1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier

MOSPILAN 20 SG

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

Insecticide for agricultural use

1.3 Details of the supplier of the safety data sheet

Name: Nisso Chemical Europe GmbH
Address: Berliner Allee 42
40212 Düsseldorf
Germany
Telephone Number: +49-(0)211-130 66 86 0
Telefax Number: +49-(0)211-328231
Email: sds@nisso-chem.de

1.4 Emergency Telephone Number: CHEMTREC +1-703-741-5970 (24-hour)

2. HAZARDS IDENTIFICATION

2.1 Classification of the mixture

2.1.1 Classification according to Regulation (EC) No 1272/2008

Acute Tox. 4 H302 Harmful if swallowed
Aquatic Acute 1 H400 Very toxic to aquatic life
Aquatic Chronic 1 H410 Very toxic to aquatic life with long lasting effects
EUH 401 To avoid risks to human health and the environment, comply with the instructions for use.

2.2 Label elements

Labeling according to Regulation (EC) No 1272/2008

Hazard pictogram

GHS07, GHS09

Signal word Warning

Hazard statement

H302 Harmful if swallowed
H410 Very toxic to aquatic life with long lasting effects
EUH 401 To avoid risks to human health and the environment, comply with the instructions for use.

Precautionary statement

P264 Wash hands and face thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P301 + P312  IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
P330  Rinse mouth.
P391  Collect spillage.
P501  Dispose of contents/container in accordance with local/national/international regulations.

SP 1  Do not contaminate water with the product or its container (Do not clean application equipment near surface water/Avoid contamination via drains from farmyards and roads).

2.3 Other hazards
This product does not meet the criteria for PBT or vPvB according to Regulation (EC) No 1907/2006, Annex X III.

3. COMPOSITION / INFORMATION ON INGREDIENTS
3.1 Substances:
Not applicable.

3.2 Mixtures

<table>
<thead>
<tr>
<th>CAS No.</th>
<th>EC No.</th>
<th>Index No. / REACH Registration number</th>
<th>% (wt)</th>
<th>Substance name</th>
<th>Classification according to Regulation (EC) No 1272/2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>135410-20-7</td>
<td>Not applicable (pesticide)</td>
<td>608-032-0 0-2 / -</td>
<td>20.2</td>
<td>(E)-N[1-[(6-Chloro-3-pyridyl)methyl]-N[2-cyano-N[3-methylacetamidine (ISO name: Acetamiprid)</td>
<td>Acute Tox. 4; H302, Aquatic Chronic 3; H412</td>
</tr>
<tr>
<td>90194-45-9</td>
<td>290-656-6</td>
<td>—</td>
<td>2.4</td>
<td>Benzenesulfonic acid, mono-C10-13-alkyl derivs., sodium salts</td>
<td>Acute tox.4; H302, Skin irrit.2; H315, Eye Dam.1; H318</td>
</tr>
<tr>
<td>—</td>
<td>—</td>
<td>—</td>
<td>77.4</td>
<td>Additives (surfactants and etc.)</td>
<td>—</td>
</tr>
</tbody>
</table>

4. FIRST AID MEASURES
4.1 Description of first aid measures

4.1.1 Eye Contact: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

4.1.2 Skin Contact: Remove contaminated clothing and shoes, and wash with plenty of water and soap. If skin irritation occurs: Get medical advice/attention.

4.1.3 Inhalation: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell.

4.1.4 Ingestion: Rinse mouth. Do Not induce vomiting. Call a POISON CENTER/doctor if your feel unwell.

4.2 Most important symptoms and effects, both acute and delayed
Not available.

4.3 Indication of any immediate medical attention and special treatment needed

No specific antidote. Supportive care. Treatment based on judgment of physician in response to symptoms of...
5. FIRE - FIGHTING MEASURES

5.1 Extinguishing media: Dry chemicals carbon dioxide, foam or water spray.

Unsuitable extinguishing media: Not known.

5.2 Special hazards arising from the substance or mixture

Thermal decomposition or combustion may produce carbon dioxide, carbon monoxide, hydrogen chloride and nitrogen oxides.

5.3 Advice for firefighters

Protective equipment: Wear self-contained breathing apparatus and complete personal protective equipment.

Other information: Move containers away from fire areas if it can be done without risk. If impossible to remove containers from fire zone, cool them with water spray.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precaution, protective equipment and emergency procedures

Refer to Section 8 for personal protective equipment.

Keep away from all ignition sources. Avoid contact with skin, eyes and clothing.

Avoid breathing dust.

6.2 Environmental precautions

Do not discharge treated water to river, sea, lake, waterway etc. directly without the authority’s approval because this product is very toxic to aquatic organisms.

