1. Identification of the substance/mixture and of the company/undertaking

Product identifier
Name of product Rivolta M.T.X. 60 forte Aerosol S

Manufacturer/distributor
Bremer & Leguil GmbH
Am Burgacker 30-42, D-47051 Duisburg
Postbox 100221, D-47002 Duisburg
Phone +49(0)203/99230, Fax +49(0)203/25901
E-Mail info@bremer-leguil.de
Internet www.bremer-leguil.de

Advice
Phone +49(0)203/99230
E-mail (competent person):
product-safety-management@bremer-leguil.de

Emergency advice
Giftinformationszentrale Mainz
Phone +49(0)-6131/19240

Recommended intended purpose(s)
Cleaner for solving oils, fats and other residues off all kind of metal-components.

2. Hazards identification

Classification according to 67/548/EEC or 1999/45/EC
F+; R12
R53
R66

! R-phrases
12 Extremely flammable.
53 May cause long-term adverse effects in the aquatic environment.
66 Repeated exposure may cause skin dryness or cracking.

Labelling according to 67/548/EEC or 1999/45/EC

Remarks for labelling
The product is classified and labelled in accordance with EC directives/German regulations on dangerous substances.

F+ Extremely flammable

! R-phrases
12 Extremely flammable.
53 May cause long-term adverse effects in the aquatic environment.
66 Repeated exposure may cause skin dryness or cracking.

S-phrases
16 Keep away from sources of ignition - No smoking.
2 Keep out of the reach of children.
23 Do not breathe spray.
24 Avoid contact with skin.
Hazardous ingredients for labeling
mixture of isoparaffines

! Special rules for supplemental label elements for certain mixtures
aerosol
Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use.
Do not spray on a naked flame or any incandescent material.
Use only in well ventilated areas. Without sufficient ventilation formation of explosive mixtures may be possible.

Information pertaining to special dangers for human and environment
Aerosol can - do not inhale spray
Prolonged contact will defat the skin

! 3. Composition/information on ingredients

Description
Mixture based on synthetic isoparaffines and reinforcing cleaning agents
Nonflammable propellant

! Hazardous ingredients

<table>
<thead>
<tr>
<th>CAS No</th>
<th>EC No</th>
<th>Name</th>
<th>[% weight]</th>
<th>Classification according to 67/548/EEC</th>
</tr>
</thead>
<tbody>
<tr>
<td>112-34-5</td>
<td>203-961-6</td>
<td>2-(2-butoxyethoxy)ethanol</td>
<td>1 - 2</td>
<td>Xi R36</td>
</tr>
<tr>
<td>34590-94-8</td>
<td>252-104-2</td>
<td>(2-methoxyethylthoxy)-propanol</td>
<td>1 - 2</td>
<td></td>
</tr>
<tr>
<td>124-38-9</td>
<td>204-696-9</td>
<td>carbon dioxide</td>
<td>1 - 5</td>
<td></td>
</tr>
<tr>
<td>68551-17-7</td>
<td>271-366-9</td>
<td>mixture of isoparaffines</td>
<td>50 - 100</td>
<td>Xn R 53, 65, 66</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CAS No</th>
<th>EC No</th>
<th>Name</th>
<th>[% weight]</th>
<th>Classification according to Regulation (EC) No 1272/2008 [CLP/GHS]</th>
</tr>
</thead>
<tbody>
<tr>
<td>112-34-5</td>
<td>203-961-6</td>
<td>2-(2-butoxyethoxy)ethanol</td>
<td>1 - 2</td>
<td>Eye Irrit. 2, H319</td>
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<tr>
<td>34590-94-8</td>
<td>252-104-2</td>
<td>(2-methoxyethylthoxy)-propanol</td>
<td>1 - 2</td>
<td></td>
</tr>
<tr>
<td>124-38-9</td>
<td>204-696-9</td>
<td>carbon dioxide</td>
<td>1 - 5</td>
<td></td>
</tr>
<tr>
<td>68551-17-7</td>
<td>271-366-9</td>
<td>mixture of isoparaffines</td>
<td>50 - 100</td>
<td>Asp. 1, H304 / Aquatic Chronic 4, H413</td>
</tr>
</tbody>
</table>

REACH

<table>
<thead>
<tr>
<th>CAS No</th>
<th>Name</th>
<th>REACH registration number</th>
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</thead>
<tbody>
<tr>
<td>68551-17-7</td>
<td>mixture of isoparaffines</td>
<td>2119472146-39</td>
</tr>
</tbody>
</table>

4. First aid measures

General information
Remove contaminated soaked clothing immediately.

