

CAS-No. : 3006-82-4

Synonyms : No data available

Components

Chemical name	CAS-No.	Concentration (% w/w)
tert-Butyl 2-ethylperoxyhexanoate	3006-82-4	<= 100

SECTION 4. FIRST AID MEASURES

General advice : Move out of dangerous area.
Show this material safety data sheet to the doctor in attendance.
Do not leave the victim unattended.
Call a physician immediately.

If inhaled : If unconscious, place in recovery position and seek medical advice.
If symptoms persist, call a physician.
If breathed in, move person into fresh air.

In case of skin contact : In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.
Wash contaminated clothing before re-use.
If on skin, rinse well with water.
If on clothes, remove clothes.
If symptoms persist, call a physician.

In case of eye contact : In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
Remove contact lenses.
Protect unharmed eye.
Keep eye wide open while rinsing.
If eye irritation persists, consult a specialist.

If swallowed : Keep respiratory tract clear.
Call a physician immediately.

Most important symptoms and effects, both acute and delayed : May cause an allergic skin reaction.
May damage fertility.

Protection of first-aiders : First Aid responders should pay attention to self-protection and use the recommended protective clothing

Notes to physician : Treat symptomatically and supportively.

SECTION 5. FIRE-FIGHTING MEASURES

Suitable extinguishing media	:	Water spray jet Alcohol-resistant foam Carbon dioxide (CO2) Dry chemical
Unsuitable extinguishing media	:	High volume water jet
Specific hazards during fire fighting	:	Contact with incompatible materials or exposure to temperatures exceeding SADT may result in a self-accelerating decomposition reaction with release of flammable vapors which may auto-ignite. The product burns violently. Flash back possible over considerable distance. Vapors may form explosive mixtures with air. The product will float on water and can be reignited on surface water. Cool closed containers exposed to fire with water spray.
Specific extinguishing methods	:	Do not use a solid water stream as it may scatter and spread fire. Remove undamaged containers from fire area if it is safe to do so. Use water spray to cool unopened containers.
Further information	:	Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Special protective equipment for fire-fighters	:	Wear self-contained breathing apparatus for firefighting if necessary. Use personal protective equipment.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	:	Use personal protective equipment. Remove all sources of ignition. Follow safe handling advice and personal protective equipment recommendations. Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas. Never return spills in original containers for re-use. Treat recovered material as described in the section "Disposal considerations".
Environmental precautions	:	Prevent product from entering drains. Prevent further leakage or spillage if safe to do so. If the product contaminates rivers and lakes or drains inform respective authorities.

Methods and materials for containment and cleaning up	:	Contact with incompatible substances can cause decomposition at or below SADT. Clear spills immediately. Suppress (knock down) gases/vapors/mists with a water spray jet. To clean the floor and all objects contaminated by this material, use plenty of water. Soak up with inert absorbent material. Isolate waste and do not reuse. Non-sparking tools should be used. Local or national regulations may apply to releases and disposal of this material, as well as those materials and items employed in the cleanup of releases. You will need to determine which regulations are applicable.

SECTION 7. HANDLING AND STORAGE

Technical measures	:	See Engineering measures under EXPOSURE CONTROLS/PERSONAL PROTECTION section.
Advice on protection against fire and explosion	:	Keep away from heat and sources of ignition. Use only explosion-proof equipment. Keep away from combustible material.
Advice on safe handling	:	Do not breathe vapors/dust. Avoid exposure - obtain special instructions before use. Avoid contact with skin and eyes. Avoid formation of aerosol. Take precautionary measures against static discharges. Never return any product to the container from which it was originally removed. Provide sufficient air exchange and/or exhaust in work rooms. Avoid confinement. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Smoking, eating and drinking should be prohibited in the application area. Wash thoroughly after handling. For personal protection see section 8. Persons susceptible to skin sensitization problems or asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this mixture is being used. Protect from contamination.
Conditions for safe storage	:	Avoid impurities (e.g. rust, dust, ash), risk of decomposition. Electrical installations / working materials must comply with the technological safety standards. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Store in original container. Keep containers tightly closed in a cool, well-ventilated place. Store in accordance with the particular national regulations.

