**1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION**

**MANUFACTURER’S NAME:** A.P. NONWEILER COMPANY  
**ADDRESS:** 3321 COUNTY ROAD A  
F.O. BOX 1007  
OSHKOSH, WI 54903-1007  
**EMERGENCY PHONE:** 1-800-535-5053  
**INFORMATION PHONE:** (920) 231-0850

**HMIS CODES:**  
F  R  P  
1 3 0 0

**2. COMPOSITION/INFORMATION ON INGREDIENTS**

<table>
<thead>
<tr>
<th>Component/Exposure Limits</th>
<th>CAS#</th>
<th>% by Wt.</th>
</tr>
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<tbody>
<tr>
<td>* MIXED XYLENES (LIMITED PARAXYLENE CONTENT), ETHYLBENZENE</td>
<td>1330-20-7</td>
<td>31.67</td>
</tr>
<tr>
<td>100 PPM TWA OSHA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>* TOLUENE</td>
<td>108-88-3</td>
<td>13.75</td>
</tr>
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<td>200 PPM TWA OSHA</td>
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</tr>
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<td></td>
<td></td>
</tr>
<tr>
<td>500 PPM PEAK OSHA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RESIN SOLUTION</td>
<td>MIXTURE</td>
<td>11.58</td>
</tr>
<tr>
<td>2-HEPTANONE</td>
<td>110-43-0</td>
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<tr>
<td>100 PPM TWA OSHA</td>
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<td></td>
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<tr>
<td>50 PPM TWA ACGIH</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ALUMINUM PASTE</td>
<td>MIXTURE</td>
<td>6.38</td>
</tr>
<tr>
<td>2 BUTOXYETHANOL</td>
<td>111-76-2</td>
<td>3.26</td>
</tr>
<tr>
<td>25 PPM-SKIN</td>
<td></td>
<td></td>
</tr>
<tr>
<td>COBALT ALKANATE SOLUTION</td>
<td>8020-83-5</td>
<td>.32</td>
</tr>
<tr>
<td>2 MG/M3</td>
<td></td>
<td></td>
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<tr>
<td>* DICHTYL PHthalATE</td>
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<td>5 MG/M3</td>
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<tr>
<td>METAL CARBOXYLATE</td>
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<tr>
<td>ACCELERATOR</td>
<td>MIXTURE</td>
<td>.11</td>
</tr>
<tr>
<td>* SOL. OF SALT OF UNSATURATED AMIDES AND HIGHER WEIGHT ACIDIC ESTERS</td>
<td>PROPRIETARY</td>
<td>.11</td>
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<tr>
<td>MINERAL SPIRITS</td>
<td>64742-88-7</td>
<td>.09</td>
</tr>
<tr>
<td>100 PPM ACGIH TLV</td>
<td></td>
<td></td>
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<tr>
<td>500 PPM OSHA PEL</td>
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<td></td>
</tr>
<tr>
<td>38% 1,10-PHENANTHROLINE IN N-BUTANOL AND 2-THYLEXANOIC ACID</td>
<td>MIXTURE</td>
<td>.04</td>
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<tr>
<td>OSHA PEL/50 PPM (SKIN)</td>
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</tr>
<tr>
<td>n-BUTYL ALCOHOL</td>
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<td>.02</td>
</tr>
<tr>
<td>50 PPM PEL OSHA</td>
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</tr>
</tbody>
</table>

**3. HAZARDS IDENTIFICATION**

**Potential Health Effects**

**EYE:**  
MAY CAUSE EYE IRRITATION. DIRECT CONTACT MAY CAUSE STINGING, TEARING AND REDNESS.
SKIN:
***WARNING*** AVOID ALL CONTACT WITH SKIN. PENETRATES SKIN READILY. ANY CONTACT MAY RESULT IN THE ABSORPTION OF POTENTIALLY HARMFUL AMOUNTS WHICH CAN CAUSE DAMAGE TO THE KIDNEYS, LIVER, BLOOD AND/OR BONE MARROW.

