MATERIAL SAFETY DATA SHEET

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Date: 17 June 2009

SECTION 1 – PRODUCT IDENTIFICATION

Trade Names and Synonyms: Avikote WB 600

Product Use: Coating compound / Surface coating / Paint
Fire retarding agent

SECTION 2 – HAZARDOUS IDENTIFICATION

CLASSIFICATION OF THE SUBSTANCE OR MIXTURE

Classification according to Directive 67/548/EEC or Directive 1999/45/EC

R52/53 : Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Information concerning particular hazards for human and environment:
The product does not have to be labeled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

Classification System:
The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

LABEL ELEMENTS

Labelling according to EU guidelines:
Observe the general safety regulations when handling chemicals.
The product is not subject to identification regulations under EU Directives / Ordinance on Hazardous Materials.

Safety Phrases:
7 Keep container tightly closed.
23 Do not breathe vapor.
26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
28 After contact with skin, wash immediately with plenty of soap and water.
36/37 Wear suitable protective clothing and gloves.
38 In case of insufficient ventilation, wear suitable respiratory equipment.
51 Use only in well-ventilated areas.
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OTHER HAZARDS:

Results of PBT and vPvB assessment
PBT - not applicable
vPvB - not applicable

SECTION 3 – COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Characterization: Mixtures

Description: Mixture of substances listed below with nonhazardous additions.

| CAS: 1244733-77-4 | Tris (2-chloro-1-methylethyl) phosphate | 1-<5% |
| EC Number: 911-815-4 | Xn R22 | |
| | Acute Tox. 3, H331; Acute Tox. 4, H302 | |
| CAS: 64742-82-1 | Naphtha (petroleum), hydrodesulfurized heavy | 1-<5% |
| EINECS: 265-185-4 | Xn R65, N R51/53 | |
| | R10-66-67 | |
| | Carc. 1B, H350; Asp. Tox. 1, H304 | |
| CAS: 9016-45-9 | Nonylphenol, ethoxylated | 1-<5% |
| NLP: 500-024-6 | R52/53 | |
| | Aquatic Chronic 3, H412 | |
| CAS: 10043-35-3 | Boric acid | 0.1-<1% |
| EINECS: 233-139-2 | T Repr. Cat. 2R60-61 | |
| | Repr. 1B, H360FD | |
| CAS: 1314-13-2 | Zinc oxide | 0.1-<1% |
| EINECS: 215-222-5 | N R50/53 | |
| | Aquatic Acute 1, H400; Aquatic Chronic 1, H410 | |
| SVHC | Boric acid | |
| 10043-35-3 | | |

Additional Information: For the wording of the listed risk phrases refer to Section 16

SECTION 4 – FIRST AID MEASURES

Description of First Aid Measures

After Inhalation: Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.

After Skin Contact: Immediately wash with water and soap and rinse thoroughly. If skin irritation continues, consult a doctor.

After Eye Contact: Rinse opened eye for several minutes under running water. Then consult a doctor.

After Swallowing: Rinse out mouth and then drink plenty of water. Seek immediate medical advice.

Most Important Symptoms and Effects, Both Acute and Delayed: No further relevant information available.

Information for Doctor: No further relevant information available.
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Hazards: No further relevant information available.

Indication of any Immediate Medical Attention and Special Treatment Needed: No further relevant information available.

SECTION 5 – FIREFIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Agents: CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam. Use fire extinguishing methods suitable to surrounding conditions.

Special Hazards Arising from the Substance or Mixture
Formation of toxic gases is possible during heating or in case of fire.

Advice for Firefighters


Additional Information: Collect contaminated firefighting water separately. It must not enter the sewage system.

SECTION 6 – ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures

Ensure adequate ventilation.
Wear protective clothing.

Environmental Precautions: Do not allow to enter sewers / surface or ground water. Inform respective authorities in case of seepage into water course or sewage system.

Methods and Material for Containment and Cleaning-up:

Ensure adequate ventilation.
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Clean the affected area carefully; suitable cleaners are: Warm water and cleansing agent.

