

SAFETY DATA SHEET



DTBP

Version	Revision Date:	SDS Number:	Date of last issue: 2018/03/16
2.0	2020/10/23	600000000009	Date of first issue: 2017/03/30

1. PRODUCT AND COMPANY IDENTIFICATION

Product name : DTBP
CAS-No. : 110-05-4

Recommended use of the chemical and restrictions on use

Recommended use : polymerisation initiators

Manufacturer or supplier's details


Company : United Initiators GmbH
Address : Dr.-Gustav-Adolph-Str. 3
82049 Pullach
Telephone : +49 / 89 / 74422 – 0
Emergency telephone number : +49 / 89 / 74422 – 0 (24 h)
E-mail address : contact@united-in.com

2. HAZARDS IDENTIFICATION

GHS Classification

Flammable liquids : Category 2
Organic peroxides : Type E
Germ cell mutagenicity : Category 2
Long-term (chronic) aquatic hazard : Category 3

GHS label elements

Hazard pictograms : 

Signal word : Danger

Hazard statements : H225 Highly flammable liquid and vapour.
H242 Heating may cause a fire.
H341 Suspected of causing genetic defects.
H412 Harmful to aquatic life with long lasting effects.

SAFETY DATA SHEET

DTBP



Version 2.0 Revision Date: 2020/10/23 SDS Number: 600000000009 Date of last issue: 2018/03/16
Date of first issue: 2017/03/30

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/sparks/open flames/hot surfaces. No smoking.
P220 Keep/Store away from clothing/ strong acids, bases, heavy metal salts and other reducing substances /combustible materials.
P233 Keep container tightly closed.
P234 Keep only in original container.
P240 Ground/bond container and receiving equipment.
P241 Use explosion-proof electrical/ ventilating/ lighting equipment.
P242 Use only non-sparking tools.
P243 Take precautionary measures against static discharge.
P273 Avoid release to the environment.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

Response:

P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P308 + P313 IF exposed or concerned: Get medical advice/ attention.
P370 + P378 In case of fire: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide to extinguish.

Storage:

P405 Store locked up.
P410 Protect from sunlight.
P411 + P235 Store at temperatures not exceeding < 40 °C/ < 104 °F. Keep cool.
P420 Store away from other materials.

Disposal:

P501 Dispose of contents and container according to wastes control act.

Other hazards which do not result in classification

No data available

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Substance
Chemical nature : Organic Peroxide liquid

Components

Chemical name	Common	CAS-No.	Concentration (%)
---------------	--------	---------	-------------------

SAFETY DATA SHEET



DTBP

Version 2.0 Revision Date: 2020/10/23 SDS Number: 600000000009 Date of last issue: 2018/03/16
Date of first issue: 2017/03/30

	Name		w/w)
Di-tert-butyl peroxide	Di-tert-butyl peroxide	110-05-4	<= 100

4. FIRST AID MEASURES

- General advice : Move out of dangerous area.
Show this safety data sheet to the doctor in attendance.
Do not leave the victim unattended.
Call a physician immediately.
- 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.
- In case of skin contact : Wash contaminated clothing before re-use.
If on skin, rinse well with water.
If on clothes, remove clothes.
If symptoms persist, call a physician.
- 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.
- If swallowed : Keep respiratory tract clear.
Call a physician immediately.
- Most important symptoms and effects, both acute and delayed : Suspected of causing genetic defects.
- 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.
-

5. FIREFIGHTING MEASURES

Suitable and unsuitable extinguishing media

- Suitable extinguishing media : Water spray jet
Alcohol-resistant foam
Carbon dioxide (CO₂)
Dry chemical
- Unsuitable extinguishing media : High volume water jet
-

SAFETY DATA SHEET

DTBP



Version	Revision Date:	SDS Number:	Date of last issue: 2018/03/16
2.0	2020/10/23	600000000009	Date of first issue: 2017/03/30

- 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.
Vapours 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 : 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.

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.
- Special protective equipment for firefighters : Wear self-contained breathing apparatus for firefighting if necessary.
Use personal protective equipment.