INGESTION:
MODERATELY TOXIC. MAY CAUSE MOUTH, THROAT, ESOPHAGUS AND STOMACH IRRITATION, NAUSEA, VOMITING AND DIARRHEA. ASPIRATION OF MATERIAL INTO LUNGS CAN CAUSE CHEMICAL PNEUMONITIS WHICH CAN BE FATAL.

INHALATION:
HIGH VAPOR/AEROSOL CONCENTRATIONS (GREATER THAN APPROXIMATELY 1000 PPM) ARE IRRITATING TO THE EYES AND THE RESPIRATORY TRACT, MAY CAUSE HEADACHES, DIZZINESS, ANESTHESIA, DROWSINESS, UNCONSCIOUSNESS, AND OTHER CENTRAL NERVOUS SYSTEM EFFECTS, INCLUDING DEATH.

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE
OVEREXPOSURE TO VAPOR, DUST OR MIST MAY AGGRAVATE EXISTING RESPIRATORY CONDITIONS, SUCH AS ASTHMA, BRONCHITIS, AND INFLAMMATORY OR FIBROTIC RESPIRATORY DISEASE.

CHRONIC (CANCER) INFORMATION:
INFORMATION NOT AVAILABLE

TERATOLOGY (BIRTH DEFECT) INFORMATION:
INFORMATION NOT AVAILABLE

REPRODUCTION INFORMATION:
INFORMATION NOT AVAILABLE

CARCINOGENICITY: NTP CARCINOGEN: NO

IARC MONOGRAPHS: NO

OSHA REGULATED: NO

4. FIRST AID MEASURES

EYES:
FLUSH IMMEDIATELY WITH PLENTY OF WATER FOR AT LEAST 15 MINUTES. IF IRRITATION PERSISTS, GET MEDICAL ATTENTION.

SKIN:
WASH CONTAMINATED AREA WITH SOAP AND WATER. CONSULT A PHYSICIAN IF IRRITATION PERSISTS.

INGESTION:
IF SWALLOWED, GIVE 2 GLASSES OF WATER TO DRINK. NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON. SEE A PHYSICIAN.
INHALATION:
RESCUERS SHOULD PUT ON APPROPRIATE PROTECTIVE GEAR. REMOVE FROM AREA OF EXPOSURE. IF NOT BREATHING, GIVE ARTIFICIAL RESPIRATION. IF BREATHING IS DIFFICULT, GIVE OXYGEN. KEEP VICTIM WARM. GET IMMEDIATE MEDICAL ATTENTION.

NOTE TO PHYSICIANS:
INFORMATION NOT AVAILABLE

5. FIRE FIGHTING MEASURES

FLAMMABLE PROPERTIES:
FLASH POINT: 4F
Method: CC
INFORMATION NOT AVAILABLE

FLAMMABLE LIMITS:
Lower flammable limit: 0.5
Upper flammable limit: 10.7

AUTOIGNITION TEMPERATURE:
INFORMATION NOT AVAILABLE

HAZARDOUS COMBUSTION PRODUCTS:
INFORMATION NOT AVAILABLE

EXTINGUISHING MEDIA:
FOAM, CARBON DIOXIDE, DRY CHEMICAL, WATER FOG

FIREFIGHTING INSTRUCTIONS:
The use of self-contained breathing apparatus is recommended for fire fighters. Water spray may be used for cooling containers to prevent possible pressure build-up and autoignition or explosion when exposed to extreme heat. Avoid spreading burning liquid with water used for cooling.

UNUSUAL FIRE AND EXPLOSION HAZARDS:
VAPORS MAY CAUSE FLASH FIRE. KEEP CONTAINERS TIGHTLY CLOSED AND ISOLATE FROM HEAT, ELECTRICAL EQUIPMENT, SPARKS AND FLAME. NEVER USE WELDING OR CUTTING TORCH ON OR NEAR DRUM (EVEN EMPTY) BECAUSE PRODUCT (EVEN JUST RESIDUE) CAN IGNITE EXPLOSIVELY.

