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

1.1 Product identifier

Trade name: TMCH-90-WO

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

Use of the Substance/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

+49 / 89 / 74422 – 0 (24 h)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

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

Long-term (chronic) aquatic hazard, Category 4
H413: May cause long lasting harmful effects to aquatic life.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms:

Signal word: Danger

Hazard statements:

H242 Heating may cause a fire.
H413 May cause long lasting harmful effects to aquatic life.
Precautionary statements:

**Prevention:**
P220 Keep/Store away from clothing/ strong acids, bases, heavy metal salts and other reducing substances /combustible materials.
P233 Keep container tightly closed.
P235 Keep cool.
P273 Avoid release to the environment.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

**Response:**
P370 + P378 In case of fire: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide to extinguish.

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

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

3.2 Mixtures

Chemical nature: Organic Peroxide

Liquid mixture

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS-No.</th>
<th>Classification</th>
<th>Concentration (% w/w)</th>
</tr>
</thead>
</table>

For explanation of abbreviations see section 16.

SECTION 4: First aid measures

4.1 Description of 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.

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

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

In case of skin contact:
Wash contaminated clothing before re-use.
If on skin, rinse well with water.
If on clothes, remove clothes.
If symptoms persist, call a physician.

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

If swallowed:
Keep respiratory tract clear.

4.2 Most important symptoms and effects, both acute and delayed
None known.

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 firefighting:
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.

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:
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.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions:
Use personal protective equipment.
Remove all sources of ignition.
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".

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
For personal protection see section 8.

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: 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.

Advice on protection against fire and explosion: Keep away from heat and sources of ignition. Use only explosion-proof equipment. Keep away from combustible material.

Hygiene measures: Keep away from food and drink. When using do not eat or drink. When using do not smoke. Wash hands before breaks and immediately after handling the product.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers: 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.
Advice on common storage: Keep away from strong acids, bases, heavy metal salts and other reducing substances.

Recommended storage temperature: < 30 °C

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

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

Occupational Exposure Limits

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS-No.</th>
<th>Value type (Form of exposure)</th>
<th>Control parameters</th>
<th>Basis</th>
</tr>
</thead>
<tbody>
<tr>
<td>White mineral oil (petroleum)</td>
<td>8042-47-5</td>
<td>OELV - 8 hrs (TWA) (inhalable fraction)</td>
<td>5 mg/m3</td>
<td>IE OEL</td>
</tr>
<tr>
<td>Further information</td>
<td>Where no specific short-term exposure limit is listed, a figure three times the long-term exposure limit value should be used</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OELV - 8 hrs (TWA) (inhalable fraction)</td>
<td>0.2 mg/m3</td>
<td>IE OEL</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Further information</td>
<td>Where no specific short-term exposure limit is listed, a figure three times the long-term exposure limit value should be used</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Derived No Effect Level (DNEL) according to Regulation (EC) No. 1907/2006:

<table>
<thead>
<tr>
<th>Substance name</th>
<th>End Use</th>
<th>Exposure routes</th>
<th>Potential health effects</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>di-tert-butyl 3,3,5-trimethylcyclohexyldene diperoxide</td>
<td>Workers</td>
<td>Inhalation</td>
<td>Long-term systemic effects</td>
<td>0.1 mg/m3</td>
</tr>
<tr>
<td></td>
<td>Workers</td>
<td>Skin contact</td>
<td>Long-term systemic effects</td>
<td>0.13 mg/kg bw/day</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Substance name</th>
<th>Environmental Compartment</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>di-tert-butyl 3,3,5-trimethylcyclohexyldene diperoxide</td>
<td>Fresh water</td>
<td>0.00021 mg/l</td>
</tr>
<tr>
<td></td>
<td>Marine water</td>
<td>0.00021 mg/l</td>
</tr>
<tr>
<td></td>
<td>Intermittent use/release</td>
<td>0.00021 mg/l</td>
</tr>
</tbody>
</table>
8.2 Exposure controls

Engineering measures
Minimize workplace exposure concentrations.

