

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended by
Commission Regulation (EU) 2020/878



TBPND-75-AL

Version	Revision Date:	SDS Number:	Date of last issue: 07.03.2023
4.0	02.01.2024	600000000248	Date of first issue: 17.03.2016

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

1.1 Product identifier

Trade name : TBPND-75-AL

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

Use of the Sub-
stance/Mixture : polymerisation initiators

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)

Flammable liquids, Category 3	H226: Flammable liquid and vapour.
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.
Aspiration hazard, Category 1	H304: May be fatal if swallowed and enters airways.
Short-term (acute) aquatic hazard, Category 1	H400: Very toxic to aquatic life.
Long-term (chronic) aquatic hazard, Category 2	H411: Toxic to aquatic life with long lasting effects.

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended by
Commission Regulation (EU) 2020/878



TBPND-75-AL

Version	Revision Date:	SDS Number:	Date of last issue: 07.03.2023
4.0	02.01.2024	600000000248	Date of first issue: 17.03.2016

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms	:	
Signal word	:	Danger
Hazard statements	:	H226 Flammable liquid and vapour. H242 Heating may cause a fire. H304 May be fatal if swallowed and enters airways. 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: P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor. P331 Do NOT induce vomiting. P370 + P378 In case of fire: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide to extinguish. P391 Collect spillage. Storage: P411 Store at temperatures not exceeding 0 °C.

Hazardous components which must be listed on the label:

tert-Butyl peroxyneodecanoate (CAS-No. 26748-41-4)
2,2,4,6,6-pentamethylheptane (CAS-No. 13475-82-6)

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.

Ecological information: 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.

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended by
Commission Regulation (EU) 2020/878



TBPND-75-AL

Version	Revision Date:	SDS Number:	Date of last issue: 07.03.2023
4.0	02.01.2024	600000000248	Date of first issue: 17.03.2016

Do not leave the victim unattended.
Symptoms of poisoning may appear several hours later.
No artificial respiration, mouth-to-mouth or mouth to nose. Use
suitable instruments/apparatus.

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.
Call a physician or poison control centre immediately.
If unconscious, place in recovery position and seek medical
advice.
Keep respiratory tract clear.

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.

If swallowed : Call a physician immediately.
Contact a poison control center.
Rinse mouth thoroughly with water.
Keep respiratory tract clear.
Do NOT induce vomiting.
If symptoms persist, call a physician.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms : sensitising effects

Risks : May be fatal if swallowed and enters airways.
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.

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended by
Commission Regulation (EU) 2020/878



TBPND-75-AL

Version	Revision Date:	SDS Number:	Date of last issue: 07.03.2023
4.0	02.01.2024	600000000248	Date of first issue: 17.03.2016

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

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 : Use extinguishing measures that are appropriate to local circumstances 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.

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended by
Commission Regulation (EU) 2020/878



TBPND-75-AL

Version	Revision Date:	SDS Number:	Date of last issue: 07.03.2023
4.0	02.01.2024	600000000248	Date of first issue: 17.03.2016

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : Follow safe handling advice and personal protective equipment recommendations.
Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.
Use personal protective equipment.
Ensure adequate ventilation.
Remove all sources of ignition.
Evacuate personnel to safe areas.
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 decomposition 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 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.

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.

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended by
Commission Regulation (EU) 2020/878



TBPND-75-AL

Version	Revision Date:	SDS Number:	Date of last issue: 07.03.2023
4.0	02.01.2024	60000000248	Date of first issue: 17.03.2016

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 application 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 areas and containers : Store in original container. Keep containers tightly closed in a cool, well-ventilated place. Store in cool 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.
- Advice on common storage : Keep away from strong acids, bases, heavy metal salts and other reducing substances.
Keep away from combustible materials.
- Recommended storage temperature : < -10 °C

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended by
Commission Regulation (EU) 2020/878



TBPND-75-AL

Version 4.0 Revision Date: 02.01.2024 SDS Number: 600000000248 Date of last issue: 07.03.2023
Date of first issue: 17.03.2016

perature

Further information on storage stability : 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) according to Regulation (EC) No. 1907/2006:

Substance name	End Use	Exposure routes	Potential health effects	Value
tert-Butyl peroxyneodecanoate	Workers	Inhalation	Long-term systemic effects	2.5 mg/m ³
	Workers	Skin contact	Long-term systemic effects	7 mg/kg bw/day

Predicted No Effect Concentration (PNEC) according to Regulation (EC) No. 1907/2006:

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.)

