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

1.1. Product identifier
375 Contact-Cleaner 07375020A

1.2. Relevant identified uses of the substance or mixture and uses advised against
Use of the substance/mixture
Cleaner

1.3. Details of the supplier of the safety data sheet
Company name: TUNAP GmbH & Co. KG
Street: Bürgermeister-Seidl-Str. 2
Place: D-82515 Wolfratshausen
Telephone: +49 (0) 8171/1600 - 0
Fax: +49 (0) 8171/1600 - 40
Email: sdb@tunap.com
Internet: www.tunap.com

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture
Regulation (EC) No. 1272/2008
Hazard categories:
Aerosol: Aerosol 1
Serious eye damage/eye irritation: Eye Irrit. 2
Specific target organ toxicity - single exposure: STOT SE 3
Hazardous to the aquatic environment: Aquatic Chronic 2

Hazard Statements:
Extremely flammable aerosol.
Pressurised container: May burst if heated.
Causes serious eye irritation.
May cause drowsiness or dizziness.
Toxic to aquatic life with long lasting effects.

2.2. Label elements
Regulation (EC) No. 1272/2008
Hazard components for labelling
Hydrocarbons C7-C9, n-alkanes, iso-alkanes, cyclos
2-Propanol

Signal word:
Danger

Pictograms:

H222 Extremely flammable aerosol.
H229 Pressurised container: May burst if heated.
H319 Causes serious eye irritation.
H336 May cause drowsiness or dizziness.
H411 Toxic to aquatic life with long lasting effects.

Precautionary statements
P210 Keep away from heat. No Smoking.
Safety Data Sheet

according to Regulation (EC) No 1907/2006

375 Contact-Cleaner 07375020A
Product code: 11AFX07_375020A

Revision date: 11.09.2018
Page 2 of 10

P211 Do not spray on an open flame or other ignition source.
P260 Do not breathe Aerosol.
P280 Use only outdoors or in a well-ventilated area.
P273 Avoid release to the environment.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P314 Get medical advice/attention if you feel unwell.
P318 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.
P301+P353 Avoid release to the environment.
P302+P304+P335 IF IN EYES: Rinse thoroughly with water for several minutes.
P306+P338+P313 IF IN CONTACT WITH EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present.
P310+P341 Get medical advice/attention if you feel unwell.
P317 Get medical advice/attention.
P332 Do notrelease to the environment.
P317+P321+P233 Get medical advice/attention if you feel unwell.
P340+P341 Get medical advice/attention.
P355+P352+P244 Dispose of contents/container according to the official regulations.

Special labelling of certain mixtures
EUH066 Repeated exposure may cause skin dryness or cracking.

2.3. Other hazards
In case of insufficient ventilation and/or through use, explosive/highly flammable mixtures may develop.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Chemical characterization

Reinger

Hazardous components

<table>
<thead>
<tr>
<th>CAS No</th>
<th>Chemical name</th>
<th>EC No</th>
<th>Index No</th>
<th>REACH No</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>64742-49-0</td>
<td>Hydrocarbons C7-C9, n-alkanes, iso-alkanes, cyclics</td>
<td>920-750-0</td>
<td>01-2119473851-33</td>
<td>25 - &lt; 50 %</td>
<td></td>
</tr>
<tr>
<td>67-63-0</td>
<td>2-Propanol</td>
<td>200-661-7</td>
<td>603-117-00-0</td>
<td>01-2119457558-25</td>
<td>25 - &lt; 50 %</td>
</tr>
<tr>
<td>124-38-9</td>
<td>carbon dioxide</td>
<td>204-696-9</td>
<td></td>
<td></td>
<td>3 - &lt; 5 %</td>
</tr>
</tbody>
</table>

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Full text of H and EUH statements: see section 16.

Labelling for contents according to Regulation (EC) No 648/2004

>= 30 % aliphatic hydrocarbons.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information
First aider: Pay attention to self-protection! Remove persons to safety. Never give anything by mouth to an unconscious person or a person with cramps.

After inhalation
Remove person to fresh air and keep comfortable for breathing. In all cases of doubt, or when symptoms persist, seek medical advice.
After contact with skin
Wash with plenty of water and soap. Take off immediately all contaminated clothing and wash it before reuse. In all cases of doubt, or when symptoms persist, seek medical advice.

After contact with eyes
Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. In case of troubles or persistent symptoms, consult an ophthalmologist.

After ingestion
Do NOT induce vomiting. Observe risk of aspiration if vomiting occurs. Call a physician in any case!

