SAFETY DATA SHEET
Rimon 10 EC
Revision Date 08-Aug-2019
Publish Date 08-Aug-2019

Section 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Product identifier

Rimon 10 EC
Synonyms
Novaluron 100 EC
Pure substance/mixture
Mixture
Formula
EC

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

Recommended Use
Insecticide
Uses advised against
No information available

Details of the supplier of the safety data sheet

Supplier Address
ADAMA SOUTH AFRICA (PTY) LTD
Ground Floor, Simeka House
The Vineyards Office Estate
99 Jip de Jager Drive
Bellville 7530

For further information, please contact

Email address
SDS@ADAMA.COM

Emergency Telephone
+ 27 82 446 8946
+ 27 86 155 5777
+ 27 21 982 1460

Section 2: HAZARDS IDENTIFICATION

Classification of the substance or mixture

Serious eye damage/eye irritation
Category 2 - (H319)
Skin sensitization
Category 1 - (H317)
Reproductive toxicity
Category 1B - (H360)
Specific target organ toxicity (single exposure)
Category 3 - (H335)
Acute aquatic toxicity
Category 1 - (H400)
Chronic aquatic toxicity
Category 1 - (H410)

Label Elements
Hazard pictograms

Signal word

Danger

Hazard Statements

H317 - May cause an allergic skin reaction
H319 - Causes serious eye irritation
H335 - May cause respiratory irritation
H360 - May damage fertility or the unborn child
H410 - Very toxic to aquatic life with long lasting effects

Precautionary Statements

P102 - Keep out of reach of children
P201 - Obtain special instructions before use
P261 - Avoid breathing dust/fume/gas/mist/vapors/spray
P280 - Wear protective gloves/protective clothing/eye protection/face protection
P302 + P352 - IF ON SKIN: Wash with plenty of soap and water
P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P501 - Dispose of contents/container to an approved waste disposal plant

Other Hazards

No information available

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

Mixture

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Weight-%</th>
<th>CAS No</th>
<th>EC No</th>
<th>GHS Classification</th>
<th>M-Factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Novaluron</td>
<td>7 - 11</td>
<td>116714-46-6</td>
<td></td>
<td>Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410)</td>
<td>M=1 M=1000</td>
</tr>
<tr>
<td>N-Methyl-2-pyrrolidone</td>
<td>42 - 46</td>
<td>872-50-4</td>
<td>212-828-1</td>
<td>Skin Irrit. 2 (H315) Eye Irrit. 2 (H319) Repr. 1B (H360) STOT SE 3 (H335)</td>
<td></td>
</tr>
<tr>
<td>Poly(oxy-1,2-ethanediyl)\alpha-(C10-14)alkyl-\omega-hydroxy, phosphate</td>
<td>11 - 13</td>
<td>68585-36-4</td>
<td></td>
<td>Skin Corr. 1B (H314)</td>
<td></td>
</tr>
</tbody>
</table>

Section 4: FIRST AID MEASURES

First aid measures

General advice

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible). First aider: Pay attention to self-protection!

Inhalation

Remove to fresh air. If breathing is irregular or stopped, administer artificial respiration. Call a physician.

Skin Contact

Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Consult a physician if necessary.
Eye contact
Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Keep eye wide open while rinsing. If symptoms persist, call a physician.

Ingestion
Do NOT induce vomiting. Rinse mouth. Drink plenty of water. If symptoms persist, call a physician.

Self-protection of the first aider
Use personal protective equipment as required.

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

Indication of any immediate medical attention and special treatment needed
Note to physicians
Treat symptomatically.

Section 5: FIRE-FIGHTING MEASURES

Extinguishing media

Suitable Extinguishing Media
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media
No information available.

Special hazards arising from the substance or mixture
No specific hazard known.

Advice for firefighters
In the event of fire, wear self-contained breathing apparatus
In the event of fire and/or explosion do not breathe fumes.

Section 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions
Use personal protective equipment as required. Evacuate personnel to safe areas. Avoid contact with skin, eyes or clothing. Keep people away from and upwind of spill/leak.

For emergency responders
Use personal protection recommended in Section 8.

Environmental precautions
Do not allow into any sewer, on the ground or into any body of water. Should not be released into the environment. Prevent further leakage or spillage if safe to do so. Prevent product from entering drains.

Methods and material for containment and cleaning up

Methods for cleaning up
Take up mechanically, placing in appropriate containers for disposal.