Personal protective equipment

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: butyl-rubber
- Break through time: >= 480 min
- Glove thickness: 0.5 mm
- Remarks: Choose gloves to protect hands against chemicals depending on the concentration and quantity of the hazardous substance and specific to place of work. For special applications, we recommend clarifying the resistance to chemicals of the aforementioned protective gloves with the glove 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.

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

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties
- Appearance: liquid
- Colour: colourless
- Odour: No data available
- Odour Threshold: No data available
- pH: No data available
<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Melting point/range</td>
<td>No data available</td>
</tr>
<tr>
<td>Boiling point/boiling range</td>
<td>Decomposes below the boiling point.</td>
</tr>
<tr>
<td>Flash point</td>
<td>74 °C</td>
</tr>
<tr>
<td>Method</td>
<td>ISO 3679</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>No data available</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Upper explosion limit / Upper flammability limit</td>
<td>No data available</td>
</tr>
<tr>
<td>Lower explosion limit / Lower flammability limit</td>
<td>No data available</td>
</tr>
<tr>
<td>Vapour pressure</td>
<td>57 hPa (83 °C)</td>
</tr>
<tr>
<td>Density</td>
<td>0.905 g/cm³ (20 °C)</td>
</tr>
<tr>
<td>Solubility(ies)</td>
<td></td>
</tr>
<tr>
<td>Water solubility</td>
<td>insoluble</td>
</tr>
<tr>
<td>Solubility in other solvents</td>
<td>No data available</td>
</tr>
<tr>
<td>Partition coefficient: n-octanol/water</td>
<td>No data available</td>
</tr>
<tr>
<td>Viscosity</td>
<td></td>
</tr>
<tr>
<td>Viscosity, dynamic</td>
<td>40 mPa.s (20 °C)</td>
</tr>
<tr>
<td>Explosive properties</td>
<td>Not explosive</td>
</tr>
<tr>
<td>Oxidizing properties</td>
<td>The substance or mixture is not classified as oxidizing. Organic peroxide</td>
</tr>
</tbody>
</table>

**9.2 Other information**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-Accelerating decomposition temperature (SADT)</td>
<td>60 °C</td>
</tr>
<tr>
<td>Method</td>
<td>UN-Test H.4</td>
</tr>
<tr>
<td>SADT-Self Accelerating Decomposition Temperature. Lowest temperature at which the tested package size will undergo a self-accelerating decomposition reaction.</td>
<td></td>
</tr>
<tr>
<td>Refractive index</td>
<td>1.444 at 20 °C</td>
</tr>
</tbody>
</table>
SECTION 10: Stability and reactivity

10.1 Reactivity
Stable under recommended storage conditions.

10.2 Chemical stability
Stable under recommended storage conditions.

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 toxicological effects

Acute toxicity
Not classified based on available information.

Components:

di-tert-butyl 3,3,5-trimethylcyclohexylidene diperoxide:

Acute oral toxicity: LD50 (Rat): > 2,000 mg/kg
Method: OECD Test Guideline 401
Assessment: The substance or mixture has no acute oral toxicity

Acute inhalation toxicity: LC50 (Rat): > 5.6 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Method: OECD Test Guideline 436
Assessment: The substance or mixture has no acute inhalation toxicity
Acute dermal toxicity
LD50 (Rat): > 2,000 mg/kg
Method: OECD Test Guideline 402
Assessment: The substance or mixture has no acute dermal toxicity

Skin corrosion/irritation
Not classified based on available information.

**Components:**

**di-tert-butyl 3,3,5-trimethylcyclohexylidene diperoxide:**
Species: Rabbit
Method: OECD Test Guideline 404
Result: No skin irritation

Serious eye damage/eye irritation
Not classified based on available information.

**Components:**

**di-tert-butyl 3,3,5-trimethylcyclohexylidene diperoxide:**
Species: Rabbit
Method: OECD Test Guideline 405
Result: No eye irritation

Respiratory or skin sensitisation

Skin sensitisation
Not classified based on available information.

Respiratory sensitisation
Not classified based on available information.