Materials to avoid	:	Keep away from strong acids, bases, heavy metal salts and other reducing substances.
Recommended storage temperature	:	< 10 °C < 50 °F
Further information on storage stability	:	No decomposition if stored normally.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredients with workplace control parameters

Contains no substances with occupational exposure limit values.

Engineering measures : Minimize workplace exposure concentrations.

Personal protective equipment

Respiratory protection : In the case of dust or aerosol formation use respirator with an approved filter.

Filter type : ABEK-filter

Hand protection

Material	:	butyl-rubber
Break through time	:	>= 480 min
Glove thickness	:	0.5 mm

Remarks : Choose gloves to protect hands against chemicals depending on the concentration and quantity of the hazardous substance and specific to place of work.
For special applications, we recommend clarifying the resistance to chemicals of the aforementioned protective gloves with the glove Wash hands before breaks and at the end of workday.

Eye protection : Tightly fitting safety goggles
Please wear suitable protective goggles. Also wear face protection if there is a splash hazard.
Ensure that eyewash stations and safety showers are close to the workstation location.

Skin and body protection : Select appropriate protective clothing based on chemical resistance data and an assessment of the local exposure potential.

Hygiene measures : Keep away from food and drink.
When using do not eat or drink.

When using do not smoke.
Wash hands before breaks and immediately after handling the product.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	:	liquid
Color	:	colorless
Odor	:	ester-like
Odor Threshold	:	No data available
pH	:	No data available
Melting point/freezing point	:	< -25 °C (1,013 hPa)
Initial boiling point and boiling range	:	Decomposition: Decomposes below the boiling point.
Flash point	:	78 °C Method: ISO 3679
Evaporation rate	:	No data available
Flammability (solid, gas)	:	Not applicable
Upper explosion limit / Upper flammability limit	:	No data available
Lower explosion limit / Lower flammability limit	:	No data available
Vapor pressure	:	0.02 hPa (20 °C)
Relative vapor density	:	No data available
Density	:	0.9 g/cm3 (20 °C)
Solubility(ies) Water solubility	: :	 ca. 0.05 g/l insoluble (20 °C)
Partition coefficient: n-octanol/water	:	log Pow: 4.79 (20 °C)
Self-Accelerating decomposition temperature (SADT)	:	40 °C Method: UN-Test H.4 SADT-Self Accelerating Decomposition Temperature. Lowest temperature at which the tested package size will undergo a self-accelerating decomposition reaction.

Viscosity Viscosity, dynamic	:	3.7 mPa.s (20 °C)
Explosive properties	:	Risk of explosion by shock, friction, fire or other sources of ignition.
Oxidizing properties	:	The substance or mixture is not classified as oxidizing. Organic peroxide
Refractive index	:	1.428 (20 °C)

SECTION 10. STABILITY AND REACTIVITY

Reactivity	:	Stable under recommended storage conditions.
Chemical stability	:	Stable under recommended storage conditions.
Possibility of hazardous reactions	:	Vapors may form explosive mixture with air.
Conditions to avoid	:	Protect from contamination. Contact with incompatible substances can cause decomposition at or below SADT. Heat, flames and sparks. Avoid confinement.
Incompatible materials	:	Accelerators, strong acids and bases, heavy metals and heavy metal salts, reducing agents
Hazardous decomposition products	:	Irritant, caustic, flammable, noxious/toxic gases and vapours can develop in the case of fire and decomposition

SECTION 11. TOXICOLOGICAL INFORMATION

Acute toxicity

Not classified based on available information.

