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

1.1 Product identifier
Trade name : CH-80-AL

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

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)

- Flammable liquids, Category 3
  - H226: Flammable liquid and vapour.

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

- Aspiration hazard, Category 1
  - H304: May be fatal if swallowed and enters airways.

- 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 :
  - Flammable liquid
  - Aspiratory hazard

- 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.
                      H413 May cause long lasting harmful effects to aquatic life.

Precautionary statements : Prevention:
                          P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
                          P220 Keep/Store away from clothing/ strong acids, bases, heavy metal salts and other reducing substances /combustible materials.
                          P233 Keep container tightly closed.
                          P235 Keep cool.
                          P273 Avoid release to the environment.
                          P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

Response:
            P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor.
            P331 Do NOT induce vomiting.

Storage:
            P403 + P235 Store in a well-ventilated place. Keep cool.

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

Hazardous components which must be listed on the label:
Cyclohexylidenebis[tert-butyl] peroxide (CAS-No. 3006-86-8)
Heptane, 2,2,4,6,6-pentamethyl- (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.

SECTION 3: Composition/information on ingredients

3.2 Mixtures
Chemical nature : Organic Peroxide
                  Liquid mixture

Components
<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS-No.</th>
<th>EC-No.</th>
<th>Classification</th>
<th>Concentration (% w/w)</th>
</tr>
</thead>
</table>
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.
Symptoms of poisoning may appear several hours later.
No artificial respiration, mouth-to-mouth or mouth to nose. Use suitable instruments/apparatus.
Call a physician immediately.

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

If inhaled:
Call a physician or poison control centre immediately.
If unconscious, place in recovery position and seek medical advice.
Keep respiratory tract clear.
If breathed in, move person into fresh air.

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

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

If swallowed:
Keep respiratory tract clear.
SAFETY DATA SHEET
according to Regulation (EC) No. 1907/2006

CH-80-AL

Version 3.0  Revision Date: 20.02.2019  SDS Number: 600000000244  Date of last issue: 21.03.2018

Do NOT induce vomiting.
Call a physician immediately.
Contact a poison control center.
Rinse mouth thoroughly with water.

4.2 Most important symptoms and effects, both acute and delayed
Risks : May be fatal if swallowed and enters airways.

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.
- Ensure adequate ventilation.
- Remove all sources of ignition.
- Evacuate personnel to safe areas.
- Follow safe handling advice and personal protective equipment recommendations.
- Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.
- Never return spills in original containers for re-use.
- Treat recovered material as described in the section "Disposal considerations".

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:

Do not swallow.
Do not breathe vapours/dust.
Avoid contact with skin and eyes.
Avoid formation of aerosol.
Take precautionary measures against static discharges.
Never return any product to the container from which it was originally removed.
Provide sufficient air exchange and/or exhaust in work rooms.
Avoid confinement.
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
Smoking, eating and drinking should be prohibited in the application area.
Wash thoroughly after handling.
For personal protection see section 8.
Protect from contamination.

Advice on protection against fire and explosion:

Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapours). Keep away from heat and sources of ignition. Use only explosion-proof equipment. Keep away from combustible material.

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

Contains no substances with occupational exposure limit values.

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>Cyclohexylidenebis[tert-butyl] peroxide</td>
<td>Workers</td>
<td>Inhalation</td>
<td>Long-term systemic effects</td>
<td>3.5 mg/m3</td>
</tr>
<tr>
<td></td>
<td>Workers</td>
<td>Skin contact</td>
<td>Long-term systemic effects</td>
<td>10 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>Cyclohexylidenebis[tert-butyl] peroxide</td>
<td>Fresh water</td>
<td>0.005 mg/l</td>
</tr>
<tr>
<td></td>
<td>Marine water</td>
<td>0.0005 mg/l</td>
</tr>
<tr>
<td></td>
<td>Intermittent use/release</td>
<td>0.005 mg/l</td>
</tr>
<tr>
<td></td>
<td>Sewage treatment plant</td>
<td>2 mg/l</td>
</tr>
<tr>
<td></td>
<td>Fresh water sediment</td>
<td>0.262 mg/kg</td>
</tr>
<tr>
<td></td>
<td>Marine sediment</td>
<td>0.0262 mg/kg</td>
</tr>
<tr>
<td></td>
<td>Soil</td>
<td>0.0499 mg/kg</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. 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

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>liquid</td>
</tr>
<tr>
<td>Colour</td>
<td>colourless</td>
</tr>
<tr>
<td>Odour</td>
<td>characteristic</td>
</tr>
<tr>
<td>pH</td>
<td>No data available</td>
</tr>
<tr>
<td>Melting point/range</td>
<td>&lt; -25 °C</td>
</tr>
<tr>
<td>Boiling point/boiling range</td>
<td>Decomposition: Decomposes below the boiling point.</td>
</tr>
<tr>
<td>Flash point</td>
<td>54 °C</td>
</tr>
<tr>
<td>Method</td>
<td>ISO 3679</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>0.92 hPa (58 °C)</td>
</tr>
</tbody>
</table>
Density : 0.88 g/cm³ (20 °C)

Solubility(ies)
  Water solubility : insoluble

Partition coefficient: n-octanol/water : log Pow: 6.28

Viscosity
  Viscosity, dynamic : 4.8 mPa.s (20 °C)

Explosive properties : Not explosive

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

**9.2 Other information**

Self-Accelerating decomposition temperature (SADT) : 60 °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.