6. ACCIDENTAL RELEASE MEASURES

- Personal precautions, protective equipment and emergency procedures : Use personal protective equipment.
Ensure adequate ventilation.
Remove all sources of ignition.
Evacuate personnel to safe areas.
Follow safe handling advice and personal protective equipment recommendations.
Beware of vapours accumulating to form explosive concentrations. Vapours 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/vapours/mists with a water

SAFETY DATA SHEET

DTBP



Version	Revision Date:	SDS Number:	Date of last issue: 2018/03/16
2.0	2020/10/23	600000000009	Date of first issue: 2017/03/30

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.

7. HANDLING AND STORAGE

- Technical measures : See Engineering measures under EXPOSURE CONTROLS/PERSONAL PROTECTION section.
- Advice on protection against fire and explosion : Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapours).
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 vapours/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.
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 : < 40 °C

SAFETY DATA SHEET



DTBP

Version	Revision Date:	SDS Number:	Date of last issue: 2018/03/16
2.0	2020/10/23	600000000009	Date of first issue: 2017/03/30

perature

Further information on storage stability : No decomposition if stored normally.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Contains no substances with occupational exposure limit values.

Engineering measures : Minimize workplace exposure concentrations.

Personal protective equipment. Among the following personal protective equipment, the PPEs which require safety certification need to be certified by KOSHA.

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

Filter type : ABEK-filter

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.

Hand protection

Material : Nitrile rubber
Break through time : 480 min
Glove thickness : 0.4 mm

Material : butyl-rubber
Break through time : 120 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 manufacturer. Wash hands before breaks and at the end of workday.

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

SAFETY DATA SHEET



DTBP

Version 2.0 Revision Date: 2020/10/23 SDS Number: 600000000009 Date of last issue: 2018/03/16
Date of first issue: 2017/03/30

the product.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : liquid

Colour : colourless

Odour : aromatic

Odour Threshold : No data available

pH : No data available

Melting point/freezing point : < -25 °C

Boiling point/boiling range : Decomposition: Decomposes below the boiling point.

Flash point : 0 °C
Method: ISO 3679, closed cup

Evaporation rate : No data available

Flammability (solid, gas) : Not applicable

Flammability (liquids) : Highly flammable

Upper explosion limit / Upper flammability limit : Upper explosion limit
100 %(V)
(45 °C)

Lower explosion limit / Lower flammability limit : Lower explosion limit
0.74 %(V)

Vapour pressure : 35 hPa (20 °C)

Solubility(ies)
Water solubility : 0.171 g/l practically insoluble (20 °C)
pH: 8.1

Relative vapour density : No data available

Density : 0.79 g/cm³ (20 °C)

Partition coefficient: n-octanol/water : log Pow: 3.2 (22 °C)

Self-Accelerating decomposi- : 80 °C

SAFETY DATA SHEET



DTBP

Version	Revision Date:	SDS Number:	Date of last issue: 2018/03/16
2.0	2020/10/23	600000000009	Date of first issue: 2017/03/30

tion temperature (SADT)	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	: 0.8 mPa.s (20 °C)
Explosive properties	: Not explosive
Oxidizing properties	: The substance or mixture is not classified as oxidizing. Organic peroxide

10. STABILITY AND REACTIVITY

Chemical stability and possibility of hazardous reactions	: Stable under recommended storage conditions. Stable under recommended storage conditions. Vapours 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

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure : No data available

Health hazard information

Acute toxicity

Product:

Acute oral toxicity	: LD50 (Rat, female): > 2,000 mg/kg Method: OECD Test Guideline 423 Assessment: The substance or mixture has no acute oral toxicity
Acute inhalation toxicity	: LC50 (Rat, male and female): > 22 mg/l Exposure time: 4 h Test atmosphere: vapour Method: OECD Test Guideline 436

SAFETY DATA SHEET



DTBP

Version	Revision Date:	SDS Number:	Date of last issue: 2018/03/16
2.0	2020/10/23	600000000009	Date of first issue: 2017/03/30

Assessment: The substance or mixture has no acute inhalation toxicity

Acute dermal toxicity : LD50 (Rat, male and female): > 2,000 mg/kg
Method: OECD Test Guideline 402
Assessment: The substance or mixture has no acute dermal toxicity

Components:

Di-tert-butyl peroxide:

Acute oral toxicity : LD50 (Rat, female): > 2,000 mg/kg
Method: OECD Test Guideline 423
Assessment: The substance or mixture has no acute oral toxicity