Reference to other sections
Other Information
See also section 8,13

Section 7: HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling
Use personal protective equipment as required. Avoid contact with skin, eyes or clothing. Use only with adequate ventilation. In case of insufficient ventilation, wear suitable respiratory equipment. Use only with adequate ventilation and in closed systems.

General Hygiene Considerations
When using do not eat, drink or smoke. Wash contaminated clothing before reuse. Keep away from food, drink and animal feeding stuffs. Contaminated work clothing should not be allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended. Avoid contact with skin, eyes or clothing. Take off all contaminated clothing and wash it before reuse. Wear suitable gloves and eye/face protection.

Conditions for safe storage, including any incompatibilities

Storage Conditions
Keep container tightly closed in a dry and well-ventilated place. Keep out of the reach of children. Keep containers tightly closed in a dry, cool and well-ventilated place. Keep in properly labeled containers.

Specific end use(s)

Risk Management Methods (RMM)
The information required is contained in this Material Safety Data Sheet.

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

National occupational exposure limits

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>European Union</th>
<th>United Kingdom</th>
<th>France</th>
<th>Spain</th>
<th>Germany</th>
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<tbody>
<tr>
<td>N-Methyl-2-pyrrolidone</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>872-50-4</td>
<td></td>
<td>STEL: 75 ppm</td>
<td>TWA: 40 mg/m³</td>
<td>S*</td>
<td>TWA: 20 ppm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>STEL: 309 mg/m³</td>
<td>TWA: 10 ppm</td>
<td>STEL: 80 mg/m³</td>
<td>Ceiling / Peak: 40 ppm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWA: 10 ppm</td>
<td>STEL: 10 ppm</td>
<td>TWA: 10 ppm</td>
<td>TWA: 82 mg/m³</td>
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<tr>
<td></td>
<td></td>
<td>STEL: 40 mg/m³</td>
<td>STEL: 20 ppm</td>
<td>TWA: 40 mg/m³</td>
<td>Ceiling / Peak: 164 mg/m³</td>
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</table>

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Italy</th>
<th>Portugal</th>
<th>Netherlands</th>
<th>Finland</th>
<th>Denmark</th>
</tr>
</thead>
<tbody>
<tr>
<td>N-Methyl-2-pyrrolidone</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>872-50-4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Skin</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>STEL: 80 mg/m³</td>
<td>TWA: 10 ppm</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWA: 40 mg/m³</td>
<td>STEL: 20 ppm</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Austria</th>
<th>Switzerland</th>
<th>Poland</th>
<th>Norway</th>
<th>Ireland</th>
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<tbody>
<tr>
<td>N-Methyl-2-pyrrolidone</td>
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<td></td>
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<td></td>
</tr>
<tr>
<td>872-50-4</td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Skin</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>STEL: 20 ppm</td>
<td>TWA: 10 ppm</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>STEL: 40 ppm</td>
<td>TWA: 40 mg/m³</td>
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</tr>
<tr>
<td></td>
<td></td>
<td>STEL: 160 mg/m³</td>
<td>TWA: 20 ppm</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>STEL: 80 mg/m³</td>
<td>TWA: 80 mg/m³</td>
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</tr>
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</table>

Exposure controls

Engineering Controls
Ensure adequate ventilation, especially in confined areas.

Personal protective equipment

Eye/face protection
Tight sealing safety goggles.
Hand Protection  Suitable chemical resistant gloves (EN 374) also with prolonged, direct contact (recommendation: protection index 6, corresponding > 480 minutes Permeability time (permeation) according to EN 374): e.g. nitrile rubber (0.4 mm), chloroprene rubber (0.5 mm), butyl rubber (0.7 mm).

Body Protection  Gloves made of plastic or rubber, Suitable protective clothing, Rubber boots, Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact, Wear chemical resistant clothing such as gloves, apron, boots or whole bodysuits made from neoprene, as appropriate.

Respiratory protection  Use only with adequate ventilation.

General Hygiene Considerations  When using do not eat, drink or smoke. Wash contaminated clothing before reuse. Keep away from food, drink and animal feeding stuffs. Contaminated work clothing should not be allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended. Avoid contact with skin, eyes or clothing. Take off all contaminated clothing and wash it before reuse. Wear suitable gloves and eye/face protection.

Environmental exposure controls  Local authorities should be advised if significant spillages cannot be contained. Do not allow into any sewer, on the ground or into any body of water. Prevent product from entering drains.

