1. Product and company identification

- **Trade name**: Pilot II AV Aluminium HR
- **Material uses**: Coatings: Solvent-borne.
- **Manufacturer**: Jotun Paints, Inc.
  9203 Highway 23
  Belle Chasse, LA 70037
  Telephone: (800) 229-3538 or +1 504-394-3538
  SDSJotun@jotun.com
- **Code**: 1109
- **In case of emergency**: 1-800-424-9300 (Staffed 24/7)

2. Hazards identification

- **Physical state**: Liquid.
- **Odor**: Characteristic.
- **Emergency overview**: CAUTION!
  COMBUSTIBLE LIQUID AND VAPOR. CONTAINS MATERIAL THAT MAY CAUSE TARGET ORGAN DAMAGE, BASED ON ANIMAL DATA. POSSIBLE CANCER HAZARD - CONTAINS MATERIAL WHICH MAY CAUSE CANCER, BASED ON ANIMAL DATA.
  Combustible liquid. Keep away from heat, sparks and flame. Avoid exposure - obtain special instructions before use. Do not breathe vapor or mist. Avoid contact with skin and clothing. Contains material that may cause target organ damage, based on animal data. Contains material which may cause cancer, based on animal data. Risk of cancer depends on duration and level of exposure. Use only with adequate ventilation.

- **Potential acute health effects**
  - **Eyes**: May cause eye irritation.
  - **Skin**: May cause skin irritation.
  - **Inhalation**: No known significant effects or critical hazards.
  - **Ingestion**: No known significant effects or critical hazards.

- **Potential chronic health effects**
  - **CARCINOGENIC EFFECTS**: Classified A4 (Not classifiable for humans or animals.) by ACGIH [aluminium stabilized]. Classified 3 (Not classifiable for humans.) by IARC [zeolite]. Classified A4 (Not classifiable for humans or animals.) by ACGIH [Distillates (petroleum), hydrotreated heavy naphthenic]. Classified A4 (Not classifiable for humans or animals.) by ACGIH [stearic acid]. Classified 3 (Possible for humans.) by European Union [2-butanone oxime]. Classified A3 (Proven for animals.) by ACGIH, 2B (Possible for humans.) by IARC [hexanoic acid, 2-ethyl-, cobalt(2+) salt].
  
  **MUTAGENIC EFFECTS**: Not available.
  
  **TERATOGENIC EFFECTS**: Not available.

- **Medical conditions aggravated by over-exposure**: Pre-existing disorders involving any target organs mentioned in this MSDS as being at risk may be aggravated by over-exposure to this product.

See toxicological information (Section 11)
3. Composition/information on ingredients

<table>
<thead>
<tr>
<th>Name</th>
<th>CAS number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrocarbons, C9-C12, n-alkanes, isoalkanes,</td>
<td>64742-82-1</td>
<td>25 -</td>
</tr>
<tr>
<td>cyclics, aromatics (2-25%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>talc (non-asbestos form)</td>
<td>14807-96-6</td>
<td>10 -</td>
</tr>
<tr>
<td>aluminium stabilized</td>
<td>7429-90-5</td>
<td>10 -</td>
</tr>
<tr>
<td>Stoddard solvent</td>
<td>8052-41-3</td>
<td>10 -</td>
</tr>
<tr>
<td>hexanoic acid, 2-ethyl-, cobalt(2+) salt</td>
<td>136-52-7</td>
<td>0 -</td>
</tr>
</tbody>
</table>

Components not listed are not physical or health hazards as defined in 29 CFR 1910.1200 (Hazard Communication Standard).

4. First aid measures

**Eye contact**: Check for and remove any contact lenses. Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical attention immediately.

**Skin contact**: In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention immediately.

**Inhalation**: Move exposed person to fresh air. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention immediately.