Acute inhalation toxicity : LC50 (Rat, male and female): > 22 mg/l
Exposure time: 4 h
Test atmosphere: vapour
Method: OECD Test Guideline 436
Assessment: The substance or mixture has no acute inhalation toxicity

Acute dermal toxicity : LD50 (Rat, male and female): > 2,000 mg/kg
Method: OECD Test Guideline 402
Assessment: The substance or mixture has no acute dermal toxicity

Skin corrosion/irritation

Product:

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

Components:

Di-tert-butyl peroxide:

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

Serious eye damage/eye irritation

Product:

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

SAFETY DATA SHEET



DTBP

Version	Revision Date:	SDS Number:	Date of last issue: 2018/03/16
2.0	2020/10/23	600000000009	Date of first issue: 2017/03/30

Components:

Di-tert-butyl peroxide:

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

Respiratory or skin sensitisation

Product:

Test Type : Buehler Test
Species : Guinea pig
Method : OECD Test Guideline 406
Result : Does not cause skin sensitisation.

Components:

Di-tert-butyl peroxide:

Test Type : Buehler Test
Species : Guinea pig
Method : OECD Test Guideline 406
Result : Does not cause skin sensitisation.

Carcinogenicity

Product:

Remarks : Not classified due to data which are conclusive although insufficient for classification.

Components:

Di-tert-butyl peroxide:

Remarks : Not classified due to data which are conclusive although insufficient for classification.

Germ cell mutagenicity

Suspected of causing genetic defects.

Product:

Genotoxicity in vitro : Test Type: Ames test
Test system: Salmonella typhimurium
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 471
Result: negative

Genotoxicity in vivo : Test Type: In vivo micronucleus test
Species: Mouse (male and female)
Method: OECD Test Guideline 474
Result: positive

SAFETY DATA SHEET



DTBP

Version 2.0 Revision Date: 2020/10/23 SDS Number: 600000000009 Date of last issue: 2018/03/16
Date of first issue: 2017/03/30

Germ cell mutagenicity- Assessment : Positive result(s) from in vivo mammalian somatic cell mutagenicity tests.

Components:

Di-tert-butyl peroxide:

Genotoxicity in vitro : Test Type: Ames test
Test system: Salmonella typhimurium
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 471
Result: negative

Genotoxicity in vivo : Test Type: In vivo micronucleus test
Species: Mouse (male and female)
Method: OECD Test Guideline 474
Result: positive

Germ cell mutagenicity- Assessment : Positive result(s) from in vivo mammalian somatic cell mutagenicity tests.

Reproductive toxicity

Product:

Effects on foetal development : Species: Rat, female
Application Route: Oral
General Toxicity Maternal: NOAEL: 1,000 mg/kg body weight
Method: OECD Test Guideline 414

Species: Rat, male and female
Application Route: Oral
General Toxicity Maternal: NOEL: 1,000 mg/kg body weight
Symptoms: No effects on reproduction parameters, No effects on foetal development
Method: OECD Test Guideline 422

Components:

Di-tert-butyl peroxide:

Effects on fertility : Species: Rat, male and female
Application Route: Oral
General Toxicity F1: NOEL: 1,000 mg/kg body weight
Symptoms: No effects on reproduction parameters, No effects on foetal development
Method: OECD Test Guideline 422
Result: No effects on reproduction parameters

Effects on foetal development : Species: Rat, female
Application Route: Oral
General Toxicity Maternal: NOAEL: 1,000 mg/kg body weight
Method: OECD Test Guideline 414

SAFETY DATA SHEET

DTBP



Version 2.0 Revision Date: 2020/10/23 SDS Number: 600000000009 Date of last issue: 2018/03/16
Date of first issue: 2017/03/30

Species: Rat, male and female
Application Route: Oral
General Toxicity Maternal: NOEL: 1,000 mg/kg body weight
Symptoms: No effects on reproduction parameters, No effects on foetal development
Method: OECD Test Guideline 422

STOT - single exposure

Product:

Remarks : Not classified due to data which are conclusive although insufficient for classification.

Components:

Di-tert-butyl peroxide:

Remarks : Not classified due to data which are conclusive although insufficient for classification.