### Section 9: PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Values</th>
<th>Method</th>
<th>Remarks</th>
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</thead>
<tbody>
<tr>
<td>Appearance</td>
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<tr>
<td>Physical state</td>
<td>Liquid</td>
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</tr>
<tr>
<td>Color</td>
<td>Salmon pink</td>
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<td></td>
</tr>
<tr>
<td>Odor</td>
<td>characteristic</td>
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</tr>
<tr>
<td>Odor threshold</td>
<td>No data available</td>
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<td></td>
</tr>
<tr>
<td>pH</td>
<td>2.4 - 3.4</td>
<td>CIPAC MT 75</td>
<td>1 % aqueous solution</td>
</tr>
<tr>
<td>Melting point/freezing point °C</td>
<td>----</td>
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<td>Not Applicable</td>
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<td>Boiling point/boiling range °C</td>
<td>No data available</td>
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<td></td>
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<tr>
<td>Flash point °C</td>
<td>102</td>
<td>EEC A.9</td>
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<tr>
<td>Evaporation rate</td>
<td>----</td>
<td></td>
<td>No data available</td>
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<tr>
<td>Flammability (solid, gas)</td>
<td>No data available</td>
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<td></td>
</tr>
<tr>
<td>Upper/lower flammability or explosive limits</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vapor pressure kPa</td>
<td>----</td>
<td></td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Vapor density</td>
<td>No data available</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Relative density</td>
<td>1.0 - 1.1</td>
<td>OECD 109</td>
<td></td>
</tr>
<tr>
<td>Solubility(mg/l)</td>
<td>----</td>
<td></td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Partition Coefficient (n-octanol/water) Log Pow</td>
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<td></td>
<td>See Section 12 for more information</td>
</tr>
<tr>
<td>Autoignition temperature °C</td>
<td>256</td>
<td>EEC A.15</td>
<td></td>
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<tr>
<td>Decomposition temperature °C</td>
<td>No data available</td>
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<tr>
<td>Kinematic viscosity mm2/s 40 °C</td>
<td>12.8</td>
<td>OECD 114</td>
<td></td>
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<tr>
<td>Explosive properties</td>
<td>Not an explosive</td>
<td>EEC A.14</td>
<td></td>
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<tr>
<td>Oxidizing properties</td>
<td>No data available</td>
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<td></td>
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<tr>
<td>Other Information</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bulk density g/ml</td>
<td></td>
<td></td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Surface tension mN/m</td>
<td>----</td>
<td></td>
<td>No data available</td>
</tr>
</tbody>
</table>

### Section 10: STABILITY AND REACTIVITY

Reactivity

ADAMA
Chemical stability
Stable under normal conditions.

Possibility of Hazardous Reactions
None under normal processing.

Conditions to avoid
Exposure to air or moisture over prolonged periods.

Incompatible Materials
No information available

Hazardous Decomposition Products
Thermal decomposition can lead to release of irritating and toxic gases and vapors.

Section 11: TOXICOLOGY INFORMATION

Information on toxicological effects

Acute toxicity

<table>
<thead>
<tr>
<th></th>
<th>Values</th>
<th>Species</th>
<th>Method</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral LD50 mg/kg</td>
<td>&gt; 5000</td>
<td>Rat</td>
<td>EPA-FIFRA 81-1</td>
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<tr>
<td>Dermal LD50 mg/kg</td>
<td>&gt; 2000</td>
<td>Rat</td>
<td>EPA-FIFRA 81-2</td>
<td></td>
</tr>
<tr>
<td>Inhalation LC50 mg/l/4h</td>
<td></td>
<td></td>
<td></td>
<td>No data available</td>
</tr>
<tr>
<td>Skin corrosion/irritation</td>
<td>Non-irritating to the skin</td>
<td>Rabbit</td>
<td>EPA-FIFRA 81-5</td>
<td></td>
</tr>
<tr>
<td>Serious eye damage/eye irritation</td>
<td>Irritating to eyes</td>
<td>Rabbit</td>
<td>EPA-OPPTS 870.2400</td>
<td></td>
</tr>
<tr>
<td>Respiratory/skin sensitization</td>
<td>Skin sensitizer</td>
<td>Guinea pig</td>
<td>USEPA 86-5</td>
<td></td>
</tr>
</tbody>
</table>

