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

#### 1.1 Product identifier

: TBPND Trade name

REACH Registration Number : 01-2119948628-22-0000

Substance name : tert-Butyl peroxyneodecanoate

EC-No. : 247-955-1

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

Use of the Sub-: polymerisation initiators

stance/Mixture

#### 1.3 Details of the supplier of the safety data sheet

Company : United Initiators GmbH

Dr.-Gustav-Adolph-Str. 3

82049 Pullach

Telephone : +49 / 89 / 74422 - 0

E-mail address of person

responsible for the SDS

: contact@united-in.com

#### 1.4 Emergency telephone number

+44 1235 239670

#### **SECTION 2: Hazards identification**

### 2.1 Classification of the substance or mixture

# Classification (REGULATION (EC) No 1272/2008) as amended by GB-CLP Regulation, UK SI 2019/720, and UK SI 2020/1567)

Organic peroxides, Type D H242: Heating may cause a fire.

Skin irritation, Category 2 H315: Causes skin irritation.

Skin sensitisation, Category 1 H317: May cause an allergic skin reaction.

Short-term (acute) aquatic hazard, Cate-

gory 1

H400: Very toxic to aquatic life.

Long-term (chronic) aquatic hazard, Cat-H411: Toxic to aquatic life with long lasting effects.

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#### 2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008) as amended by GB-CLP Regulation, UK SI 2019/720, and UK SI 2020/1567)

Hazard pictograms :







Signal word : Danger

Hazard statements : H242 Heating may cause a fire.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H410 Very toxic to aquatic life with long lasting effects.

Precautionary statements : Prevention:

P210 Keep away from heat, hot surfaces, sparks, open

flames and other ignition sources. No smoking.

P234 Keep only in original packaging. P273 Avoid release to the environment.

P280 Wear protective gloves/ protective clothing/ eye

protection/ face protection/ hearing protection.

Response:

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.

P411 Store at temperatures not exceeding -5 °C.

#### 2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

### **SECTION 3: Composition/information on ingredients**

### 3.1 Substances

Substance name : tert-Butyl peroxyneodecanoate

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Chemical nature : Organic Peroxide

liquid

#### Components

Chemical name	CAS-No.	Concentration (% w/w)
	EC-No.	
tert-Butyl peroxyneodeca-	26748-41-4	>= 95 - <= 100
noate	247-955-1	

#### **SECTION 4: First aid measures**

### 4.1 Description of first aid measures

General advice : Take off contaminated clothing and shoes immediately.

Call a physician immediately.

Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and seek medical

advice.

Move out of dangerous area.

Show this safety data sheet to the doctor in attendance.

Do not leave the victim unattended.

Protection of first-aiders : First Aid responders should pay attention to self-protection

and use the recommended protective clothing

If inhaled : Administer oxygen if breathing is difficult or cyanosis is ob-

served.

If breathed in, move person into fresh air. If not breathing, give artificial respiration.

If unconscious, place in recovery position and seek medical

advice.

If symptoms persist, call a physician.

In case of skin contact : If symptoms persist, call a physician.

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.

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.

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If swallowed : Call a physician immediately.

Rinse mouth thoroughly with water.

Keep respiratory tract clear.

If symptoms persist, call a physician.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms : sensitising effects

Risks : Causes skin irritation.

May cause an allergic skin reaction.

4.3 Indication of any immediate medical attention and special treatment needed

Treatment : Treat symptomatically and supportively.

### **SECTION 5: Firefighting measures**

#### 5.1 Extinguishing media

Suitable extinguishing media : Water spray jet

Alcohol-resistant foam Carbon dioxide (CO2)

Dry chemical

Unsuitable extinguishing

media

High volume water jet

#### 5.2 Special hazards arising from the substance or mixture

Specific hazards during fire-

fighting

Risk of explosion if heated under confinement.

Possible emission of gaseous decomposition products may

lead to a dangerous pressure build-up.

Avoid confinement.

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.

Do not allow run-off from fire fighting to enter drains or water

courses.

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.

#### 5.3 Advice for firefighters

Special protective equipment : Wear self-contained breathing apparatus for firefighting if nec-

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for firefighters essary. Use personal protective equipment.

Specific extinguishing meth-

ods

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 : Use extinguishing measures that are appropriate to local cir-

cumstances and the surrounding environment. Use a water spray to cool fully closed containers.

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.