**Ingestion**: Wash out mouth with water. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention immediately.

**Protection of first-aiders**: No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

5. Fire-fighting measures

**Flammability of the product**: Flammable.

**Products of combustion**: Decomposition products may include the following materials:
- carbon dioxide
- carbon monoxide
- metal oxide/oxides

**Extinguishing media**

- **Suitable**: Use dry chemical, CO₂, water spray (fog) or foam.
- **Not suitable**: Do not use water jet.

**Special exposure hazards**: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

Combustible liquid. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion.

**Special protective equipment for fire-fighters**: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
6. Accidental release measures

Personal precautions: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see Section 8).

Environmental precautions: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities.

Methods for cleaning up: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

7. Handling and storage

Handling: Put on appropriate personal protective equipment (see Section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapor or mist. Avoid release to the environment. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use non-sparking tools. Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. Empty containers retain product residue and can be hazardous. Do not reuse container.

Storage: Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

8. Exposure controls/personal protection

<table>
<thead>
<tr>
<th>Product name</th>
<th>Exposure limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)</td>
<td>ACGIH TLV (United States, 1/2005). Notes: Substances for which the TLV is higher than the OSHA Permissible Exposure Limit (PEL) and/or the NIOSH Recommended Exposure Limit (REL). See CFR 58(124) :36338-33351, June 30, 1993, for revised OSHA PEL.</td>
</tr>
<tr>
<td></td>
<td>TWA: 525 mg/m³ 8 hours. Form: All forms</td>
</tr>
<tr>
<td></td>
<td>TWA: 100 ppm 8 hours. Form: All forms</td>
</tr>
<tr>
<td>Talc (non-asbestos form)</td>
<td>CA British Columbia Provincial (Canada, 5/2015).</td>
</tr>
<tr>
<td></td>
<td>TWA: 0,1 f/cc 8 hours. Form:</td>
</tr>
<tr>
<td></td>
<td>TWA: 2 mg/m³ 8 hours. Form: Respirable</td>
</tr>
</tbody>
</table>

Continued on next page
8. Exposure controls/personal protection

CA Quebec Provincial (Canada, 1/2014).
TWAEV: 3 mg/m³ 8 hours. Form: Respirable dust.

CA Ontario Provincial (Canada, 7/2015).
TWA: 2 mg/m³ 8 hours. Form: Respirable fraction: means that size fraction of the airborne particulate deposited in the gas-exchange region of the respiratory tract and collected during air sampling with a particle size-selective device that, (a) meets the ACGIH particle size-selective sampling criteria for airborne particulate matter; and (b) has the cut point of 4 µm at 50 per cent collection efficiency.
TWA: 2 mg/m³ 8 hours. Form: The value is for particulate matter containing no asbestos and < 1 per cent crystalline silica.

aluminium stabilized

CA Quebec Provincial (Canada, 1/2014). Notes: as Al
TWAEV: 10 mg/m³, (as Al) 8 hours. Form:

CA Alberta Provincial (Canada, 4/2009). Skin sensitizer. Notes:
8 hrs OEL: 10 mg/m³, () 8 hours. Form: Metal Dust

CA British Columbia Provincial (Canada, 5/2015).
TWA: 1 mg/m³ 8 hours. Form: Respirable

CA Ontario Provincial (Canada, 7/2015).
TWA: 1 mg/m³ 8 hours. Form: Respirable fraction

Stoddard solvent

CA Alberta Provincial (Canada, 4/2009).
8 hrs OEL: 572 mg/m³ 8 hours.
8 hrs OEL: 100 ppm 8 hours.

CA British Columbia Provincial (Canada, 5/2015).
STEL: 580 mg/m³ 15 minutes.
TWA: 290 mg/m³ 8 hours.

CA Ontario Provincial (Canada, 7/2015).
TWA: 525 mg/m³ 8 hours.
TWA: 100 ppm 8 hours.

CA Quebec Provincial (Canada, 1/2014).
TWAEV: 525 mg/m³ 8 hours.
TWAEV: 100 ppm 8 hours.

hexanoic acid, 2-ethyl-, cobalt(2+) salt

CA Ontario Provincial (Canada, 7/2015).
TWA: 0,02 mg/m³, (as Co) 8 hours. Form: Inorganic

CA British Columbia Provincial (Canada, 5/2015).
TWA: 0,02 mg/m³, (as Co) 8 hours.