Refractive index : 1.4337 at 20 °C

**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:

Cyclohexylidenebis[tert-butyl] peroxide:
Acute oral toxicity: LD50 (Rat): 13,342 mg/kg
Method: Expert judgement
Assessment: The substance or mixture has no acute oral toxicity

Acute dermal toxicity: LD50 (Rat): > 2,000 mg/kg
Method: Expert judgement
Assessment: The substance or mixture has no acute dermal toxicity

Heptane, 2,2,4,6,6-pentamethyl-:
Acute oral toxicity: LD50 (Rat): > 5,000 mg/kg
Assessment: The substance or mixture has no acute oral toxicity
Remarks: Based on data from similar materials

Skin corrosion/irritation
Not classified based on available information.

Product:
Remarks: May cause skin irritation and/or dermatitis.

Components:

Cyclohexylidenebis[tert-butyl] peroxide:
Species: Rabbit
Method: OECD Test Guideline 404
Result: Mild skin irritation

Heptane, 2,2,4,6,6-pentamethyl-:
Result: Repeated exposure may cause skin dryness or cracking.
Serious eye damage/eye irritation
Not classified based on available information.

**Product:**
Remarks : Vapours may cause irritation to the eyes, respiratory system and the skin.

**Components:**

**Cyclohexylidenebis[tert-butyl] peroxide:**
Species : Rabbit
Result : No eye irritation

Heptane, 2,2,4,6,6-pentamethyl-:
Remarks : No data available

**Respiratory or skin sensitisation**

**Skin sensitisation**
Not classified based on available information.

**Respiratory sensitisation**
Not classified based on available information.

**Components:**

**Cyclohexylidenebis[tert-butyl] peroxide:**
Test Type : Buehler Test
Exposure routes : Skin contact
Species : Guinea pig
Method : OECD Test Guideline 406
Result : negative

**Germ cell mutagenicity**
Not classified based on available information.

**Components:**

**Cyclohexylidenebis[tert-butyl] peroxide:**
Genotoxicity in vitro : Test Type: Bacterial reverse mutation assay (AMES)
Method: OECD Test Guideline 471
Result: negative

Heptane, 2,2,4,6,6-pentamethyl-:
Germ cell mutagenicity- Assessment : No known effect.
Carcinogenicity
Not classified based on available information.

Components:

Heptane, 2,2,4,6,6-pentamethyl-:
Carcinogenicity - Assessment: No known effect.

Reproductive toxicity
Not classified based on available information.

Components:

Cyclohexylidenebis[tert-butyl] peroxide:
Effects on fertility: Test Type: Combined repeated dose toxicity study with the reproduction/developmental toxicity screening test Species: Rat Application Route: Ingestion Method: OECD Test Guideline 422 Result: negative

Effects on foetal development: Test Type: Combined repeated dose toxicity study with the reproduction/developmental toxicity screening test Species: Rat Application Route: Ingestion Method: OECD Test Guideline 422 Result: negative

Heptane, 2,2,4,6,6-pentamethyl-:
Reproductive toxicity - Assessment: No known effect.

STOT - single exposure
Not classified based on available information.

STOT - repeated exposure
Not classified based on available information.

Repeated dose toxicity

Components:

Cyclohexylidenebis[tert-butyl] peroxide:
Species: Rat NOAEL: 200 mg/kg Application Route: Oral Method: OECD Test Guideline 422
**Aspiration toxicity**
May be fatal if swallowed and enters airways.

**Components:**

**Cyclohexylidenebis[tert-butyl] peroxide:**
The substance or mixture is known to cause human aspiration toxicity hazards or has to be regarded as if it causes a human aspiration toxicity hazard.