#### **SECTION 6: Accidental release measures**

#### 6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : Follow safe handling advice and personal protective equip-

ment recommendations.

Beware of vapours accumulating to form explosive concentra-

tions. Vapours can accumulate in low areas.

Use personal protective equipment. Remove all sources of ignition.

Never return spills in original containers for re-use.

Treat recovered material as described in the section "Disposal

considerations".

#### 6.2 Environmental precautions

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.

#### 6.3 Methods and material for containment and cleaning up

Methods for cleaning up : Contact with incompatible substances can cause decomposi-

tion at or below SADT. Clear spills immediately.

Suppress (knock down) gases/vapours/mists with a water

spray jet.

To clean the floor and all objects contaminated by this materi-

al, 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

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employed in the cleanup of releases. You will need to deter-

mine which regulations are applicable.

#### 6.4 Reference to other sections

See sections: 7, 8, 11, 12 and 13.

# **SECTION 7: Handling and storage**

### 7.1 Precautions for safe handling

Technical measures : See Engineering measures under EXPOSURE

CONTROLS/PERSONAL PROTECTION section.

Advice on safe handling : Open drum carefully as content may be under pressure.

Protect from contamination.

Do not swallow.

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 ap-

plication area.

Wash thoroughly after handling. For personal protection see section 8.

Persons susceptible to skin sensitisation problems or asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this mixture is being

used.

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 open flames, hot surfaces and sources of ignition. Keep away from combustible material. Do not spray on a naked flame or any incandescent material.

Hygiene measures : Avoid contact with skin, eyes and clothing. 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.

#### 7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage : Store in original container. Keep containers tightly closed in a

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cool, well-ventilated place. Store in cool place. Keep in a wellareas and containers

ventilated place. Contamination may result in dangerous pressure increases - closed containers may rupture. Observe label precautions. Store in accordance with the particular national regulations. 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.

Keep away from combustible materials. Advice on common storage

Keep away from strong acids, bases, heavy metal salts and

other reducing substances.

Recommended storage tem: :

perature

< -10 °C

age stability

Further information on stor- : Stable under recommended storage conditions.

7.3 Specific end use(s)

Specific use(s) For further information, refer to the product technical data

sheet.

### **SECTION 8: Exposure controls/personal protection**

### 8.1 Control parameters

Contains no substances with occupational exposure limit values.

### **Derived No Effect Level (DNEL):**

Substance name	End Use	Exposure routes	Potential health effects	Value
tert-Butyl peroxy- neodecanoate	Workers	Inhalation	Long-term systemic effects	2.5 mg/m3
	Workers	Skin contact	Long-term systemic effects	7 mg/kg bw/day

# **Predicted No Effect Concentration (PNEC):**

Substance name	Environmental Compartment	Value
tert-Butyl peroxyneodecanoate	Fresh water	0.001 mg/l
	Marine water	0.0 mg/l
	Sewage treatment plant	96.69 mg/l
	Fresh water sediment	0.439 mg/kg dry
		weight (d.w.)
	Marine sediment	0.044 mg/kg dry
		weight (d.w.)
	Soil	0.087 mg/kg dry
		weight (d.w.)

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#### 8.2 Exposure controls

#### **Engineering measures**

Minimize workplace exposure concentrations.

#### Personal protective equipment

Eye/face protection : Ensure that eyewash stations and safety showers are close to

the workstation location.

Please follow all applicable local/national requirements when selecting protective measures for a specific workplace.

Always wear eye protection when the potential for inadvertent

eye contact with the product cannot be excluded.

Tightly fitting safety goggles

Please wear suitable protective goggles. Also wear face pro-

tection if there is a splash hazard.

Hand protection

Material : Nitrile rubber
Break through time : 480 min
Glove thickness : 0.40 mm

Remarks : The data about break through time/strength of material are

standard values! The exact break through time/strength of material has to be obtained from the producer of the protective glove. 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 re-

sistance data and an assessment of the local exposure poten-

tial.

Additional body garments should be used based upon the task being performed (e.g., sleevelets, apron, gauntlets, disposable

suits) to avoid exposed skin surfaces.

Wear as appropriate:

Flame retardant antistatic protective clothing.

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

approved filter.

Filter type : ABEK-filter

Protective measures : The type of protective equipment must be selected according

to the concentration and amount of the dangerous substance

at the specific workplace.