Reference to other Sections

No dangerous substances are released.
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.
SECTION 7 – HANDLING AND STORAGE

Precautions for Safe Handling
Ensure good ventilation/exhaustion at the workplace.
Avoid contact with the eyes and skin.

Conditions for Safe Storage, Including any Incompatibilities Storage:

Requirements to be Met by Storerooms and Receptacles:
Store only in unopened original receptacles.

Information About Storage in One Common Storage Facility:
Protect from heat and direct sunlight.

Further information About Storage Conditions:
Keep container tightly sealed.
Protect from frost.
Storage temperature: +5°C to + 25°C

Specific End Use(s): No further relevant available.

SECTION 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION

CONTROL PARAMETERS

<table>
<thead>
<tr>
<th>Ingredients with limit values that require monitoring at the workplace:</th>
</tr>
</thead>
<tbody>
<tr>
<td>6472-82-1 Naphtha (petroleum), hydrodesulfurized heavy</td>
</tr>
<tr>
<td>OES</td>
</tr>
</tbody>
</table>

Additional Information: The lists valid during the making were used as basis.

EXPOSURE CONTROLS

Personal Protective Equipment:

General Protective Hygienic Measures:
Do not inhale gases / fumes / aerosols.
Avoid contact with the eyes and skin.

Respiratory Protection:
Only during spraying without adequate removal by suction.
Filter A/P2

Protection of Hands
Protective gloves
The glove material has to be impermeable and resistant to the product / the substance / the preparation.
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Material Gloves
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material cannot be calculated in advance and has therefore to be checked prior to the application.
Flourocarbon rubber (Viton)
Nitrile rubber, NBR
PVC or PE gloves

Penetration Time of Glove Material
The exact breakthrough time has to be found out by the manufacturer of the protective gloves and has to be observed.

Eye Protection : Tightly sealed goggles.
Body Protection : Protective work clothing.

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Information on basic physical and chemical properties</th>
<th>General Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance:</td>
<td>Liquid</td>
</tr>
<tr>
<td>Form</td>
<td>White</td>
</tr>
<tr>
<td>Color</td>
<td>Uncharacteristic</td>
</tr>
<tr>
<td>Odour</td>
<td></td>
</tr>
<tr>
<td>pH value</td>
<td>8.0 – 9.5</td>
</tr>
<tr>
<td>Change in condition</td>
<td>&gt;100°C</td>
</tr>
<tr>
<td>Boiling point / Boiling range</td>
<td></td>
</tr>
<tr>
<td>Flash Point</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Danger of Explosion</td>
<td>Product does not present an explosion hazard</td>
</tr>
<tr>
<td>Vapor Pressure at 20°C</td>
<td>2.4 hPa</td>
</tr>
<tr>
<td>Density at 20°C</td>
<td>1.3 – 1.5 g/cm³</td>
</tr>
<tr>
<td>Solubility in / Miscibility with water</td>
<td>Fully miscible</td>
</tr>
<tr>
<td>Solvent Content</td>
<td></td>
</tr>
<tr>
<td>VOC (EU)</td>
<td>21 g/l</td>
</tr>
<tr>
<td>Other information</td>
<td>No further relevant information available</td>
</tr>
</tbody>
</table>

SECTION 10 – STABILITY AND REACTIVITY

Reactivity : Stable

Chemical Stability
Thermal decomposition / conditions to be avoided:
: No decomposition if used according to specifications.

Possibility of Hazardous Reactions:
: Reacts with acids, alkalis and oxidizing agents.
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Conditions to Avoid : No further relevant information available.

Incompatible Materials : No further relevant information available.

Hazardous Decomposition Products:
- Possible in traces
- Carbon monoxide and carbon dioxide
- Nitrogen oxides.