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 protection if there is a splash hazard.

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended by
Commission Regulation (EU) 2020/878



TBPND-75-AL

Version	Revision Date:	SDS Number:	Date of last issue: 07.03.2023
4.0	02.01.2024	600000000248	Date of first issue: 17.03.2016

Equipment should conform to EN 166

Hand protection

Material : Nitrile rubber
Break through time : 480 min
Glove thickness : 0.40 mm
Directive : Equipment should conform to EN 374

Material : butyl-rubber
Break through time : 60 min
Glove thickness : 0.47 mm
Directive : Equipment should conform to EN 374

Directive : Equipment should conform to EN 374

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 resistance data and an assessment of the local exposure potential.
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.
Respirator with combination filter for vapour/particulate (EN 141)

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.

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended by
Commission Regulation (EU) 2020/878



TBPND-75-AL

Version	Revision Date:	SDS Number:	Date of last issue: 07.03.2023
4.0	02.01.2024	600000000248	Date of first issue: 17.03.2016

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state	:	liquid
Colour	:	colourless
Odour	:	ester-like
Odour Threshold	:	not determined
Melting point/range	:	< -25 °C
Boiling point/boiling range	:	Decomposition: Decomposes below the boiling point.
Flammability	:	Not applicable
Upper explosion limit / Upper flammability limit	:	Upper explosion limit 4 %(V) (for a component of this mixture)
Lower explosion limit / Lower flammability limit	:	Lower explosion limit 0.5 %(V) (for a component of this mixture)
Flash point	:	50 °C Method: ISO 3679, closed cup
Auto-ignition temperature	:	not determined
Self-Accelerating decomposition temperature (SADT)	:	20 °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.
pH	:	substance/mixture is non-soluble (in water)
Viscosity	:	

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended by
Commission Regulation (EU) 2020/878



TBPND-75-AL

Version	Revision Date:	SDS Number:	Date of last issue: 07.03.2023
4.0	02.01.2024	600000000248	Date of first issue: 17.03.2016

Viscosity, dynamic : 4 mPa.s (20 °C)

Viscosity, kinematic : not determined

Solubility(ies)

Water solubility : insoluble

Solubility in other solvents : No data available

Partition coefficient: n-octanol/water : Not applicable

Vapour pressure : not determined

Relative density : not determined

Density : 0.86 g/cm³ (20 °C)

Relative vapour density : not determined

9.2 Other information

Explosives : Not explosive
In use, may form flammable/explosive vapour-air mixture.

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

Flammability (liquids) : Flammable liquid and vapour., Organic peroxide

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

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

Substances and mixtures, which in contact with water, emit flammable gases : The substance or mixture does not emit flammable gases in contact with water.

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended by
Commission Regulation (EU) 2020/878



TBPND-75-AL

Version	Revision Date:	SDS Number:	Date of last issue: 07.03.2023
4.0	02.01.2024	600000000248	Date of first issue: 17.03.2016

Desensitised explosives : Not applicable

Refractive index : 1.433 at 20 °C

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

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 hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity

Not classified due to lack of data.

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended by
Commission Regulation (EU) 2020/878



TBPND-75-AL

Version	Revision Date:	SDS Number:	Date of last issue: 07.03.2023
4.0	02.01.2024	600000000248	Date of first issue: 17.03.2016

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

2,2,4,6,6-pentamethylheptane:

- Acute oral toxicity : LD50 (Rat): > 5,000 mg/kg
Method: OECD Test Guideline 401
Assessment: The substance or mixture has no acute oral toxicity
Remarks: Based on data from similar materials
- Acute inhalation toxicity : Remarks: No data available
- Acute dermal toxicity : LD50 Dermal (Rabbit): > 5,000 mg/kg
Method: OECD Test Guideline 402

Skin corrosion/irritation

Causes skin irritation.

Product:

- Remarks : May cause skin irritation in susceptible persons.

Components:

tert-Butyl peroxyneodecanoate:

- Species : Rabbit
Method : OECD Test Guideline 404
Result : Skin irritation

2,2,4,6,6-pentamethylheptane:

- Result : Repeated exposure may cause skin dryness or cracking.