STOT - repeated exposure

Product:

Remarks : Not classified due to data which are conclusive although insufficient for classification.

Components:

Di-tert-butyl peroxide:

Remarks : Not classified due to data which are conclusive although insufficient for classification.

Repeated dose toxicity

Product:

Species : Rat, male and female
NOAEL : 100 mg/kg
LOAEL : 300 mg/kg
Application Route : Oral
Exposure time : 28 d
Method : OECD Test Guideline 422

Species : Rat, male and female
NOAEC : 993 mg/m³
Application Route : Inhalation
Test atmosphere : vapour
Exposure time : 90 d
Method : OECD Test Guideline 413

SAFETY DATA SHEET



DTBP

Version	Revision Date:	SDS Number:	Date of last issue: 2018/03/16
2.0	2020/10/23	600000000009	Date of first issue: 2017/03/30

Components:

Di-tert-butyl peroxide:

Species : Rat, male and female
NOAEL : 100 mg/kg
LOAEL : 300 mg/kg
Application Route : Oral
Exposure time : 28 d
Method : OECD Test Guideline 422

Species : Rat, male and female
NOAEC : 993 mg/m³
Application Route : Inhalation
Test atmosphere : vapour
Exposure time : 90 d
Method : OECD Test Guideline 413

Aspiration toxicity

Product:

Not classified due to data which are conclusive although insufficient for classification.

Components:

Di-tert-butyl peroxide:

Not classified due to data which are conclusive although insufficient for classification.

Experience with human exposure

No data available

Toxicology, Metabolism, Distribution

No data available

Neurological effects

No data available

Further information

Product:

Remarks : Solvents may degrease the skin.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Product:

Toxicity to fish : LC50 (Poecilia reticulata (guppy)): > 1,000 mg/l
Exposure time: 96 h
Remarks: Expert judgement
No toxicity at the limit of solubility

SAFETY DATA SHEET



DTBP

Version	Revision Date:	SDS Number:	Date of last issue: 2018/03/16
2.0	2020/10/23	600000000009	Date of first issue: 2017/03/30

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): > 73.1 mg/l
Exposure time: 48 h
Method: OECD Test Guideline 202

Toxicity to algae/aquatic plants : EC50 (Pseudokirchneriella subcapitata (green algae)): 36 mg/l
End point: Growth rate
Exposure time: 72 h
Method: OECD Test Guideline 201

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC (Daphnia magna (Water flea)): 7.2 mg/l
Exposure time: 21 d
Method: OECD Test Guideline 211

Toxicity to microorganisms : EC50 (Bacteria): 1,000 mg/l
Exposure time: 0.5 h
Method: OECD Test Guideline 209

Ecotoxicology Assessment

Acute aquatic toxicity : Harmful to aquatic life.

Chronic aquatic toxicity : Harmful to aquatic life with long lasting effects.

Components:

Di-tert-butyl peroxide:

Toxicity to fish : LC50 (Poecilia reticulata (guppy)): > 1,000 mg/l
Exposure time: 96 h
Remarks: Expert judgement
No toxicity at the limit of solubility

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 73.1 mg/l
Exposure time: 48 h
Method: OECD Test Guideline 202

Toxicity to algae/aquatic plants : EC50 (Pseudokirchneriella subcapitata (green algae)): 36 mg/l
Exposure time: 72 h
Method: OECD Test Guideline 201

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC (Daphnia magna (Water flea)): 7.2 mg/l
Exposure time: 21 d
Method: OECD Test Guideline 211

Toxicity to microorganisms : EC50 (Bacteria): 1,000 mg/l
Exposure time: 0.5 h
Method: OECD Test Guideline 209

Ecotoxicology Assessment

Acute aquatic toxicity : Harmful to aquatic life.

Chronic aquatic toxicity : Harmful to aquatic life with long lasting effects.

SAFETY DATA SHEET



DTBP

Version	Revision Date:	SDS Number:	Date of last issue: 2018/03/16
2.0	2020/10/23	600000000009	Date of first issue: 2017/03/30

Persistence and degradability

Product:

Biodegradability : Result: Not readily biodegradable.
Method: OECD Test Guideline 301D

Components:

Di-tert-butyl peroxide:

Biodegradability : Result: Not readily biodegradable.
Method: OECD Test Guideline 301D

Bioaccumulative potential

Components:

Di-tert-butyl peroxide:

Partition coefficient: n-octanol/water : log Pow: 3.2 (22 °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.
Harmful to aquatic life with long lasting effects.