In case of inhalation
Ensure of fresh air.

In case of skin contact
Wash with soap and water, apply emollient cream.

In case of eye contact
In case of contact with eyes rinse thoroughly with plenty of water and seek medical advice.

In case of ingestion
Do not induce vomiting. Consult a physician.
5. Firefighting measures

Suitable extinguishing media
ABC-powder, carbon dioxide, foam, dry fire-extinguishing substance

Extinguishing media which must not be used for safety reasons
water

Special hazards arising from the substance or mixture
No particular dangers due to the product
Aerosol – overheated cans will explode and be thrown away with big force

Special protective equipment for fire-fighters
no

Additional information
Cool endangered containers with water spray jet.

6. Accidental release measures

Personal precautions
Ensure adequate ventilation.
Keep away sources of ignition.

Environmental precautions
Do not discharge into the drains/surface waters/groundwater.

Methods for cleaning up
Take up with absorbent material (e.g. sand, kieselguhr, acid binder, general-purpose binder, sawdust).
Separate leaky cans

7. Handling and storage

Advice on safe handling
Use only in well ventilated areas, keep away from sources of ignition
Do not spray into flames or against incandescent material
Do not pierce or burn, even after use

Advice on protection against fire and explosion
Cool endangered containers with water

Requirements for storage rooms and vessels
Storing at room temperature in sufficient ventilated area
Take care for storage conditions of aerosol products

Further information on storage conditions
Protect from heat and direct solar radiation.

Information on storage stability
Storage time: 24 months.

8. Exposure controls/personal protection

Ingredients with occupational exposure limits to be monitored

<table>
<thead>
<tr>
<th>CAS No</th>
<th>Name</th>
<th>Code</th>
<th>mg/m³</th>
<th>ppm</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>112-34-5</td>
<td>2-(2-butoxyethoxy)ethanol</td>
<td>8 hours</td>
<td>67</td>
<td>10</td>
<td>1.5</td>
</tr>
<tr>
<td>124-38-9</td>
<td>carbon dioxide</td>
<td>8 hours</td>
<td>9100</td>
<td>5000</td>
<td>2(II)</td>
</tr>
<tr>
<td>34590-94-8</td>
<td>(2-Methoxy)methylethoxypropanol</td>
<td>8 hours</td>
<td>310</td>
<td>50</td>
<td>1(I)</td>
</tr>
<tr>
<td></td>
<td>(Isomerengemisch)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>68551-17-7</td>
<td>Synthetic isoparaffines</td>
<td>8 hours</td>
<td>600</td>
<td></td>
<td>2(II)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CAS No</th>
<th>Name</th>
<th>Code</th>
<th>[mg/m³]</th>
<th>[ppm]</th>
<th>Remark</th>
</tr>
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<tbody>
<tr>
<td>112-34-5</td>
<td>2-(2-butoxyethoxy)ethanol</td>
<td>8 hours</td>
<td>67.5</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>124-38-9</td>
<td>carbon dioxide</td>
<td>8 hours</td>
<td>101.2</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>34590-94-8</td>
<td>(2-methoxymethylethoxy)-propanol</td>
<td>8 hours</td>
<td>9000</td>
<td>5000</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Short-term</td>
<td>308</td>
<td>50</td>
<td>skin</td>
</tr>
</tbody>
</table>

Respiratory protection
In case of spraying the product in insufficiently ventilated rooms wear respiratory protection (filter mask, filter A); in case of product concentrations > 1% use an air independant respirator

Hand protection
Gloves (solvent resistant), p.e. Viton (permeation time > 480min/0.7mm thickness according to DIN/EN 374)

Eye protection
Safety goggles with side proection in case of spraying the product

Hygiene measures
At work do not eat, drink and smoke.