4.2. Most important symptoms and effects, both acute and delayed
Headache, nausea, dizziness, fatigue, skin irritation

4.3. Indication of any immediate medical attention and special treatment needed
Treat symptomatically. Call a POISON CENTER. Symptoms can occur only after several hours.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Unsuitable extinguishing media
Full water jet

5.2. Special hazards arising from the substance or mixture
Incomplete combustion and thermolysis gases of different toxicity can occur. In the case of hydrocarbonaceous products such as CO, CO2, aldehydes and soot. These can be very dangerous if they are inhaled in high concentrations or in enclosed spaces.

5.3. Advice for firefighters
In case of fire and/or explosion do not breathe fumes. Move undamaged containers from immediate hazard area if it can be done safely. In case of fire: Wear self-contained breathing apparatus.

Additional information
Danger of bursting container.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures
Wear breathing apparatus if exposed to vapours/dusts/aerosols. Remove all sources of ignition. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Wear personal protection equipment.

6.2. Environmental precautions
Do not allow to enter into surface water or drains. Prevent spread over a wide area (e.g. by containment or oil barriers). Ensure all waste water is collected and treated via a waste water treatment plant.

6.3. Methods and material for containment and cleaning up
Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents). Clean contaminated articles and floor according to the environmental legislation.

6.4. Reference to other sections
Safe handling: see section 7
Personal protection equipment: see section 8
Disposal: see section 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling
Advice on safe handling
Do not breathe gas/fumes/vapour/spray.
Advice on protection against fire and explosion

Do not spray on naked flames or any incandescent material. Keep away from sources of ignition - No smoking.
Vapours may form explosive mixtures with air.

Further information on handling

Avoid contact with skin and eyes.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed. Keep in a cool, well-ventilated place. Keep away from sources of ignition - No smoking.

Hints on joint storage

Do not store together with: Material, rich in oxygen, oxidizing.

Further information on storage conditions

Protect from frost. Protect against direct sunlight.

7.3. Specific end use(s)

No information available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limits (EH40)

<table>
<thead>
<tr>
<th>CAS No</th>
<th>Substance</th>
<th>ppm</th>
<th>mg/m³</th>
<th>fibres/ml</th>
<th>Category</th>
<th>Origin</th>
</tr>
</thead>
<tbody>
<tr>
<td>124-38-9</td>
<td>Carbon dioxide</td>
<td>5000</td>
<td>9150</td>
<td></td>
<td>TWA (8 h)</td>
<td>WEL</td>
</tr>
<tr>
<td>15000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>STEL (15 min)</td>
<td>WEL</td>
</tr>
<tr>
<td>67-63-0</td>
<td>Propan-2-ol</td>
<td>400</td>
<td>999</td>
<td></td>
<td>TWA (8 h)</td>
<td>WEL</td>
</tr>
<tr>
<td></td>
<td></td>
<td>500</td>
<td>1250</td>
<td></td>
<td>STEL (15 min)</td>
<td>WEL</td>
</tr>
</tbody>
</table>

Additional advice on limit values

a no restriction
b End of exposure or shift
c in long-term exposure: after several shifts
d prior to next shift

TWA (EC): time-weighted average
U: Urea
B: Blood

8.2. Exposure controls

Appropriate engineering controls

If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe gas/fumes/vapour/spray.

Protective and hygiene measures

Avoid exposure. Wear suitable protective clothing. Draw up and observe skin protection programme.

Eye/face protection

Suitable eye protection: Tightly sealed safety glasses.
DIN EN 166

Hand protection

Protect skin by using skin protective cream. When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances.
Suitable material: NBR (Nitrile rubber) Breakthrough time (maximum wearing time) 480min
Thickness of the glove material 0,45 mm
DIN EN 374

Skin protection
Wear suitable protective clothing. Take off immediately all contaminated clothing and wash it before reuse.

Respiratory protection
Wear breathing apparatus if exposed to vapours/dusts/aerosols.
When exceeding the relevant workplace exposure limits, note the following:
Suitable respiratory protective equipment: Combination filter device (DIN EN 141).
Filtering device with filter or ventilator filtering device of type: A
Observe the wear time limits as specified by the manufacturer.
Observe legal regulations and provisions.

Environmental exposure controls
Observe legal regulations and provisions.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Physical state:</th>
<th>Aerosol</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colour:</td>
<td>colourless</td>
</tr>
<tr>
<td>Odour:</td>
<td>solvent like</td>
</tr>
</tbody>
</table>

Test method
pH-Value (at 20 °C): not applicable

Changes in the physical state
Melting point: No information available.
Initial boiling point and boiling range: 78 °C
Sublimation point: No information available.
Softening point: No information available.
Flash point: 1 °C
Lower explosion limits: 0,9 vol. %
Upper explosion limits: 12 vol. %
Ignition temperature: No information available.
Vapour pressure: No information available.
Vapour pressure: No information available.
Density (at 20 °C): 0,7525 g/cm³ DIN 51757
Water solubility: The study does not need to be conducted because the substance is known to be insoluble in water.
Partition coefficient: No information available.
Viscosity / dynamic: No information available.
Viscosity / kinematic: No information available.
Flow time: No information available.
Vapour density: No information available.
Evaporation rate: No information available.
Solvent separation test: No information available.
Solvent content: No information available.