CA Quebec Provincial (Canada, 1/2014). Skin sensitizer.
TWAEV: 0,02 mg/m³, (as Co) 8 hours.

Engineering measures
Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

Personal protection

Eyes
Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.

Skin
Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory
Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard (NIOSH-approved P95) if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Continued on next page


8. Exposure controls/personal protection

**Hands**: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

**Hygiene measures**: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

9. Physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Physical state</strong></td>
<td>Liquid</td>
</tr>
<tr>
<td><strong>Flash point</strong></td>
<td>Closed cup: 38°C (100.4°F)</td>
</tr>
<tr>
<td><strong>Color</strong></td>
<td>Various colors.</td>
</tr>
<tr>
<td><strong>Odor</strong></td>
<td>Characteristic.</td>
</tr>
<tr>
<td><strong>Relative density</strong></td>
<td>1.059 g/cm³</td>
</tr>
<tr>
<td><strong>VOC</strong></td>
<td>3.45 pounds/gallon (US)</td>
</tr>
<tr>
<td><strong>Viscosity</strong></td>
<td>Kinematic (40°C (104°F)): &gt;0.225 cm²/s (&gt;22.5 mm²/s)</td>
</tr>
<tr>
<td><strong>Solubility</strong></td>
<td>Insoluble in the following materials: cold water and hot water.</td>
</tr>
</tbody>
</table>

10. Stability and reactivity

**Stability and reactivity**: The product is stable.

**Hazardous decomposition products**: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

**Hazardous polymerization**: Under normal conditions of storage and use, hazardous polymerization will not occur.

11. Toxicological information

**Chronic effects on humans**: CARCINOGENIC EFFECTS: Classified A4 (Not classifiable for humans or animals.) by ACGIH [aluminium stabilized]. Classified 3 (Not classifiable for humans.) by IARC [zeolite]. Classified A4 (Not classifiable for humans or animals.) by ACGIH [Distillates (petroleum), hydrotreated heavy naphthenic]. Classified A4 (Not classifiable for humans or animals.) by ACGIH [stearic acid]. Classified 3 (Possible for humans.) by European Union [2-butanoate oxime]. Classified A3 (Proven for animals.) by ACGIH, 2B (Possible for humans.) by IARC [hexanoic acid, 2-ethyl-, cobalt(2+) salt].

Contains material which may cause damage to the following organs: lungs, the nervous system, upper respiratory tract, skin, eyes.

**Other toxic effects on humans**: Exposure to component solvent vapor concentrations in excess of the stated occupational exposure limit may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Solvents may cause some of the above effects by absorption through the skin. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and, in extreme cases, loss of consciousness. Repeated or prolonged contact with the mixture may cause removal of natural fat from the skin, resulting in non-allergic contact dermatitis and absorption through the skin. If splashed in the eyes, the liquid may cause irritation and reversible damage. Swallowing may cause nausea, diarrhea, vomiting, gastrointestinal irritation and chemical pneumonia.

Continued on next page
11. Toxicological information

Contains 2-butanone oxime, cobalt bis(2-ethylhexanoate). May produce an allergic reaction.

**Specific effects**

**Carcinogenic effects**: Contains material which may cause cancer, based on animal data. Risk of cancer depends on duration and level of exposure.

**Mutagenic effects**: No known significant effects or critical hazards.

**Reproduction toxicity**: No known significant effects or critical hazards.

**Chronic effects**: Contains material that may cause target organ damage, based on animal data.

**Target organs**: Contains material which may cause damage to the following organs: lungs, the nervous system, upper respiratory tract, skin, eyes.