6.3 Methods and material for containment and cleaning up

Obey Federal, State or local regulations for health & environmental protection when accidental spills is treated. (large quantities) Remove with vacuum truck.

Wash spill site with soap and plenty of water after material pick-up is complete.

(small quantities) Remove with inert absorbent (e.g. sand or vermiculite), and place in a close containers and hold for waste disposal. Wash pill site with soap and plenty of water after material pick-up is complete.

6.4 Reference to other sections

Section 8 and 13

7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Refer to Section 8 for personal protective equipment.

Keep out of the reach of children.

Avoid contact with eyes, skin and clothing.

Do not breathe dust.

Wash hands and face thoroughly after handling.

Do not eat, drink or smoke when using this product.

7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed.

Store in a cool, dry, well-ventilated place.

Avoid direct contact with water, acids or base.

Avoid release to the environment during storage by spill collection using leakage trays, pans, etc.
7.3 Specific end use

Insecticide for agricultural use.

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8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters: Active ingredient: TLV/ACGIH Not listed.

8.2 Exposure controls: It is desirable to use general and/or local exhaust ventilation to control atmosphere in work area. Provide safety showers and eyewashes.

8.2.1 Appropriate engineering controls

Use general and/or local exhaust ventilation to control dust.

Provide safety showers and eyewashes.

8.2.2 Individual protection measures, such as personal protective equipment

(a) Eye protection: Use safety goggles.

(b) Skin protection: Wear suitable working wear, gloves and boots.

Hand protection: Protective gloves against chemicals and micro-organisms.

    Gloves materials: e.g. outside Rubber, Vinyl chloride resin

    inside Cotton, Rayon

(c) Respiratory protection: Wear suitable respirator for dust.

(d) Thermal hazards: None

8.2.3 Environmental exposure controls:

Use general and/or local exhaust ventilation to control dust.

Provide safety showers and eyewashes.

Prevent from entering into drains, ditches or rivers.

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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>Cyan blue, fee-flowering, opaque, hard, granular solid.</td>
</tr>
<tr>
<td>Odor</td>
<td>Weak odor.</td>
</tr>
<tr>
<td>pH</td>
<td>&gt; 4 but &lt; 10</td>
</tr>
<tr>
<td>Melting Point</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Boiling Point</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Flash Point</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Evaporation Rate (Butyl Acetate=1)</td>
<td>Not available.</td>
</tr>
<tr>
<td>Flammability</td>
<td>This product doesn’t have auto flammability in normal condition.</td>
</tr>
<tr>
<td>Upper/lower flammability limit</td>
<td>Not available.</td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Vapor Density (air=1)</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Relative Density</td>
<td>Pour density: 0.673g/mL, Tap density: 0.739g/mL.</td>
</tr>
<tr>
<td>Specific Gravity (H₂O=1)</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Solubility in water</td>
<td>Soluble.</td>
</tr>
<tr>
<td>Partition Coefficient n-Octanol/H₂O</td>
<td>Log Po/w = 0.79 (as active ingredient)</td>
</tr>
<tr>
<td>Auto-Ignition temperature</td>
<td>Not available.</td>
</tr>
</tbody>
</table>
9.2 Other information

Dust Explosive Properties: Not available.
Surface Tension: 32 mN/m at 20°C
Particle Size Distribution: Nominal size range of granule 250-850 μm diameter.

10. STABILITY AND REACTIVITY

10.1 Reactivity

The specific test data of the reactivity hazards is not available. But this product is stable under normal storage and handling conditions. Incompatible materials are referred to 10.5.

10.2 Chemical stability

Stable under normal storage and handling conditions.

10.3 Possibility of hazardous reactions

Hazardous polymerization does not occur.

10.4 Condition to avoid

High temperature.

10.5 Incompatible materials

Strong oxidizing agents, strong acids or bases.

10.6 Hazardous decomposition products

Carbon oxides, nitrogen oxides, hydrogen chloride and organic compounds.

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

(a) Acute toxicity (Data of Soluble Powder formation of the same contents):

Oral LD₅₀ (rat): 1065mg/kg (male, female)
Dermal LD₅₀ (rat): >2000 mg/kg (male, female)
Inhalation LC₅₀ (rat): >3.5 mg/L (4hr) (dust, maximum attainable concentration)

(b) Skin corrosion/irritation:

Dermal (rabbit): Not irritant.

(c) Serious eye damage/irritation:

Eye (rabbit): Not irritant. (20% Soluble Powder was used for this test.)

(d) Respiratory or skin sensitization:

Dermal (guinea pig): Non-sensitising
Respiratory: Not available.