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.

Disposal precautions

Dispose of contents and container according to wastes control act.

SAFETY DATA SHEET



DTBP

Version	Revision Date:	SDS Number:	Date of last issue: 2018/03/16
2.0	2020/10/23	600000000009	Date of first issue: 2017/03/30

14. TRANSPORT INFORMATION

International Regulations

UNRTDG

UN number : UN 3107
Proper shipping name : ORGANIC PEROXIDE TYPE E, LIQUID
(DI-tert-BUTYL PEROXIDE)
Class : 5.2
Packing group : Not assigned by regulation
Labels : 5.2

IATA-DGR

UN/ID No. : UN 3107
Proper shipping name : Organic peroxide type E, liquid
(Di-tert-Butyl peroxide)
Class : 5.2
Packing group : Not assigned by regulation
Labels : Division 5.2 - Organic peroxides, Handling Label - Keep Away
From Heat
Packing instruction (cargo aircraft) : 570
Packing instruction (passenger aircraft) : 570

IMDG-Code

UN number : UN 3107
Proper shipping name : ORGANIC PEROXIDE TYPE E, LIQUID
(DI-tert-BUTYL PEROXIDE)
Class : 5.2
Packing group : Not assigned by regulation
Labels : 5.2
EmS Code : F-J, S-R
Marine pollutant : no

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

Not applicable for product as supplied.

National Regulations

Refer to section 15 for specific national regulation.

Special precautions for user

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.

SAFETY DATA SHEET



DTBP

Version	Revision Date:	SDS Number:	Date of last issue: 2018/03/16
2.0	2020/10/23	600000000009	Date of first issue: 2017/03/30

15. REGULATORY INFORMATION

National regulatory information

Regulation under the Occupational Safety and Health Act

Harmful Substances Prohibited from Manufacturing

Not applicable

Harmful Substances Required Permission for Manufacture

Not applicable

Harmful Agents to be kept below Occupational Exposure Limits

Not applicable

Harmful Agents Required to be kept below Permission Levels

Not applicable

Hazardous substances requiring management

Not applicable

Special Management Materials

Not applicable

Controlled Substances Subject to Environment Monitoring

Not applicable

Controlled Substances Subject to Health Examination

Not applicable

Regulation under the Chemicals Control Act

Toxic Chemicals

Not applicable

Restricted Chemicals

Not applicable

Prohibited Chemicals

Not applicable

Toxic Release Inventory

Not applicable

Accident Precaution Chemicals

Not applicable

Dangerous Substances Safety Management Act

Classification : Group 5, Self-reactive substances, Organic peroxides

Hazard rank : Hazardous rank I

Designated Quantity : 10 kilogram

Safety Warning : Be careful with shock, Keep away from fire

SAFETY DATA SHEET



DTBP

Version	Revision Date:	SDS Number:	Date of last issue: 2018/03/16
2.0	2020/10/23	600000000009	Date of first issue: 2017/03/30

Wastes Control Act

Industrial waste
Follow article 13 of the act to dispose the product waste

Other requirements in domestic and other countries

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

TCSI (TW)	:	On the inventory, or in compliance with the inventory
TSCA (US)	:	All substances listed as active on the TSCA inventory
AICS (AU)	:	On the inventory, or in compliance with the inventory
DSL (CA)	:	All components of this product are on the Canadian DSL
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
NZIoC (NZ)	:	On the inventory, or in compliance with the inventory

16. OTHER INFORMATION

Further information

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

Issuing date : 2017/03/30

Revision number and date

Number of Revision : 2.0

Revision Date : 2020/10/23

Other information : This safety datasheet only contains information relating to

SAFETY DATA SHEET



DTBP

Version	Revision Date:	SDS Number:	Date of last issue: 2018/03/16
2.0	2020/10/23	600000000009	Date of first issue: 2017/03/30

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.

Date format : yyyy/mm/dd

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; 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% response; 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

The information provided in this 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.

KR / EN