Chronic toxicity

Germ cell mutagenicity
Chemical Name
Novaluron : Not classified

Carcinogenicity
Chemical Name
Novaluron : Not Carcinogenic

Reproductive toxicity
Chemical Name
Novaluron : Not toxic for the reproductive system

STOT - single exposure
Chemical Name
Novaluron : No data available

STOT - repeated exposure
Chemical Name
Novaluron : No data available

Aspiration hazard
Chemical Name
Novaluron : No data available
## Section 12: ECOLOGICAL INFORMATION

### Toxicity

#### Aquatic toxicity

<table>
<thead>
<tr>
<th>Species</th>
<th>Method</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rainbow trout</td>
<td>OECD 203</td>
<td></td>
</tr>
<tr>
<td>Daphnia magna</td>
<td>OECD 202</td>
<td></td>
</tr>
<tr>
<td>S. capricornutum</td>
<td>OECD 201</td>
<td></td>
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</table>

#### Terrestrial Toxicity

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Species</th>
<th>Method</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Novaluron</td>
<td>&gt; 2000 Bobwhite quail</td>
<td>US EPA 71-1</td>
<td></td>
</tr>
<tr>
<td>Novaluron</td>
<td>&gt; 100 Apis mellifera</td>
<td>EPPO 170</td>
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</tr>
</tbody>
</table>

### Persistence and degradability

#### Abiotic Degradation

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Values</th>
<th>Method</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Novaluron</td>
<td>----</td>
<td></td>
<td>No data available</td>
</tr>
<tr>
<td>Novaluron</td>
<td></td>
<td></td>
<td>No data available</td>
</tr>
<tr>
<td>Novaluron</td>
<td></td>
<td></td>
<td>No data available</td>
</tr>
</tbody>
</table>

### Mobility in soil

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Values</th>
<th>Method</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Novaluron</td>
<td>9598</td>
<td></td>
<td>Koc</td>
</tr>
</tbody>
</table>
Results of PBT and vPvB assessment
The components in this formulation do not meet the criteria for classification as PBT or vPvB

Other adverse effects
No information available.

Section 13: DISPOSAL CONSIDERATIONS

Waste treatment methods
Waste from residues/unused products
Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated packaging
Do not reuse container.

Other Information
Waste codes should be assigned by the user based on the application for which the product was used.

Section 14: TRANSPORTATION INFORMATION

IMDG/IMO
UN/ID No * 3082
Proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Novaluron)
Hazard Class 9
Packing Group III
Marine pollutant Yes
Special precautions for user

RID/ADR
UN/ID No * 3082
Proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Novaluron)
Hazard Class 9
Packing Group III
Environmental hazard Yes
Special precautions for user

ICAO/IATA
UN/ID No * 3082
Proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Novaluron)
Hazard Class 9
Packing Group III
Environmental hazard Yes
Special precautions for user

* Note: UN3077 & UN3082 – These products may be transported as non-dangerous goods under the special provisions of IMDG Code 2.10.2.7;
ADR SP375 and ICAO/IATA A197 when packed in single or inner packaging of up to 5L for liquids or 5 kg or less for solids.

Section 15: REGULATORY INFORMATION

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

Section 16: OTHER INFORMATION

Full text of H-Statements referred to under sections 2 and 3
H400 - Very toxic to aquatic life
H410 - Very toxic to aquatic life with long lasting effects
H314 - Causes severe skin burns and eye damage
H315 - Causes skin irritation
H319 - Causes serious eye irritation
H360D - May damage the unborn child
H335 - May cause respiratory irritation

Revision Note
Changes made to the last version are labeled with this sign ***.

List of Acronyms
ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road
ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
CAS Number - Chemical Abstracts Service number
EC Number - EINECS and ELINCS Number
EINECS - European Inventory of Existing Commercial Substances
ELINCS - European List of notified Chemical Substances
IATA - International Air Transport Association
ICAO-TI - Technical Instructions for the Safe Transport of Dangerous Goods by Air
IMDG - International Maritime Dangerous Goods
LC50 - Lethal Concentration to 50% of a test population
LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose)
OECD - Organization for Economic Co-operation and Development
PBT - Persistent, Bioaccumulative and Toxic substance
RID - Regulations concerning the International Carriage of Dangerous Goods by Rail
STOT - Specific Target Organ Toxicity
vPvB - Very Persistent and Very Bioaccumulative

Disclaimer
The information provided in this Material 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.

End of Safety Data Sheet