Product:

Acute oral toxicity	:	LD0 (Rat): >= 10,000 mg/kg Method: OECD Test Guideline 401
Acute inhalation toxicity	:	LC50 (Rat): > 42.2 mg/l Exposure time: 4 h Test atmosphere: dust/mist
Acute dermal toxicity	:	LD50 (Rabbit): 16,818 mg/kg Method: OECD Test Guideline 402

Components:

tert-Butyl 2-ethylperoxyhexanoate:

Acute oral toxicity	:	LD0 (Rat): >= 10,000 mg/kg Method: OECD Test Guideline 401
Acute inhalation toxicity	:	LC50 (Rat): > 42.2 mg/l Exposure time: 4 h Test atmosphere: dust/mist
Acute dermal toxicity	:	LD50 (Rabbit): 16,818 mg/kg Method: OECD Test Guideline 402

Skin corrosion/irritation

Not classified based on available information.

Product:

Remarks	:	May cause skin irritation in susceptible persons.
Species	:	Rabbit
Method	:	OECD Test Guideline 404
Result	:	No skin irritation

Components:

tert-Butyl 2-ethylperoxyhexanoate:

Species	:	Rabbit
Method	:	OECD Test Guideline 404
Result	:	No skin irritation

Serious eye damage/eye irritation

Not classified based on available information.

Product:

Species	:	Rabbit
Result	:	No eye irritation
Method	:	OECD Test Guideline 405
Remarks	:	Vapors may cause irritation to the eyes, respiratory system and the skin.

Components:

tert-Butyl 2-ethylperoxyhexanoate:

Species	:	Rabbit
Result	:	No eye irritation
Method	:	OECD Test Guideline 405

Respiratory or skin sensitization

Skin sensitization

May cause an allergic skin reaction.

Respiratory sensitization

Not classified based on available information.

Product:

Remarks : Causes sensitization.

Species : Guinea pig
Method : OECD Test Guideline 406
Result : May cause sensitization by skin contact.

Components:

tert-Butyl 2-ethylperoxyhexanoate:

Species : Guinea pig
Method : OECD Test Guideline 406
Result : May cause sensitization by skin contact.

Germ cell mutagenicity

Not classified based on available information.

Product:

Genotoxicity in vitro : Test Type: Bacterial reverse mutation assay (AMES)
Method: OECD Test Guideline 471
Result: positive

Test Type: In vitro mammalian cell gene mutation test
Method: OECD Test Guideline 476
Result: positive

Genotoxicity in vivo : Species: Mouse
Application Route: Ingestion
Method: OECD Test Guideline 474
Result: negative

Components:

tert-Butyl 2-ethylperoxyhexanoate:

Genotoxicity in vitro : Test Type: Bacterial reverse mutation assay (AMES)
Method: OECD Test Guideline 471
Result: positive

Test Type: In vitro mammalian cell gene mutation test
Method: OECD Test Guideline 476
Result: positive

Genotoxicity in vivo : Species: Mouse
Application Route: Ingestion
Method: OECD Test Guideline 474
Result: negative

Carcinogenicity

Not classified based on available information.

Product:

Remarks : This information is not available.

Components:

tert-Butyl 2-ethylperoxyhexanoate:

Remarks : This information is not available.

Reproductive toxicity

May damage fertility.

Product:

Effects on fertility	:	Test Type: Reproduction/Developmental toxicity screening test Species: Rat Application Route: Oral General Toxicity Parent: NOAEL: 300 mg/kg body weight Method: OECD Test Guideline 421 Test Type: One-generation reproduction toxicity study Species: Rat Application Route: Oral General Toxicity Parent: NOAEL: 300 mg/kg body weight General Toxicity F1: NOAEL: 300 mg/kg body weight Fertility: NOAEL Mating/Fertility: 100 mg/kg body weight Early Embryonic Development: NOAEL F2: 300 mg/kg body weight Method: OECD Test Guideline 443 GLP: yes
Effects on fetal development	:	Species: Rat Application Route: Oral Embryo-fetal toxicity.: NOAEL Mating/Fertility: 1,000 mg/kg body weight Method: OECD Test Guideline 414
Reproductive toxicity - Assessment	:	Clear evidence of adverse effects on sexual function and fertility, based on animal experiments.