6. ACCIDENTAL RELEASE MEASURES

SMALL SPILL:
REMOVE ALL SOURCES OF IGNITION (FLAMES, HOT SURFACES, AND ELECTRICAL, STATIC, OR FRICTIONAL SPARKS). AVOID BREATHING VAPORS. VENTILATE AREA. CONTAIN AND REMOVE WITH VERMICULITE OR OTHER INERT MATERIAL. PLACE IN A CONTAINER FOR CHEMICAL WASTE. IF LARGE SPILL, FLUSH SPILL AREA WITH WATER SPRAY AND PREVENT RUNOFF FROM ENTERING DRAINS, SEWERS, OR STREAMS.

LARGE SPILL:
7. HANDLING AND STORAGE

HANDLING:
STUDIES WITH RATS HAVE SHOWN A COMPONENT OF THIS MATERIAL TO HAVE MUTANOGENIC EFFECTS.

REPORTS HAVE ASSOCIATED REPEATED OR PROLONGED OCCUPATIONAL OVEREXPOSURE TO SOLVENTS WITH PERMANENT BRAIN AND NERVOUS SYSTEM DAMAGE. INTENTIONAL MISUSE BY DELIBERATELY CONCENTRATING AND INHALING THE CONTENTS MAY BE HARMFUL OR FATAL.

STORAGE:
DO NOT STORE ABOVE 120 DEG.F. STORE LARGE QUANTITIES IN BUILDINGS DESIGNED TO COMPLY WITH OSHA 1910.106. KEEP AWAY FROM HEAT, SPARKS AND FLAME. KEEP CONTAINERS CLOSED WHEN NOT IN USE AND UPRIGHT TO PREVENT LEAKAGE.

OTHER PRECAUTIONS:
AVOID CONTACT WITH SKIN OR EYES. WASH THOROUGHLY AFTER HANDLING.

HOT ORGANIC CHEMICAL VAPORS OR MISTS ARE SUSCEPTIBLE TO SUDDEN SPONTANEOUS COMBUSTION WHEN MIXED WITH AIR. IGNITION MAY OCCUR AT TEMPERATURES BELOW THOSE PUBLISHED IN THE LITERATURE AS "AUTOIGNITION" OR "IGNITION" TEMPERATURES. IGNITION TEMPERATURES DECREASE WITH INCREASING VAPOR VOLUME AND VAPOR/AIR CONTACT TIME, AND ARE INFLUENCED BY PRESSURE CHANGES.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS:
USE LOCAL EXHAUST VENTILATION WIN A MINIMUM CAPTURE VELOCITY OF 100 FT/MIN. (0.5 M/SEC.) AT THE POINT OF VAPOR EVOLUTION. REFER TO THE CURRENT EDITION OF INDUSTRIAL VENTILATION: A MANUAL OF RECOMMENDED PRACTICE PUBLISHED BY THE AMERICAN CONFERENCE OF GOVERNMENTAL INDUSTRIAL HYGIENISTS FOR INFORMATION ON THE DESIGN, INSTALLATION, USE, AND MAINTENANCE OF EXHAUST SYSTEMS.

RESPIRATORY PROTECTION:
DO NOT BREATHE VAPORS. WHEN CONCENTRATIONS EXCEED THE ESTABLISHED EXPOSURE LIMITS, WEAR AN APPROPRIATE, PROPERLY FITTED RESPIRATOR (NIOSH/MSHA APPROVED) UNTIL VAPORS ARE EXHAUSTED. FOLLOW RESPIRATOR MANUFACTURER'S DIRECTIONS FOR RESPIRATOR USE. OBSERVE OSHA STANDARD 29CFR 1910.134.