12. Ecological information

**Ecotoxicity data**

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Species</th>
<th>Period</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)</td>
<td>Fish (LC50)</td>
<td>96 hour(s)</td>
<td>&lt;10 mg/l</td>
</tr>
<tr>
<td></td>
<td>Daphnia (EC50)</td>
<td>48 hour(s)</td>
<td>&lt;10 mg/l</td>
</tr>
<tr>
<td></td>
<td>Algae (IC50)</td>
<td>72 hour(s)</td>
<td>&lt;10 mg/l</td>
</tr>
<tr>
<td>aluminium stabilized</td>
<td>Oncorhynchus mykiss (LC50)</td>
<td>96 hour(s)</td>
<td>0.12 mg/l</td>
</tr>
<tr>
<td></td>
<td>Oncorhynchus mykiss (LC50)</td>
<td>96 hour(s)</td>
<td>0.16 mg/l</td>
</tr>
<tr>
<td></td>
<td>Oncorhynchus mykiss (LC50)</td>
<td>96 hour(s)</td>
<td>0.31 mg/l</td>
</tr>
</tbody>
</table>

**Environmental precautions**: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. Water polluting material. May be harmful to the environment if released in large quantities.

**Products of degradation**: Products of degradation: carbon oxides (CO, CO₂) and water. Some metallic oxides.

13. Disposal considerations

**Waste disposal**

The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Disposal should be in accordance with applicable regional, national and local laws and regulations. Local regulations may be more stringent than regional or national requirements.

The information presented below only applies to the material as supplied. The identification based on characteristic(s) or listing may not apply if the material has been used or otherwise contaminated. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable regulations.

Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees.

Continued on next page
14. Transport information

<table>
<thead>
<tr>
<th>Regulatory information</th>
<th>UN number</th>
<th>Proper shipping name</th>
<th>Class</th>
<th>PG*</th>
<th>Label</th>
<th>Additional information</th>
</tr>
</thead>
<tbody>
<tr>
<td>DOT Classification</td>
<td>Not regulated.</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>TDG Classification</td>
<td>Not regulated.</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>ADR/RID Class</td>
<td>1263</td>
<td>Paint</td>
<td>3</td>
<td>III</td>
<td>![ flame ]</td>
<td>Tunnel restriction code: (D/E) Hazard identification number: 30 Special provisions: 640E</td>
</tr>
<tr>
<td>IATA-DGR Class</td>
<td>1263</td>
<td>Paint</td>
<td>3</td>
<td>III</td>
<td>![ flame ]</td>
<td>The environmentally hazardous / marine pollutant mark may appear if required by other transportation regulations.</td>
</tr>
</tbody>
</table>

PG*: Packing group

Marking: The environmental hazardous / marine pollutant mark is only applicable for packages containing more than 5 litres for liquids and 5 kg for solids.

15. Regulatory information

WHMIS (Canada): Class B-3: Combustible liquid with a flash point between 37.8°C (100°F) and 93.3°C (200°F).
Class D-2A: Material causing other toxic effects (Very toxic).
Class D-2B: Material causing other toxic effects (Toxic).

CEPA Toxic substances: None of the components are listed.
Canadian ARET: None of the components are listed.
Canadian NPRI: The following components are listed: Stoddard solvent; Aluminum (fume or dust only)
Alberta Designated Substances: None of the components are listed.
Ontario Designated Substances: None of the components are listed.
Quebec Designated Substances: None of the components are listed.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

Continued on next page
15. Regulatory information

EU regulations

Hazard symbol or symbols:

- Harmful
- Dangerous for the environment

Risk phrases:

- R10- Flammable.
- R48/20- Harmful: danger of serious damage to health by prolonged exposure through inhalation.
- R66- Repeated exposure may cause skin dryness or cracking.
- R67- Vapors may cause drowsiness and dizziness.
- R51/53- Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Safety phrases:

- S23- Do not breathe vapor / spray.
- S38- In case of insufficient ventilation, wear suitable respiratory equipment.
- S61- Avoid release to the environment. Refer to special instructions/safety data sheet.

16. Other information

Date of issue: 03.05.2016
Version: 1

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

⚠ Indicates information that has changed from previously issued version.