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### **SECTION 9: Physical and chemical properties**

9.1 Information on basic physical and chemical properties

Appearance : liquid

Colour : colourless

Odour : ester-like

Odour Threshold : No data available

pH : substance/mixture is non-soluble (in water)

Melting point/ range : < -20 °C

Initial boiling point and boiling

range

Decomposition: Decomposes below the boiling point.

Flash point : 62 °C

Method: closed cup Decomposition

Evaporation rate : No data available

Upper explosion limit / Upper

flammability limit

not determined

Lower explosion limit / Lower

flammability limit

not determined

Vapour pressure : 0.53 hPa (65 °C)

Relative vapour density : No data available

Relative density : not determined

Density : 0.898 g/cm3 (20 °C)

Solubility(ies)

Water solubility : 0.009 g/l insoluble (0 °C)

Auto-ignition temperature : not determined

Decomposition

Viscosity

Viscosity, dynamic : 6.3 mPa.s (20 °C)

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Viscosity, kinematic : not determined

Explosive properties : Not explosive

In use, may form flammable/explosive vapour-air mixture.

Oxidizing properties : The substance or mixture is not classified as oxidizing.

Organic peroxide

9.2 Other information

Self-Accelerating decomposi-

tion temperature (SADT)

15 °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.

Flammability (liquids) : Flammable liquid

Remarks: Organic peroxide

Self-heating substances : The substance or mixture is not classified as self heating.

Refractive index : 1.437 at 20 °C

Self-ignition : The substance or mixture is not classified as pyrophoric.

#### **SECTION 10: Stability and reactivity**

# 10.1 Reactivity

Stable under recommended storage conditions.

Heating may cause a fire or explosion.

#### 10.2 Chemical stability

Stable under recommended storage conditions.

No decomposition if stored normally.

# 10.3 Possibility of hazardous reactions

Hazardous reactions : Vapours may form explosive mixture with air.

10.4 Conditions to avoid

Conditions to avoid : Protect from contamination.

Contact with incompatible substances can cause decomposi-

tion at or below SADT. Heat, flames and sparks. Avoid confinement.

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#### 10.5 Incompatible materials

Materials to avoid : Accelerators, strong acids and bases, heavy metals and

heavy metal salts, reducing agents

#### 10.6 Hazardous decomposition products

Irritant, caustic, flammable, noxious/toxic gases and vapours can develop in the case of fire and decomposition

#### **SECTION 11: Toxicological information**

### 11.1 Information on toxicological effects

#### **Acute toxicity**

Based on available data, the classification criteria are not met.

**Product:** 

Acute oral toxicity : LD50 (Rat, male and female): 8,082 mg/kg

Method: OECD Test Guideline 401 Remarks: The value is calculated

Acute inhalation toxicity : LC50 (Rat, male and female): 37.5 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist

Method: OECD Test Guideline 403 Remarks: The value is calculated

Acute dermal toxicity : LD50 (Rabbit, male and female): > 6,000 mg/kg

Method: OECD Test Guideline 402 Remarks: The value is calculated

# **Components:**

### tert-Butyl peroxyneodecanoate:

Acute oral toxicity : LD50 (Rat, male and female): 8,082 mg/kg

Method: OECD Test Guideline 401 Remarks: The value is calculated

Acute inhalation toxicity : LC50 (Rat, male and female): 37.5 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist

Method: OECD Test Guideline 403 Remarks: The value is calculated

Acute dermal toxicity : LD50 (Rabbit, male and female): > 6,000 mg/kg

Method: OECD Test Guideline 402 Remarks: The value is calculated

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#### Skin corrosion/irritation

Causes skin irritation.

Product:

Species : Rabbit

Method : OECD Test Guideline 404

Result : Skin irritation

Remarks : May cause skin irritation in susceptible persons.

#### **Components:**

#### tert-Butyl peroxyneodecanoate:

Species : Rabbit

Method : OECD Test Guideline 404

Result : Skin irritation

#### Serious eye damage/eye irritation

Based on available data, the classification criteria are not met.

**Product:** 

Species : Rabbit

Method : OECD Test Guideline 405

Result : No eye irritation

Remarks : Vapours may cause irritation to the eyes, respiratory system

and the skin.

#### **Components:**

### tert-Butyl peroxyneodecanoate:

Species : Rabbit

Method : OECD Test Guideline 405

Result : No eye irritation

#### Respiratory or skin sensitisation

# Skin sensitisation

May cause an allergic skin reaction.