Components:

tert-Butyl 2-ethylperoxyhexanoate:

Effects on fertility	:	Test Type: Reproduction/Developmental toxicity screening test Species: Rat Application Route: Oral General Toxicity Parent: NOAEL: 300 mg/kg body weight Method: OECD Test Guideline 421 Test Type: One-generation reproduction toxicity study Species: Rat Application Route: Oral General Toxicity Parent: NOAEL: 300 mg/kg body weight General Toxicity F1: NOAEL: 300 mg/kg body weight Fertility: NOAEL Mating/Fertility: 100 mg/kg body weight Early Embryonic Development: NOAEL F2: 300 mg/kg body weight

		Method: OECD Test Guideline 443 GLP: yes
Effects on fetal development	:	Species: Rat Application Route: Oral Embryo-fetal toxicity.: NOAEL Mating/Fertility: 1,000 mg/kg body weight Method: OECD Test Guideline 414
Reproductive toxicity - Assessment	:	Clear evidence of adverse effects on sexual function and fertility, based on animal experiments.

STOT-single exposure

Not classified based on available information.

Product:

Remarks : No data available

Components:

tert-Butyl 2-ethylperoxyhexanoate:

Remarks : No data available

STOT-repeated exposure

Not classified based on available information.

Product:

Remarks : No data available

Components:

tert-Butyl 2-ethylperoxyhexanoate:

Remarks : No data available

Repeated dose toxicity

Product:

Species	:	Rat, male
NOAEL	:	316 mg/kg
Exposure time	:	28 d
Method	:	OECD Test Guideline 407
Species	:	Rat, female
NOAEL	:	100 mg/kg
Exposure time	:	28 d
Method	:	OECD Test Guideline 407
Species	:	Rat
NOAEL	:	450 mg/kg
Method	:	OECD Test Guideline 408

Components:

tert-Butyl 2-ethylperoxyhexanoate:

Species	:	Rat, male
NOAEL	:	316 mg/kg
Exposure time	:	28 d
Method	:	OECD Test Guideline 407
Species	:	Rat, female
NOAEL	:	100 mg/kg
Exposure time	:	28 d
Method	:	OECD Test Guideline 407
Species	:	Rat
NOAEL	:	450 mg/kg
Method	:	OECD Test Guideline 408

Aspiration toxicity

Not classified based on available information.

Further information

Product:

Remarks : No data available

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Components:

tert-Butyl 2-ethylperoxyhexanoate:

Toxicity to fish	:	LC50 (Oncorhynchus mykiss (rainbow trout)): 8.66 mg/l Exposure time: 96 h Method: OECD Test Guideline 203 NOEC (Poecilia reticulata (guppy)): 2.10 mg/l Exposure time: 96 h Method: OECD Test Guideline 203
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia magna (Water flea)): 7.5 mg/l Exposure time: 48 h Method: OECD Test Guideline 202
Toxicity to algae	:	EC50 (Pseudokirchneriella subcapitata (green algae)): 0.44 mg/l Exposure time: 72 h Method: OECD Test Guideline 201 NOEC (Pseudokirchneriella subcapitata (green algae)): 0.018 mg/l Exposure time: 72 h Method: OECD Test Guideline 201

M-Factor (Acute aquatic toxicity)	:	1
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)	:	NOEC (Daphnia magna (Water flea)): 0.45 mg/l Exposure time: 21 d Method: OECD Test Guideline 211 LOEC (Daphnia magna (Water flea)): 0.87 mg/l Exposure time: 21 d Method: OECD Test Guideline 211
M-Factor (Chronic aquatic toxicity)	:	1
Toxicity to microorganisms	:	EC50: 64 mg/l Exposure time: 0.5 h Method: OECD Test Guideline 209

Ecotoxicology Assessment

Acute aquatic toxicity	:	Very toxic to aquatic life.
Chronic aquatic toxicity	:	Very toxic to aquatic life with long lasting effects.