Serious eye damage/eye irritation

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

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended by
Commission Regulation (EU) 2020/878



TBPND-75-AL

Version	Revision Date:	SDS Number:	Date of last issue: 07.03.2023
4.0	02.01.2024	600000000248	Date of first issue: 17.03.2016

Product:

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

2,2,4,6,6-pentamethylheptane:

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:

Remarks : Causes sensitisation.

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.

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

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended by
Commission Regulation (EU) 2020/878



TBPND-75-AL

Version	Revision Date:	SDS Number:	Date of last issue: 07.03.2023
4.0	02.01.2024	600000000248	Date of first issue: 17.03.2016

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

2,2,4,6,6-pentamethylheptane:

Germ cell mutagenicity- Assessment : No known effect.

Carcinogenicity

Not classified due to lack of data.

Components:

tert-Butyl peroxyneodecanoate:

Remarks : This information is not available.

2,2,4,6,6-pentamethylheptane:

Carcinogenicity - Assessment : No known effect.

Reproductive toxicity

Not classified due to lack of data.

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 development : 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

2,2,4,6,6-pentamethylheptane:

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended by
Commission Regulation (EU) 2020/878



TBPND-75-AL

Version	Revision Date:	SDS Number:	Date of last issue: 07.03.2023
4.0	02.01.2024	600000000248	Date of first issue: 17.03.2016

Reproductive toxicity - Assessment : No known effect.

STOT - single exposure

Not classified due to lack of data.

STOT - repeated exposure

Not classified due to lack of data.

Repeated dose toxicity

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

May be fatal if swallowed and enters airways.

Components:

tert-Butyl peroxyneodecanoate:

No data available

2,2,4,6,6-pentamethylheptane:

May be fatal if swallowed and enters airways.

11.2 Information on other hazards

Endocrine disrupting properties

Product:

Assessment : 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.

Further information

Product:

Remarks : Solvents may degrease the skin.

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended by
Commission Regulation (EU) 2020/878



TBPND-75-AL

Version	Revision Date:	SDS Number:	Date of last issue: 07.03.2023
4.0	02.01.2024	600000000248	Date of first issue: 17.03.2016

Components:

2,2,4,6,6-pentamethylheptane:

Remarks : May cause headache and dizziness.

SECTION 12: Ecological information

12.1 Toxicity

Components:

tert-Butyl peroxyneodecanoate:

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 toxicity)	:	1
Toxicity to microorganisms	:	EC50 : > 1,000 mg/l Exposure time: 3 h Test Type: Respiration inhibition of activated sludge Method: OECD Test Guideline 209
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)	:	NOEC: 0.049 mg/l Exposure time: 21 d Species: Daphnia magna (Water flea) Method: OECD Test Guideline 211

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended by
Commission Regulation (EU) 2020/878



TBPND-75-AL

Version	Revision Date:	SDS Number:	Date of last issue: 07.03.2023
4.0	02.01.2024	600000000248	Date of first issue: 17.03.2016

2,2,4,6,6-pentamethylheptane:

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia (water flea)): > 0.04 mg/l
Exposure time: 48 h
Remarks: Information given is based on data obtained from similar substances.

Toxicity to algae/aquatic plants : IC50 (algae): > 0.04 mg/l
Exposure time: 72 h
Remarks: Information given is based on data obtained from similar substances.

Ecotoxicology Assessment

Acute aquatic toxicity : This product has no known ecotoxicological effects.

Chronic aquatic toxicity : May cause long lasting harmful effects to aquatic life.

12.2 Persistence and degradability

Components:

tert-Butyl peroxyneodecanoate:

Biodegradability : Test Type: aerobic
Result: rapidly biodegradable
Exposure time: 28 d
Method: OECD Test Guideline 301D

2,2,4,6,6-pentamethylheptane:

Biodegradability : Result: Not readily biodegradable.

12.3 Bioaccumulative potential

Components:

2,2,4,6,6-pentamethylheptane:

Partition coefficient: n-octanol/water : log Pow: 5.94 - 6.16 (20 °C)
Remarks: The value is calculated

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.

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended by
Commission Regulation (EU) 2020/878



TBPND-75-AL

Version	Revision Date:	SDS Number:	Date of last issue: 07.03.2023
4.0	02.01.2024	600000000248	Date of first issue: 17.03.2016

12.6 Endocrine disrupting properties

Product:

Assessment : 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.