**Components:**

**di-tert-butyl 3,3,5-trimethylcyclohexylidene diperoxide:**
Species: Guinea pig
Method: OECD Test Guideline 406
Result: Does not cause skin sensitisation.

Germ cell mutagenicity
Not classified based on available information.

**Components:**

**di-tert-butyl 3,3,5-trimethylcyclohexylidene diperoxide:**
Genotoxicity in vitro: Test Type: Chromosome aberration test in vitro
Method: OECD Test Guideline 473
Result: negative
Test Type: Bacterial reverse mutation assay (AMES)  
Method: OECD Test Guideline 471  
Result: negative

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

Genotoxicity in vivo  
Remarks: No data available

Carcinogenicity  
Not classified based on available information.

Components:  
di-tert-butyl 3,3,5-trimethylcyclohexylidene diperoxide:  
Species: Mouse  
Application Route: Oral  
Result: negative

Reproductive toxicity  
Not classified based on available information.

Components:  
di-tert-butyl 3,3,5-trimethylcyclohexylidene diperoxide:  
Effects on fertility  
Remarks: No data available

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

STOT - single exposure  
Not classified based on available information.

STOT - repeated exposure  
Not classified based on available information.

Aspiration toxicity  
Not classified based on available information.

Further information

Product:  
Remarks: No data available
SECTION 12: Ecological information

12.1 Toxicity

**Product:**

Ecotoxicology Assessment
Acute aquatic toxicity : No data available
Chronic aquatic toxicity : May cause long lasting harmful effects to aquatic life.

**Components:**

di-tert-butyl 3,3,5-trimethylcyclohexylidene diperoxide:

Toxicity to fish : LC50 (Brachydanio rerio (zebrafish)): > 0.043 mg/l
Exposure time: 96 h
Method: OECD Test Guideline 203
Remarks: No toxicity at the limit of solubility

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): > 1 mg/l
Exposure time: 48 h
Method: OECD Test Guideline 202
Remarks: No toxicity at the limit of solubility

Toxicity to algae : EC10 (Pseudokirchneriella subcapitata (green algae)): 0.11 mg/l
Exposure time: 72 h
Method: OECD Test Guideline 201
Remarks: No toxicity at the limit of solubility

Toxicity to microorganisms : EC50 (Bacteria): > 1,000 mg/l
Exposure time: 3 h
Method: OECD Test Guideline 209

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC: 0.0128 mg/l
Exposure time: 21 d
Species: Daphnia magna (Water flea)
Method: OECD Test Guideline 211
Remarks: No toxicity at the limit of solubility

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

12.2 Persistence and degradability

**Components:**

di-tert-butyl 3,3,5-trimethylcyclohexylidene diperoxide:
12.3 Bioaccumulative potential

**Components:**

di-tert-buty 3,3,5-trimethylcyclohexyldene diperoxide:

- Bioaccumulation: Bioconcentration factor (BCF): 443
- Partition coefficient: n-octanol/water: log Pow: 6.53

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:**

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

SECTION 13: Disposal considerations

13.1 Waste treatment methods

**Product:**

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

**Contaminated packaging:**

- Empty remaining contents.
- Dispose of as unused product.
- Do not re-use empty containers.
- Do not burn, or use a cutting torch on, the empty drum.
- Dispose of in accordance with local regulations.
SECTION 14: Transport information

14.1 UN number

| ADN | UN 3103 |
| ADR | UN 3103 |
| RID | UN 3103 |
| IMDG | UN 3103 |
| IATA | UN 3103 |

14.2 UN proper shipping name

| ADN | ORGANIC PEROXIDE TYPE C, LIQUID (1,1-Di-(tert-BUTYLPEROXY)-3,3,5-TRIMETHYLICYCLOHEXANE) |
| ADR | ORGANIC PEROXIDE TYPE C, LIQUID (1,1-Di-(tert-BUTYLPEROXY)-3,3,5-TRIMETHYLICYCLOHEXANE) |
| RID | ORGANIC PEROXIDE TYPE C, LIQUID (1,1-Di-(tert-BUTYLPEROXY)-3,3,5-TRIMETHYLICYCLOHEXANE) |
| IMDG | ORGANIC PEROXIDE TYPE C, LIQUID (1,1-Di-(tert-BUTYLPEROXY)-3,3,5-TRIMETHYLICYCLOHEXANE) |
| IATA | Organic peroxide type C, liquid (1,1-Di-(tert-butylperoxy)-3,3,5-trimethylcyclohexane) |