(e) Germ cell mutagenicity:

For the Product: Not available.
active ingredient

Ames test: Negative
Chromosome aberration test: Positive
Micronucleus test (mouse): Negative
UDS study: Negative

(f) Carcinogenicity:
For the Product Not available.
active ingredient Negative (rat)
Negative (mouse)

(g) Reproductive Toxicity:
Reproductive Toxicity
For the Product Not available.
active ingredient Negative (rat)
Teratogenicity
For the Product Not available.
active ingredient Negative (rat)
Negative (rabbit)

(h) STOT-single exposure: Not available.

(i) STOT-repeated exposure:
For the Product: Not available
active ingredient:

Chronic Toxicity
NOAEL (rat): 7.1 mg/kg/day (male), 8.8 mg/kg/day (female) (2 years)
NOAEL (mouse): 20.3 mg/kg/day (male), 25.2 kg/day (female) (1.5 years)

(j) Aspiration hazard:

(k) Others Not available.

12. ECOLOGICAL INFORMATION

12.1 Toxicity
Acute Toxicity for Fish (Carp): $LC_{50} > 100 \text{mg/L} \ (96 \text{hr})$
Acute Toxicity for Daphnia (Daphnia Magna): $EC_{50} > 159 \text{mg/L} \ (48 \text{hr})$
Acute Toxicity for Chironomus (Chironomus riparius): $EC_{50} = 0.0981 \text{mg/L} \ (48 \text{hr})$
Acute Toxicity to Algae (Scenedesmus subspicatus): $ErC_{50} > 97.8 \text{mg/L} \ (72 \text{hr})$

12.2 Persistence and degradability
For the Product Not available.
active ingredient Not readily biodegradable.

12.3 Bioaccumulative potential
For the Product Not available.
active ingredient This substance is not bioaccumulative.

12.4 Mobility in soil: Not applicable
12.5 Results of PBT and vPvB assessment: This product does not meet the criteria for PBT or vPvB according to Regulation (EC) No 1907/2006, Annex X III.

12.6 Other adverse effects: Not available.

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13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

1) Waste disposal according to 91/689/EEC in the corresponding versions (hazardous waste).
2) Consider classifications (European waste catalogue) 02 01 or 07 04.
3) Consult the appropriate local authorities about special requirement.
4) Dispose of contents/container in accordance with local/national/international regulations.

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14. TRANSPORT INFORMATION

14.1 IMDG

<table>
<thead>
<tr>
<th>UN No.</th>
<th>3077</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proper shipping name</td>
<td>ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N. O. S. (Acetamiprid mixture)</td>
</tr>
<tr>
<td>Hazard Class</td>
<td>9</td>
</tr>
<tr>
<td>Packing group</td>
<td>III</td>
</tr>
<tr>
<td>Marine pollutant</td>
<td>Applicable</td>
</tr>
</tbody>
</table>

14.2 RID/ ADR

<table>
<thead>
<tr>
<th>UN No.</th>
<th>3077</th>
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</thead>
<tbody>
<tr>
<td>Name and description</td>
<td>ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N. O. S. (Acetamiprid mixture)</td>
</tr>
<tr>
<td>Class</td>
<td>9</td>
</tr>
<tr>
<td>Packing group</td>
<td>III</td>
</tr>
<tr>
<td>Hazard Identification No.</td>
<td>90</td>
</tr>
<tr>
<td>Environmentally hazardous</td>
<td>Applicable</td>
</tr>
</tbody>
</table>

14.3 ICAO/IATA-DGR

<table>
<thead>
<tr>
<th>UN No.</th>
<th>3077</th>
</tr>
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<tbody>
<tr>
<td>Class</td>
<td>9</td>
</tr>
<tr>
<td>Proper shipping name</td>
<td>Environmentally hazardous substance, solid, n. o. s. (Acetamiprid mixture)</td>
</tr>
<tr>
<td>Packing group</td>
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<td>Applicable</td>
</tr>
</tbody>
</table>

14.4 Special precautions for use

None

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15. REGULATORY INFORMATION

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

EU regulatory information

The product is regulated under the EU Directive(s) or Regulation(s) on plant protection products since it is one of plant protection products.

National regulatory information
15.2 Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out.

16. OTHER INFORMATION

16.1 Added, deleted or revised information

16.1.1 This safety data sheet is revised in accordance with Regulation (EC) No 1907/2006.

16.1.2 Added, deleted or revised information

Section 2, 3, 16: Classifications according to Directive 67/548/EEC and 1999/45/EC were deleted.

16.2 List of hazard statements contained in Section 2 to 15 of this document (for information only)

H302  Harmful if swallowed
H315  Causes skin irritation.
H318  Causes serious eye damage.
H400  Very toxic to aquatic life
H410  Very toxic to aquatic life with long lasting effects
H412  Harmful to aquatic life with long lasting effects
EUH401 To avoid risks to human health and the environment, comply with the instructions

16.3 References

None