SECTION 11 – ECOLOGICAL INFORMATION

Information on Toxicological Effects

Acute toxicity

<table>
<thead>
<tr>
<th>LD/LC50 values relevant for classification:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1314-13-2 zinc oxide</td>
<td></td>
</tr>
<tr>
<td>Oral</td>
<td>LD50</td>
</tr>
</tbody>
</table>

Primary Irritant Effect:
- On the skin : Slight irritation possible
- On the eye : Irritating effect
- Sensitization : No sensitizing effects known.

Additional Toxicological Information:
The product is not subject to classification according to the calculation method of the General EU Classification Guidelines for Preparation as issued in the latest version.

When used and handled according to specifications, the product does not have any harmful effects To our experience and the information provided to us.

12 – ECOLOGICAL INFORMATION

Toxicity

Aquatic toxicity : No further relevant information available.

Persistence and degradability : No further relevant information available.

Bio accumulative potential : No further relevant information available.

Mobility in soil : No further relevant information available.

Ecotoxical Effects:

Remarks : Harmful to fish
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Additional ecological information:
General Notes:
Do not allow product to reach ground water, water course or sewage system, even in small quantities.
Danger in drinking water if even extremely small quantities leak into the ground.

Results of PBT and vPvB assessment
PBT - Not applicable
vPvB - Not applicable

Other adverse effects: No further relevant information available.

13 – DISPOSAL CONSIDERATIONS

Waste Treatment Methods
Recommendation: Disposal must be made according to official regulations.
Must not be disposed together with household garbage.
Do not allow product to reach sewage system.

European Waste Catalogue
08 01 20 | Aqueous suspensions containing paint or varnish other than those mentioned in 08 01 10

Uncleaned Packaging:
Recommendation: Packagings that may not be cleansed are to be disposed of in the same manner as the product.
Non contaminated packaging may be recycled

Recommended Cleansing Agents: Water, if necessary together with cleansing agents.

14 – TRANSPORT INFORMATION

| UN-Number | Void |
| ADR, AND, IMDG, IATA | Void |
| UN Proper Shipping Name | Void |
| ADR, AND, IMDG, IATA | Void |
| Transport Hazard Class(es) | Void |
| ADR, AND, IMDG, IATA Class | Void |
| Packaging Group | Void |
| ADR, IMDG, IATA | Void |
| Environmental Hazards: | No |
| Marine pollutants | Not applicable |
| Special Precautions for User | No applicable |
| Transport in Bulk According to Annex II of MARPOL73/78 and the IBC Code | No applicable |
| UN “Model Regulation: |
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15 - REGULATORY INFORMATION

Safety, Health and Environmental Regulations/legislation Specific for the Substance or Mixture

"CHIP" SI 2009 No. 716
1999/45/EC
(EC) No 1272/2008
REACH (EC) No 1907/2006

NATIONAL REGULATIONS:

Other regulations, limitations and prohibitive regulations

<table>
<thead>
<tr>
<th>Substances of very high concern (SVHC) according to REACH, Article 57</th>
</tr>
</thead>
<tbody>
<tr>
<td>10043-35-3</td>
</tr>
</tbody>
</table>

Chemical safety assessment : A Chemical Safety Assessment has not been carried out.

16 - OTHER INFORMATION

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Relevant Phrases:

H302 - Harmful if swallowed
H304 - May be fatal if swallowed and enters airways.
H331 - Toxic if inhaled.
H350 - May cause cancer.
H360FD - May damage fertility. May damage the unborn child.
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.
R10 - Flammable.
R22 - Harmful if swallowed.
R50/53 - Very toxic to aquatic organisms, may cause long term adverse effects in the aquatic environment.
R51/53 - Toxic to aquatic organisms, may cause long term adverse effects in the aquatic environment.
R52/53 - Harmful to aquatic organisms, may cause long term adverse effects in the aquatic environment.
R60 - May impair fertility.
R61 - May cause harm to the unborn child.
R65 - Harmful: may cause lung damage if swallowed.
R66 - Repeated exposure may cause skin dryness or cracking.
R67 - Vapors may cause drowsiness and dizziness.

Previous Revision Date: 19-10-2011