9. Physical and chemical properties

<table>
<thead>
<tr>
<th>Form</th>
<th>Colour</th>
<th>Odour</th>
</tr>
</thead>
<tbody>
<tr>
<td>aerosol</td>
<td>colourless, clear</td>
<td>weak</td>
</tr>
</tbody>
</table>

Important health, safety and environmental information

<table>
<thead>
<tr>
<th>pH value in delivery state</th>
<th>Value</th>
<th>Temperature at</th>
<th>Method</th>
<th>Remark</th>
</tr>
</thead>
</table>

Flash point
> 61 °C

Ignition temperature
c.a. 265 °C

Lower explosion limit
0,6 Vol-%

Upper explosion limit
6,5 Vol-%

Vapour pressure
< 1 hPa

Density
0,764 g/cm³

Solubility in water
Insoluble

Oxidizing properties
Product is combustible

Explosive properties
At use possible formation of explosive/highly flammable mixtures of vapours with the air. Danger of bursting at temperatures above 50°C

Additional information
Inside pressure 630 kPa
Evaporation rate: 60 DIN 53170
These informations are valid for the active substance
10. Stability and reactivity

Conditions to avoid
Protect from sunlight and temperatures above 50°C. Aerosol product

Materials to avoid
Strong oxidizing agents

Hazardous decomposition products
no

Thermal decomposition

Remark no

11. Toxicological information

Acute toxicity/Irritability/Sensitization

<table>
<thead>
<tr>
<th>Value/Validation</th>
<th>Species</th>
<th>Method</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>LD50 acute oral</td>
<td></td>
<td></td>
<td>Can lead to digestive discomfort and diarrhoe. May cause lung damage.</td>
</tr>
<tr>
<td>LC50 acute inhalation</td>
<td></td>
<td></td>
<td>High concentrations may be irritating to the respiratory tract</td>
</tr>
<tr>
<td>Irritability skin</td>
<td>Will defat the skin during prolonged contact</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Irritability eye</td>
<td>Low irritant. No injuries of eye tissues.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

12. Ecological information

General regulation
Product does not contain halogenated hydrocarbons (e.g. CFC, CHC), aromatic components (toluene, xylene), PCB, PCT.

13. Disposal considerations

Waste code No. 16 05 05 Name of waste gases in pressure containers other than those mentioned in 16 05 04

Recommendations for the product
Usually there is no product to discharge after use

Recommendations for packaging
Empty and non-pressurized cans: EWC-No. 15 01 04 Totally emptied packaging may be taken for recycling.

General information
Spray cans with residues: EWC-No. 160505 Gases in pressurized containers
14. Transport information

- Land and inland navigation transport ADR RID
  UN 1950 AEROSOLS, LIMITED QUANTITY, 2.1, (D), Classification code: 5F

- Marine transport IMDG
  UN 1950 Aerosols, limited quantities 1I, 2
  EmS-Nr.: F-D, S-U

- Air transport ICAO/IATA-DGR
  UN 1950 Aerosols, flammable, 2.1
  Packing Instr.: 203

15. Regulatory information

16. Other information

Recommend uses and restrictions
This information relates only to the product designated. It may not be valid in combination with any other materials or in any process.
Such information is the best of our knowledge and belief accurate and reliable as to the date indicated. However the information given here is submitted without any liability on our part.

- Product is admitted for the use in the food industry

Further information
Main changes to preliminary versions are marked with "I" on the left side of the pages.

The following R-phrases do not represent the classification of the total product. They refer to the pure ingredients, mentioned in point 3.

Worded of the R/H-phrases specified in chapter 3 (not the classification of the mixture!)

- R 36 Irritating to eyes.
- R 53 May cause long-term adverse effects in the aquatic environment.
- R 65 Harmful: may cause lung damage if swallowed.
- R 66 Repeated exposure may cause skin dryness or cracking.

H304 May be fatal if swallowed and enters airways.
H319 Causes serious eye irritation.
H413 May cause long lasting harmful effects to aquatic life.