12.7 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.
Very toxic to aquatic life with long lasting effects.
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 chemical or used container.

According to the European Waste Catalogue, Waste Codes are not product specific, but application specific.
Waste codes should be assigned by the user, preferably in discussion with the waste disposal authorities.

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.
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 or ID number

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended by
Commission Regulation (EU) 2020/878



TBPND-75-AL

Version 4.0 Revision Date: 02.01.2024 SDS Number: 600000000248 Date of last issue: 07.03.2023
Date of first issue: 17.03.2016

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
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

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended by
Commission Regulation (EU) 2020/878



TBPND-75-AL

Version	Revision Date:	SDS Number:	Date of last issue: 07.03.2023
4.0	02.01.2024	600000000248	Date of first issue: 17.03.2016

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 : 0 °C

Emergency temperature : 10 °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 Maritime transport in bulk according to IMO instruments

Not applicable for product as supplied.

SECTION 15: Regulatory information

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

REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles (Annex XVII) : Conditions of restriction for the following entries should be considered: Number on list 3

REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59). : Not applicable

Regulation (EC) No 1005/2009 on substances that deplete the ozone layer : Not applicable

Regulation (EU) 2019/1021 on persistent organic pollutants (recast) : Not applicable

Regulation (EC) No 649/2012 of the European Parliament and the Council concerning the export and import of dangerous chemicals : Not applicable

REACH - List of substances subject to authorisation : Not applicable

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended by
Commission Regulation (EU) 2020/878



TBPND-75-AL

Version	Revision Date:	SDS Number:	Date of last issue: 07.03.2023
4.0	02.01.2024	600000000248	Date of first issue: 17.03.2016

(Annex XIV)

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances.

P6b SELF-REACTIVE SUBSTANCES AND MIXTURES and ORGANIC PEROXIDES

E1 ENVIRONMENTAL HAZARDS

Other regulations:

Gefahrgruppe nach TRGS 741: Ia (German regulatory requirements)

Take note of Directive 94/33/EC on the protection of young people at work or stricter national regulations, where applicable.

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

TCSI (TW) : 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

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

This information is not available.

SECTION 16: Other information

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

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended by
Commission Regulation (EU) 2020/878



TBPND-75-AL

Version	Revision Date:	SDS Number:	Date of last issue: 07.03.2023
4.0	02.01.2024	600000000248	Date of first issue: 17.03.2016

may still contain product residues.
The hazards on the label also apply to residues in the container.

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/>

Classification of the mixture:

Flam. Liq. 3	H226
Org. Perox. D	H242
Skin Irrit. 2	H315
Skin Sens. 1	H317
Asp. Tox. 1	H304
Aquatic Acute 1	H400
Aquatic Chronic 2	H411

Classification procedure:

Based on product data or assessment
Based on product data or assessment
Calculation method

Full text of H-Statements

H226	: Flammable liquid and vapour.
H242	: Heating may cause a fire.
H304	: May be fatal if swallowed and enters airways.
H315	: Causes skin irritation.
H317	: May cause an allergic skin reaction.
H400	: Very toxic to aquatic life.
H411	: Toxic to aquatic life with long lasting effects.
H413	: May cause long lasting harmful effects to aquatic life.
EUH066	: Repeated exposure may cause skin dryness or cracking.

Full text of other abbreviations

Aquatic Acute	: Short-term (acute) aquatic hazard
Aquatic Chronic	: Long-term (chronic) aquatic hazard
Asp. Tox.	: Aspiration hazard
Flam. Liq.	: Flammable liquids
Org. Perox.	: Organic peroxides
Skin Irrit.	: Skin irritation
Skin Sens.	: Skin sensitisation

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - Agreement concerning the International Carriage of Dangerous Goods by Road; AIIIC - 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 La-

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended by
Commission Regulation (EU) 2020/878



TBPND-75-AL

Version	Revision Date:	SDS Number:	Date of last issue: 07.03.2023
4.0	02.01.2024	600000000248	Date of first issue: 17.03.2016

boratory 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; TECl - Thailand Existing Chemicals Inventory; TRGS - Technical Rule for Hazardous Substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative

Disclaimer

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.

IE / EN