9.2. Other information
SECTION 10: Stability and reactivity

10.1. Reactivity
No information available.

10.2. Chemical stability
The product is stable under normal conditions.

10.3. Possibility of hazardous reactions
Do not expose to temperatures above 50 °C. Heating causes rise in pressure with risk of bursting.

10.4. Conditions to avoid
Keep away from sources of heat (e.g. hot surfaces), sparks and open flames. Vapours can form explosive mixtures with air. Take precautionary measures against static discharges.

10.5. Incompatible materials
Oxidizing agents. Pyrophoric or self-heating substances.

10.6. Hazardous decomposition products
Incomplete combustion and thermolysis gases of different toxicity can occur. In the case of hydrocarbonaceous products such as CO, CO2, aldehydes and soot. These can be very dangerous if they are inhaled in high concentrations or in enclosed spaces.

Further information
Do not mix with other chemicals.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicokinetics, metabolism and distribution
No information available.

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

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS No</th>
<th>Exposure route</th>
<th>Dose</th>
<th>Species</th>
<th>Source</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-Propanol</td>
<td>67-63-0</td>
<td>oral</td>
<td>LD50</td>
<td>5280</td>
<td>Rat</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>dermal</td>
<td>LD50</td>
<td>&gt; 2000</td>
<td>Rabbit</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>inhalation (4 h) vapour</td>
<td>LC50</td>
<td>47.5 mg/l</td>
<td>Rat</td>
<td></td>
</tr>
</tbody>
</table>

Irritation and corrosivity
Causes serious eye irritation.
Skin corrosion/irritation: Based on available data, the classification criteria are not met.
Vapours may cause drowsiness and dizziness.

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

Carcinogenic/mutagenic/toxic effects for reproduction
Based on available data, the classification criteria are not met.

No indication of human carcinogenicity.

No indications of human germ cell mutagenicity exist.

No indications of human reproductive toxicity exist.

**STOT-single exposure**
May cause drowsiness or dizziness. (Hydrocarbons C7-C9, n-alkanes, iso-alkanes, cyclics; 2-Propanol)

**STOT-repeated exposure**
Repeated exposure may cause skin dryness or cracking.
Has degreasing effect on the skin. Frequently or prolonged contact with skin may cause dermal irritation.

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

**Specific effects in experiment on an animal**
No information available.

**Additional information on tests**
The mixture is classified as hazardous according to regulation (EC) No 1272/2008 [CLP].

### SECTION 12: Ecological information

#### 12.1. Toxicity
Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

<table>
<thead>
<tr>
<th>CAS No</th>
<th>Chemical name</th>
<th>Aquatic toxicity</th>
<th>Dose</th>
<th>[h]</th>
<th>[d]</th>
<th>Species</th>
<th>Source</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>67-63-0</td>
<td>2-Propanol</td>
<td>Acute fish toxicity</td>
<td>LC50</td>
<td>9640 mg/l</td>
<td>96 h</td>
<td>Pimephales promelas</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Acute algae toxicity</td>
<td>ErC50</td>
<td>&gt; 100 mg/l</td>
<td>72 h</td>
<td>Desmodesmus subspicatus</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Acute crustacea toxicity</td>
<td>EC50</td>
<td>&gt; 100 mg/l</td>
<td>48 h</td>
<td>Daphnia magna</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### 12.2. Persistence and degradability
There are no data available on the mixture itself. AOX (mg/l): 0

#### 12.3. Bioaccumulative potential
There are no data available on the mixture itself.

<table>
<thead>
<tr>
<th>CAS No</th>
<th>Chemical name</th>
<th>Log Pow</th>
</tr>
</thead>
<tbody>
<tr>
<td>67-63-0</td>
<td>2-Propanol</td>
<td>0,05</td>
</tr>
</tbody>
</table>

#### 12.4. Mobility in soil
No information available.

#### 12.5. Results of PBT and vPvB assessment
This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.

#### 12.6. Other adverse effects
No information available.

**Further information**
Do not allow to enter into surface water or drains.

### SECTION 13: Disposal considerations

#### 13.1. Waste treatment methods
**Advice on disposal**

Dispose of waste according to applicable legislation.