VENTILATION:
PROVIDE GENERAL CLEAN AIR DILUTION OR LOCAL EXHAUST VENTILATION IN VOLUME AND PATTERN TO KEEP THE AIR CONTAMINANT CONCENTRATION BELOW THE LOWER EXPLOSION LIMIT AND BELOW CURRENT APPLICABLE EXPOSURE LIMITS. REFER TO OSHA STANDARD 1910.94.

SKIN PROTECTION:
USE SOLVENT IMPERMEABLE GLOVES TO AVOID CONTACT WITH PRODUCT.

EYE PROTECTION:
**M A T E R I A L  S A F E T Y  D A T A  S H E E T**

**Product Code:** 1700J070  
**Product Name:** 1700J070 HS FINE SILVER AD

**A.P. NONWEILER COMPANY, 3321 COUNTY ROAD A, P.O. BOX 1007, OSHKOSH, WI 54903-1007**

**24-hour Emergency Phone:** 1-800-535-5053

Do not get in eyes. Use safety eyewear with splash guards or side shields, chemical goggles, face shields.

**Other Protective Clothing or Equipment**  
**Avoid contact with skin. Use protective clothing. Prevent contact with contaminated clothing. Wash contaminated clothing, including shoes, before reuse.**

**Work/Hygienic Practices**  
Wash at the end of each workshift and before eating, smoking, or using the toilet. Use appropriate hand and skin lotions to protect the skin.

**9. Physical and Chemical Properties**

- **Boiling Point:** 131-243°F  
- **Melting Point:** Information not available  
- **Vapor Pressure:** Information not available  
- **Vapor Density:** Heavier than air  
- **Solubility in Water:** Insoluble  
- **Specific Gravity:** .95  
- **Evaporation Rate:** Slower than butyl acetate  
- **pH:** Information not available  
- **Odor:** Organic solvent  
- **Appearance:** Information not available

**10. Stability and Reactivity**

**Chemical Stability (Conditions to Avoid):**  
Stable

**Incompatibility:**  
Strong acids and strong oxidizing agents.

**Conditions to Avoid:**  
Elevated temperatures

**Sources of Ignition**

**Hazardous Decomposition Products:**  
Thermal decomposition or combustion can produce fumes containing organic acids, carbon dioxide and carbon monoxide.

**Hazardous Polymerization:** Will not occur.

**11. Toxicological Information**

**Eye:**  
Information not available

**Skin:**
Product Code: 1700J070
Product Name: 1700J070 HS FINE SILVER AD

A.P. NONWEILER COMPANY, 3321 COUNTY ROAD A, P.O. BOX 1007, OSHKOSH, WI 54903-1007

24-hour Emergency Phone: 1-800-535-5053

INFORMATION NOT AVAILABLE

INGESTION: INFORMATION NOT AVAILABLE

INHALATION: INFORMATION NOT AVAILABLE

SUBCHRONIC: INFORMATION NOT AVAILABLE

CHRONIC/CARCINOGENICITY: INFORMATION NOT AVAILABLE

TERATOLOGY: INFORMATION NOT AVAILABLE

REPRODUCTION: INFORMATION NOT AVAILABLE

MUTAGENICITY: INFORMATION NOT AVAILABLE

12. ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL INFORMATION: INFORMATION NOT AVAILABLE

CHEMICAL FATE INFORMATION:

13. DISPOSAL CONSIDERATIONS

DISPOSE OF IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REGULATIONS. DO NOT INCINERATE CLOSED CONTAINERS. INCINERATE IN APPROVED FACILITY.

14. TRANSPORT INFORMATION (Not meant to be all inclusive)

US DOT HAZARD CLASS: 3 UN1263 FLAMMABLE

15. REGULATORY INFORMATION

(Not meant to be all inclusive - selected regulations represented)

U.S. FEDERAL REGULATIONS:
INFORMATION NOT AVAILABLE

OSHA:

CERCLA: SARA HAZARD CATEGORY:
THIS MATERIAL IS REGULATED UNDER THE COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION AND LIABILITY ACT (CERCLA) AND THE SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT (SARA) TITLE III SECTION 302. THIS MATERIAL IS OR CONTAINS CHEMICAL(S) LISTED IN 40 CFR TABLE 302.4 OR NONDESIGNATED RCRA ICR SUBSTANCE(S). (NONDESIGNATED ICR SUBSTANCES APPLY TO MATERIALS THAT WILL NOT BE REUSED.) RELEASE IN EXCESS OF ITS REPORTABLE QUANTITY MUST BE REPORTED TO THE NATIONAL RESPONSE CENTER (1-800-424-8802) AND TO THE APPROPRIATE STATE AND LOCAL EMERGENCY RESPONSE ORGANIZATIONS.
SECTION 313:
THIS PRODUCT CONTAINS A CHEMICAL WHICH IS LISTED IN SECTION 313 AT OR ABOVE DE MINIMIS CONCENTRATIONS.

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TOXIC SUBSTANCES CONTROL ACT: INFORMATION NOT AVAILABLE

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</table>

INTERNATIONAL REGULATIONS:

CANADIAN WHMIS:
THIS PRODUCT IS A 'CONTROLLED PRODUCT' UNDER THE CANADIAN WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM (WHMIS).

CANADIAN ENVIRONMENTAL PROTECTION ACT (CEPA): INFORMATION NOT AVAILABLE

EINECS: INFORMATION NOT AVAILABLE

STATE REGULATIONS:

NEW JERSEY
THE FOLLOWING MATERIALS ARE NON-HAZARDOUS, BUT ARE AMONG THE TOP FIVE COMPONENTS IN THIS PRODUCT:

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24-hour Emergency Phone: 1-800-535-5053

MINERAL SPIRITS
100 PPM ACGIH TLV
500 PPM OSHA PEL

64742-88-7 .09

PENNSYLVANIA
THE FOLLOWING NON-HAZARDOUS INGREDIENTS ARE PRESENT IN THE PRODUCT AT GREATER THAN 3%:

Component/Exposure Limits                              CAS#       % by Wt.
MIXED XYLENES (LIMITED PARAXYLENE CONTENT), ETHYLBENZENE 1330-20-7 31.67
100 PPM TWA OSHA
TOLUENE                                                  108-88-3  13.75
200 PPM TWA OSHA
300 PPM CEIL OSHA
500 PPM PEAK OSHA

CALIFORNIA
THE CHEMICAL(S) NOTED BELOW AND CONTAINED IN THIS PRODUCT, ARE KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER:

Component/Exposure Limits                              CAS#       % by Wt.
MIXED XYLENES (LIMITED PARAXYLENE CONTENT), ETHYLBENZENE 1330-20-7 31.67
100 PPM TWA OSHA
TOLUENE                                                  108-88-3  13.75
200 PPM TWA OSHA
300 PPM CEIL OSHA
500 PPM PEAK OSHA
COBALT ALKANOATE SOLUTION                               8020-83-5  .32
2 MG/M3
METAL CARBOXYLATE                                       MIXTURE  .30

VOLATILE ORGANIC COMPOUNDS: 4.64 lb/gl

16. OTHER INFORMATION

MSDS Status: INFORMATION NOT AVAILABLE

THIS DOCUMENT HAS BEEN PREPARED USING DATA FROM SOURCES CONSIDERED TECHNICALLY RELIABLE. IT DOES NOT CONSTITUTE A WARRANTY, EXPRESS OR IMPLIED, AS TO THE ACCURACY OF THE INFORMATION CONTAINED HEREIN. ACTUAL CONDITIONS OF USE AND HANDLING ARE BEYOND SELLER’S CONTROL. USER IS RESPONSIBLE TO EVALUATE ALL AVAILABLE INFORMATION WHEN USING PRODUCT FOR ANY PARTICULAR USE AND TO COMPLY WITH ALL FEDERAL, STATE, PROVINCIAL AND LOCAL LAWS AND REGULATIONS.

The following boilerplate keys do not have matching boilerplate key prefixes in the MSDS Master Format file:
EF01
NP02

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