#### Respiratory sensitisation

Not classified due to lack of data.

**Product:** 

Species : Guinea pig

Method : OECD Test Guideline 406

Result : May cause sensitisation by skin contact.

Remarks : Causes sensitisation.

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#### **Components:**

# tert-Butyl peroxyneodecanoate:

Species : Guinea pig

Method : OECD Test Guideline 406

Result : May cause sensitisation by skin contact.

#### Germ cell mutagenicity

Not classified due to lack of data.

**Product:** 

Genotoxicity in vitro : Test Type: Bacterial reverse mutation assay (AMES)

Test system: Escherichia coli Method: OECD Test Guideline 471

Result: positive

Test Type: In vitro mammalian cell gene mutation test

Test system: Chinese hamster ovary cells

Method: OECD Test Guideline 476

Result: negative

Genotoxicity in vivo : Test Type: In vivo micronucleus test

Species: Mouse (male and female)
Application Route: Intraperitoneal injection

Method: OECD Test Guideline 474

Result: negative

### **Components:**

#### tert-Butyl peroxyneodecanoate:

Genotoxicity in vitro : Test Type: Bacterial reverse mutation assay (AMES)

Test system: Escherichia coli Method: OECD Test Guideline 471

Result: positive

Test Type: In vitro mammalian cell gene mutation test

Test system: Chinese hamster ovary cells

Method: OECD Test Guideline 476

Result: negative

Genotoxicity in vivo : Test Type: In vivo micronucleus test

Species: Mouse (male and female)
Application Route: Intraperitoneal injection

Method: OECD Test Guideline 474

Result: negative

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#### Carcinogenicity

Not classified due to lack of data.

Product:

Remarks : This information is not available.

**Components:** 

tert-Butyl peroxyneodecanoate:

Remarks : This information is not available.

Reproductive toxicity

Not classified due to lack of data.

**Product:** 

Effects on fertility : Test Type: Combined repeated dose toxicity study with the

reproduction/developmental toxicity screening test

Species: Rat

Application Route: Oral

General Toxicity - Parent: NOAEL: 60 mg/kg body weight General Toxicity F1: NOAEL: 60 mg/kg body weight Fertility: NOAEL Mating/Fertility: 200 mg/kg body weight

Method: OECD Test Guideline 422

Effects on foetal develop-

ment

Test Type: Combined repeated dose toxicity study with the

reproduction/developmental toxicity screening test

Species: Rat Strain: wistar

Application Route: Oral

General Toxicity Maternal: NOAEL: 60 mg/kg body weight

Teratogenicity: NOAEL: 200 mg/kg body weight

Developmental Toxicity: NOAEL: 60 mg/kg body weight

Method: OECD Test Guideline 414

**Components:** 

tert-Butyl peroxyneodecanoate:

Effects on fertility : Test Type: Combined repeated dose toxicity study with the

reproduction/developmental toxicity screening test

Species: Rat

**Application Route: Oral** 

General Toxicity - Parent: NOAEL: 60 mg/kg body weight General Toxicity F1: NOAEL: 60 mg/kg body weight Fertility: NOAEL Mating/Fertility: 200 mg/kg body weight

Method: OECD Test Guideline 422

Effects on foetal develop-

ment

Test Type: Combined repeated dose toxicity study with the

reproduction/developmental toxicity screening test

Species: Rat

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Strain: wistar

**Application Route: Oral** 

General Toxicity Maternal: NOAEL: 60 mg/kg body weight

Teratogenicity: NOAEL: 200 mg/kg body weight

Developmental Toxicity: NOAEL: 60 mg/kg body weight

Method: OECD Test Guideline 414

### STOT - single exposure

Not classified due to lack of data.

#### STOT - repeated exposure

Not classified due to lack of data.

#### Repeated dose toxicity

#### **Product:**

Species : Rat, male and female

NOAEL : 160 mg/kg Application Route : Oral Exposure time : 90 d

Method : OECD Test Guideline 408

Remarks : Based on data from similar materials

### **Components:**

#### tert-Butyl peroxyneodecanoate:

Species : Rat, male and female

NOAEL : 160 mg/kg Application Route : Oral Exposure time : 90 d

Method : OECD Test Guideline 408

Remarks : Based on data from similar materials

### **Aspiration toxicity**

Not classified due to lack of data.