14.3 Transport hazard class(es)

| ADN | 5.2 |
| ADR | 5.2 |
| RID | 5.2 |
| IMDG | 5.2 |
| IATA | 5.2 |

14.4 Packing group

| ADN | Packing group: Not assigned by regulation |
| Classification Code | P1 |
| Labels | 5.2 |

| ADR | Packing group: Not assigned by regulation |
| Classification Code | P1 |
| Labels | 5.2 |
Tunnel restriction code: (D)

RID
Packing group: Not assigned by regulation
Classification Code: P1
Hazard Identification Number: 539
Labels: 5.2

IMDG
Packing group: Not assigned by regulation
Labels: 5.2

IATA (Cargo)
Packing instruction (cargo aircraft): 570
Packing group: Not assigned by regulation
Labels: Organic Peroxides, Keep Away From Heat

IATA (Passenger)
Packing instruction (passenger aircraft): 570
Packing group: Not assigned by regulation
Labels: Organic Peroxides, Keep Away From Heat

14.5 Environmental hazards

ADN
Environmentally hazardous: no

ADR
Environmentally hazardous: no

RID
Environmentally hazardous: no

IMDG
Marine pollutant: no

14.6 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.

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

REACH - List of substances subject to authorisation (Annex XIV) : Not applicable

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

Regulation (EC) No 850/2004 on persistent organic pollutants : 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 - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, preparations and articles (Annex XVII) : Not applicable


P6b SELF-REACTIVE SUBSTANCES AND MIXTURES and ORGANIC PEROXIDES Quantity 1 Quantity 2
50 t 200 t

Other regulations:
Gefahrgruppe nach § 3 BGV B4: Ib, S+ (German regulatory requirements)

Produkt unterliegt dem Sprengstoffgesetz (SprengG; Stoffgruppe C). (German regulatory requirements)

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

DSL (CA) : All components of this product are on the Canadian DSL

AICS (AU) : On the inventory, or in compliance with the inventory

KECI (KR) : On the inventory, or in compliance with the inventory

PICCS (PH) : On the inventory, or in compliance with the inventory

IECSC (CN) : On the inventory, or in compliance with the inventory

TCSI (TW) : On the inventory, or in compliance with the inventory
15.2 Chemical safety assessment

This information is not available.

SECTION 16: Other information

Full text of H-statements

H241 : Heating may cause a fire or explosion.
H413 : May cause long lasting harmful effects to aquatic life.

Full text of other abbreviations

Aquatic Chronic : Long-term (chronic) aquatic hazard
Org. Perox. : Organic peroxides
IE OEL : Ireland. List of Chemical Agents and Occupational Exposure Limit Values - Schedule 1
IE OEL / OELV - 8 hrs (TWA) : Occupational exposure limit value (8-hour reference period)

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road; AICS - Australian Inventory of Chemical Substances; 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; IECS - 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; TRGS - Technical Rule for Hazardous Substances; TSCA - Toxic Sub-
SAFETY DATA SHEET
according to Regulation (EC) No. 1907/2006

TMCH-90-WO

Version: 2.0
Revision Date: 26.11.2019
SDS Number: 600000000182
Date of last issue: 29.11.2016
Date of first issue: 22.03.2016

stances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioac-
cumulative

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

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:
Org. Perox. C H242 Based on product data or assessment
Aquatic Chronic 4 H413 Based on product data or assessment

The information provided in this Safety Data Sheet is correct to the best of our knowledge, infor-
mation and belief at the date of its publication. The information given is designed only as a guid-
ance 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.

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