**Waste disposal number of waste from residues/unused products**

<table>
<thead>
<tr>
<th>Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>160504</td>
<td>WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and discarded chemicals; gases in pressure containers (including halons) containing hazardous substances; hazardous waste</td>
</tr>
</tbody>
</table>

**Waste disposal number of used product**

<table>
<thead>
<tr>
<th>Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>160504</td>
<td>WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and discarded chemicals; gases in pressure containers (including halons) containing hazardous substances; hazardous waste</td>
</tr>
</tbody>
</table>

**Waste disposal number of contaminated packaging**

<table>
<thead>
<tr>
<th>Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>150110</td>
<td>WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); packaging containing residues of or contaminated by hazardous substances; hazardous waste</td>
</tr>
</tbody>
</table>

**Contaminated packaging**

Non-contaminated packages may be recycled. Handle contaminated packages in the same way as the substance itself.

### SECTION 14: Transport information

#### Land transport (ADR/RID)

- **14.1. UN number:** UN 1950
- **14.2. UN proper shipping name:** AEROSOLS
- **14.3. Transport hazard class(es):** 2
- **14.4. Packing group:** -
- **Hazard label:** 2.1
- **Classification code:** 5F
- **Special Provisions:** 190 327 344 625
- **Limited quantity:** 1 L
- **Excepted quantity:** E0
- **Transport category:** 2
- **Tunnel restriction code:** D

#### Inland waterways transport (ADN)

- **14.1. UN number:** UN 1950
- **14.2. UN proper shipping name:** AEROSOLS
- **14.3. Transport hazard class(es):** 2
- **14.4. Packing group:** -
- **Hazard label:** 2.1
- **Classification code:** 5F
- **Special Provisions:** 190 327 344 625
- **Limited quantity:** 1 L
- **Excepted quantity:** E0

#### Marine transport (IMDG)

- **14.1. UN number:** UN 1950
- **14.2. UN proper shipping name:** AEROSOLS (Hydrocarbons C7-C9, n-alkanes, iso-alkanes, cyclics)
- **14.3. Transport hazard class(es):** 2.1
- **14.4. Packing group:** -
- **Hazard label:** 2.1
- **Marine pollutant:** Yes
Special Provisions:
Limited quantity: 1000 mL
Excepted quantity: E0
EmS: F-D, S-U

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number: UN 1950
14.2. UN proper shipping name: AEROSOLS, flammable
14.3. Transport hazard class(es): 2.1
14.4. Packing group: -
Hazard label: 2.1
Special Provisions: A145 A167 A802
Limited quantity Passenger: 30 kg G
Passenger LQ: Y203
Excepted quantity: E0
IATA-packing instructions - Passenger: 203
IATA-max. quantity - Passenger: 75 kg
IATA-packing instructions - Cargo: 203
IATA-max. quantity - Cargo: 150 kg

14.5. Environmental hazards
ENVIRONMENTALLY HAZARDOUS: yes
Danger releasing substance: Hydrocarbons C7-C9, n-alkanes, iso-alkanes, cyclics

14.6. Special precautions for user
Warning: Flammable gases

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code
not applicable

SECTION 15: Regulatory information

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

EU regulatory information
Restrictions on use (REACH, annex XVII):
Entry 28: Hydrocarbons C7-C9, n-alkanes, iso-alkanes, cyclics
2010/75/EU (VOC): No information available.
2004/42/EC (VOC): No information available.

Additional information
Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH)
Aerosol directive (75/324/EEC)

National regulatory information
Water contaminating class (D): 1 - slightly water contaminating

Additional information
94/69/EC (21st ATP). The benzene content of the product is less than 0.1%. It applies the annotation P. Classification and labeling as carcinogenic is not necessary.

SECTION 16: Other information

Changes
This data sheet contains changes from the previous version in section(s): 1.

Abbreviations and acronyms
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
Safety Data Sheet

according to Regulation (EC) No 1907/2006

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer
(Regulations Concerning the International Transport of Dangerous Goods by Rail)
IATA: International Air Transport Association
IMDG: International Maritime Code for Dangerous Goods
GHS: Globally Harmonized System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
DNEL/DMEL: Derived No Effect Level / Derived Minimal Effect Level
WEL (UK): Workplace Exposure Limits
TWA (EC): Time-Weighted Average
ATE: Acute Toxicity Estimate
STEL (EC) Short Term Exposure Limit
LC50: Lethal Concentration
EC50: half maximal Effective Concentration
ErC50: means EC50 in terms of reduction of growth rate

Relevant H and EUH statements (number and full text)

H222 Extremely flammable aerosol.
H225 Highly flammable liquid and vapour.
H229 Pressurised container: May burst if heated.
H304 May be fatal if swallowed and enters airways.
H319 Causes serious eye irritation.
H336 May cause drowsiness or dizziness.
H411 Toxic to aquatic life with long lasting effects.
EUH066 Repeated exposure may cause skin dryness or cracking.

Further Information
The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)