#### **Product:**

No data available

### **Components:**

#### tert-Butyl peroxyneodecanoate:

No data available

#### **Further information**

#### **Product:**

Remarks : No data available

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### **SECTION 12: Ecological information**

#### 12.1 Toxicity

**Product:** 

Toxicity to fish LC50 (Danio rerio (zebra fish)): 0.33 mg/l

> Exposure time: 96 h Test Type: semi-static test

Method: OECD Test Guideline 203

NOEC (Danio rerio (zebra fish)): 0.24 mg/l

Exposure time: 96 h Test Type: semi-static test

Method: OECD Test Guideline 203

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): 0.79 mg/l

Exposure time: 48 h Test Type: static test

Method: OECD Test Guideline 202

NOEC (Daphnia magna (Water flea)): 0.381 mg/l

Exposure time: 48 h Test Type: static test

Method: OECD Test Guideline 202

Toxicity to algae/aquatic

plants

ErC50 (Pseudokirchneriella subcapitata (green algae)): 0.48

mg/l

Exposure time: 72 h

Method: OECD Test Guideline 201

NOEC (Pseudokirchneriella subcapitata (green algae)): 0.03

mg/l

Exposure time: 72 h

Method: OECD Test Guideline 201

Toxicity to daphnia and other : aquatic invertebrates (Chron-

ic toxicity)

NOEC: 0.049 mg/l Exposure time: 21 d

Species: Daphnia magna (Water flea) Method: OECD Test Guideline 211

EC50 : > 1,000 mg/lToxicity to microorganisms

Exposure time: 3 h

Test Type: Respiration inhibition of activated sludge

Method: OECD Test Guideline 209

#### **Components:**

#### tert-Butyl peroxyneodecanoate:

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Toxicity to fish LC50 (Danio rerio (zebra fish)): 0.33 mg/l

> Exposure time: 96 h Test Type: semi-static test

Method: OECD Test Guideline 203

NOEC (Danio rerio (zebra fish)): 0.24 mg/l

Exposure time: 96 h Test Type: semi-static test

Method: OECD Test Guideline 203

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): 0.79 mg/l

Exposure time: 48 h Test Type: static test

Method: OECD Test Guideline 202

NOEC (Daphnia magna (Water flea)): 0.381 mg/l

Exposure time: 48 h Test Type: static test

Method: OECD Test Guideline 202

Toxicity to algae/aquatic

plants

ErC50 (Pseudokirchneriella subcapitata (green algae)): 0.48

mg/l

End point: Growth rate Exposure time: 72 h

Method: OECD Test Guideline 201

M-Factor (Acute aquatic tox- : 1

icity)

: EC50 : > 1,000 mg/l Toxicity to microorganisms

Exposure time: 3 h

Test Type: Respiration inhibition of activated sludge

Method: OECD Test Guideline 209

Toxicity to daphnia and other aquatic invertebrates (Chron-

ic toxicity)

NOEC: 0.049 mg/l Exposure time: 21 d

Species: Daphnia magna (Water flea) Method: OECD Test Guideline 211

12.2 Persistence and degradability

**Product:** 

Biodegradability Test Type: aerobic

Result: rapidly biodegradable

Exposure time: 28 d

Method: OECD Test Guideline 301D

**Components:** 

tert-Butyl peroxyneodecanoate:

According to REACH Regulation (EC) No 1907/2006, as amended by UK REACH Regulations SI 2019/758



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Biodegradability : Test Type: aerobic

Result: rapidly biodegradable

Exposure time: 28 d

Method: OECD Test Guideline 301D

#### 12.3 Bioaccumulative potential

No data available

### 12.4 Mobility in soil

No data available

# 12.5 Results of PBT and vPvB assessment

#### **Product:**

Assessment : This substance/mixture contains no components considered

to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of

0.1% or higher.

#### 12.6 Other adverse effects

#### **Product:**

Endocrine disrupting poten-

tial

: The substance/mixture does not contain components considered to have endocrine disrupting properties according to

REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at

levels of 0.1% or higher.

Additional ecological infor-

mation

An environmental hazard cannot be excluded in the event of

unprofessional handling or disposal.

Very toxic to aquatic life.

Toxic to aquatic life with long lasting effects.

#### **SECTION 13: Disposal considerations**

#### 13.1 Waste treatment methods

Product : Dispose of wastes in an approved waste disposal facility.

The product should not be allowed to enter drains, water

courses or the soil.