**Heptane, 2,2,4,6,6-pentamethyl-:**
May be fatal if swallowed and enters airways.

**Further information**

**Product:**
Remarks : Solvents may degrease the skin.

**Components:**

**Heptane, 2,2,4,6,6-pentamethyl-:**
Remarks : May cause headache and dizziness.

**SECTION 12: Ecological information**

**12.1 Toxicty**

**Components:**

**Cyclohexylidenebis[tert-butyl] peroxide:**

Toxicity to fish :
- LL50 (Danio rerio (zebra fish)): > 100 mg/l
- Exposure time: 96 h
- Test substance: Water Accommodated Fraction

Toxicity to daphnia and other aquatic invertebrates :
- EC50 (Daphnia magna (Water flea)): > 1,000 mg/l
- Exposure time: 48 h
- Method: OECD Test Guideline 202

Toxicity to algae :
- NOELR (Pseudokirchneriella subcapitata (green algae)): > 10 mg/l
- Exposure time: 72 h
- Test substance: Water Accommodated Fraction
- Method: OECD Test Guideline 201
- Remarks: No toxicity at the limit of solubility

Toxicity to microorganisms :
- EC50 : > 20 mg/l
- Exposure time: 3 h
- Method: OECD Test Guideline 209
Heptane, 2,2,4,6,6-pentamethyl-

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: 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:
Cyclohexylidenebis[tert-butyl] peroxide:
Biodegradability: Result: Not readily biodegradable.
Biodegradation: 5 %
Exposure time: 28 d
Method: OECD Test Guideline 301B

Heptane, 2,2,4,6,6-pentamethyl-:
Biodegradability: Result: Not readily biodegradable.

12.3 Bioaccumulative potential

Components:
Cyclohexylidenebis[tert-butyl] peroxide:
Partition coefficient: n-octanol/water: log Pow: > 6.5

Heptane, 2,2,4,6,6-pentamethyl-:
Partition coefficient: n-octanol/water: Remarks: 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:

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

<table>
<thead>
<tr>
<th>ADN</th>
<th>ADR</th>
<th>RID</th>
<th>IMDG</th>
<th>IATA</th>
</tr>
</thead>
<tbody>
<tr>
<td>UN 3103</td>
<td>UN 3103</td>
<td>UN 3103</td>
<td>UN 3103</td>
<td>UN 3103</td>
</tr>
</tbody>
</table>

14.2 UN proper shipping name

<table>
<thead>
<tr>
<th>ADN</th>
<th>ADR</th>
<th>RID</th>
</tr>
</thead>
<tbody>
<tr>
<td>ORGANIC PEROXIDE TYPE C, LIQUID (1,1-DI-(tert-BUTYLPEROXY) CYCLOHEXANE)</td>
<td>ORGANIC PEROXIDE TYPE C, LIQUID (1,1-DI-(tert-BUTYLPEROXY) CYCLOHEXANE)</td>
<td>ORGANIC PEROXIDE TYPE C, LIQUID (1,1-DI-(tert-BUTYLPEROXY) CYCLOHEXANE)</td>
</tr>
</tbody>
</table>
SAFETY DATA SHEET
according to Regulation (EC) No. 1907/2006

CH-80-AL

Version 3.0
Revision Date: 20.02.2019
SDS Number: 600000000244
Date of last issue: 21.03.2018
Date of first issue: 19.08.2016

IMDG : ORGANIC PEROXIDE TYPE C, LIQUID
       (1,1-Di-(tert-BUTYLPEROXY)CYCLOHEXANE)

IATA : Organic peroxide type C, liquid
       (1,1-Di-(tert-butylperoxy) cyclohexane)

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
   EmS Code : F-J, S-R

   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

16 / 20
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 Concern for Authorisation (Article 59). : Not applicable
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) : Conditions of restriction for the following entries should be considered: Number on list 3
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:

<table>
<thead>
<tr>
<th>Inventory</th>
<th>Report</th>
</tr>
</thead>
<tbody>
<tr>
<td>DSL (CA)</td>
<td>All components of this product are on the Canadian DSL</td>
</tr>
<tr>
<td>KECI (KR)</td>
<td>On the inventory, or in compliance with the inventory</td>
</tr>
<tr>
<td>PICCS (PH)</td>
<td>On the inventory, or in compliance with the inventory</td>
</tr>
<tr>
<td>IECSC (CN)</td>
<td>On the inventory, or in compliance with the inventory</td>
</tr>
<tr>
<td>TCSI (TW)</td>
<td>On the inventory, or in compliance with the inventory</td>
</tr>
</tbody>
</table>

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

SECTION 16: Other information

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.
H413: May cause long lasting harmful effects to aquatic life.

Full text of other abbreviations
Aquatic Chronic: Long-term (chronic) aquatic hazard
Asp. Tox.: Aspiration hazard
Flam. Liq.: Flammable liquids
Org. Perox.: Organic peroxides

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;
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.


Classification of the mixture:

<table>
<thead>
<tr>
<th>Classification</th>
<th>Code</th>
<th>Procedure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flam. Liq. 3</td>
<td>H226</td>
<td>Based on product data or assessment</td>
</tr>
<tr>
<td>Org. Perox. C</td>
<td>H242</td>
<td>Based on product data or assessment</td>
</tr>
<tr>
<td>Asp. Tox. 1</td>
<td>H304</td>
<td>Calculation method</td>
</tr>
<tr>
<td>Aquatic Chronic 4</td>
<td>H413</td>
<td>Calculation method</td>
</tr>
</tbody>
</table>

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.