Persistence and degradability

Components:

tert-Butyl 2-ethylperoxyhexanoate:

Biodegradability	:	Result: Biodegradable Method: OECD Test Guideline 301D

Bioaccumulative potential

Components:

tert-Butyl 2-ethylperoxyhexanoate:

Partition coefficient: n-octanol/water	:	log Pow: 4.79 (20 °C)

Mobility in soil

No data available

Other adverse effects

Product:

Additional ecological information	:	An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Very toxic to aquatic life with long lasting effects.

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

Waste from residues : The product should not be allowed to enter drains, water courses or the soil.
Do not contaminate ponds, waterways or ditches with chemical or used container.
Dispose of wastes in an approved waste disposal facility.

Contaminated packaging : Empty remaining contents.
Dispose of as unused product.
Do not re-use empty containers.
Do not burn, or use a cutting torch on, the empty drum.
Dispose of in accordance with local regulations.

SECTION 14. TRANSPORT INFORMATION

International Regulations

UNRTDG

UN number	:	UN 3113
Proper shipping name	:	ORGANIC PEROXIDE TYPE C, LIQUID, TEMPERATURE CONTROLLED (tert-BUTYL PEROXY-2-ETHYLHEXANOATE)
Class	:	5.2
Packing group	:	Not assigned by regulation
Labels	:	5.2

IATA-DGR

Not permitted for transport

IMDG-Code

UN number	:	UN 3113
Proper shipping name	:	ORGANIC PEROXIDE TYPE C, LIQUID, TEMPERATURE CONTROLLED (tert-BUTYL PEROXY-2-ETHYLHEXANOATE)
Class	:	5.2
Packing group	:	Not assigned by regulation
Labels	:	5.2
EmS Code	:	F-F, S-R
Marine pollutant	:	yes

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

Not applicable for product as supplied.

Domestic regulation

TDG

UN number	:	UN 3113
Proper shipping name	:	ORGANIC PEROXIDE TYPE C, LIQUID, TEMPERATURE CONTROLLED (tert-BUTYL PEROXY-2-ETHYLHEXANOATE)
Class	:	5.2
Packing group	:	II
Labels	:	5.2

ERG Code : 148
Marine pollutant : yes

Special precautions for user

Additional advice:

Temperature controlled transport.:
Control temperature : 20 °C
Emergency temperature : 25 °C

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

SECTION 15. REGULATORY INFORMATION

The ingredients of this product are reported in the following inventories:

DSL (CA)	:	All components of this product are on the Canadian DSL
AICS (AU)	:	On the inventory, or in compliance with the inventory
NZIoC (NZ)	:	On the inventory, or in compliance with the inventory
ENCS (JP)	:	On the inventory, or in compliance with the inventory
ISHL (JP)	:	On the inventory, or in compliance with the inventory
KECI (KR)	:	On the inventory, or in compliance with the inventory
PICCS (PH)	:	On the inventory, or in compliance with the inventory
IECSC (CN)	:	On the inventory, or in compliance with the inventory
TCSI (TW)	:	On the inventory, or in compliance with the inventory
TSCA (US)	:	On TSCA Inventory

Canadian lists

No substances are subject to a Significant New Activity Notification.

SECTION 16. OTHER INFORMATION

Full text of other abbreviations

AICS - Australian Inventory of Chemical Substances; ANTT - National Agency for Transport by Land of Brazil; ASTM - American Society for the Testing of Materials; bw - Body weight; CMR - Carcinogen, Mutagen or Reproductive Toxicant; CPR - Controlled Products Regulations; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; ELx - Loading rate associated with x% re-

sponse; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; Nch - Chilean Norm; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NOM - Official Mexican Norm; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TDG - Transportation of Dangerous Goods; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative; WHMIS - Workplace Hazardous Materials Information System

This material safety datasheet only contains information relating to safety and does not replace any product information or product specification.
These safety instructions also apply to empty packaging which may still contain product residues.

Sources of key data used to compile the Material Safety Data Sheet	:	Internal technical data, data from raw material SDSs, OECD eChem Portal search results and European Chemicals Agency, http://echa.europa.eu/
Revision Date	:	09/18/2019

The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

CA / Z8