Do not contaminate ponds, waterways or ditches with chemi-

cal or used container.

Contaminated packaging : Dispose of in accordance with local regulations.

Clean container with water.

Dispose of contents/ container to an approved waste disposal

plant.

Empty remaining contents.

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Dispose of as unused product. Do not re-use empty containers.

Do not burn, or use a cutting torch on, the empty drum.

### **SECTION 14: Transport information**

14.1 UN number

**ADR** : UN 3115 **RID** : UN 3115

Not permitted for transport

IMDG : UN 3115 IATA : UN 3115

Not permitted for transport

14.2 UN proper shipping name

**ADR** : ORGANIC PEROXIDE TYPE D, LIQUID, TEMPERATURE

CONTROLLED

(tert-BUTYL PEROXYNEODECANOATE)

RID : ORGANIC PEROXIDE TYPE D, LIQUID, TEMPERATURE

CONTROLLED

Not permitted for transport

IMDG : ORGANIC PEROXIDE TYPE D, LIQUID, TEMPERATURE

CONTROLLED

(tert-BUTYL PEROXYNEODECANOATE)

iata : Organic Peroxide Type D, Liquid, Temperature

CONTROLLED

Not permitted for transport

14.3 Transport hazard class(es)

Class Subsidiary risks

**ADR** : 5.2

RID : Not permitted for transport

**IMDG** : 5.2

IATA : Not permitted for transport

14.4 Packing group

**ADR** 

Packing group : Not assigned by regulation

Classification Code : P2 Labels : 5.2 Tunnel restriction code : (D)

RID : Not permitted for transport

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**IMDG** 

Packing group : Not assigned by regulation

Labels : 5.2 EmS Code : F-F, S-R

IATA (Cargo) : Not permitted for transport
IATA (Passenger) : Not permitted for transport

14.5 Environmental hazards

**ADR** 

Environmentally hazardous : yes

RID : Not permitted for transport

**IMDG** 

Marine pollutant : yes

14.6 Special precautions for user

**Additional advice** 

Temperature controlled transport.:

Control temperature : -5 °C

Emergency temperature : 5 °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.

### 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable for product as supplied.

#### **SECTION 15: Regulatory information**

# 15.1 Safety, health and environmental regulations/legislation specific for the substance or mix-

Relevant EU provisions transposed through retained EU law

UK REACH List of restrictions (Annex 17) : Conditions of restriction for the fol-

lowing entries should be considered:

Number on list 3

UK REACH Candidate list of substances of very high

concern (SVHC) for Authorisation

: Not applicable

The Persistent Organic Pollutants Regulations (retained Regulation (EU) 2019/1021 as amended for Great Brit-

ain)

Not applicable

Regulation (EC) on substances that deplete the ozone

layer

: Not applicable

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UK REACH List of substances subject to authorisation Not applicable

(Annex XIV)

GB Export and import of hazardous chemicals - Prior Not applicable

Informed Consent (PIC) Regulation

Control of Major Accident Hazards Regulations P6b SELF-REACTIVE SUBSTANCES 2015 (COMAH)

AND MIXTURES and ORGANIC

**PEROXIDES** 

E1 **ENVIRONMENTAL HAZARDS** 

### Other regulations:

Take note of The Management of Health and Safety at Work Regulations 1999 (requirements relating to protection of young people at work contained in Regulation 19) and of Directive 94/33/EC on the protection of young people at work.

#### 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

AIIC (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

TECI (TH) On the inventory, or in compliance with the inventory

### 15.2 Chemical safety assessment

A Chemical Safety Assessment has been carried out for this substance. For further information see eSDS.

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#### **SECTION 16: Other information**

#### Full text of other abbreviations

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - Agreement concerning the International Carriage of Dangerous Goods by Road: AIIC - Australian Inventory of Industrial Chemicals: ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA -European Chemicals Agency; EC-Number - European Community number; 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; 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; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; 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; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; SVHC - Substance of very high concern; TCSI - Taiwan Chemical Substance Inventory; TECI -Thailand Existing Chemicals Inventory; 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

#### **Further information**

Other information

This 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.

The hazards on the label also apply to residues in the con-

tainer.

Sources of key data used to : Internal technical data, data from raw material SDSs, OECD

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compile the Safety Data eChem Portal search results and European Chemicals Agen-

Sheet cy, http://echa.europa.eu/

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.

GB/EN