1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: Klean Strip Japan Drier
Company Name: W. M. Barr
2105 Channel Avenue
Memphis, TN 38113

Phone Number: (901)775-0100

Web site address: www.wmbarr.com

Emergency Contact: 3E 24 Hour Emergency Contact (800)451-8346
Information: W.M. Barr Customer Service (800)398-3892

Intended Use: Accelerate the drying ability of oil-based enamel and varnish

Product Code: PJD40, PKJD41

2. HAZARDS IDENTIFICATION

Flammable Liquids, Category 3
Skin Corrosion/Irritation, Category 2
Serious Eye Damage/Eye Irritation, Category 2A
Respiratory Sensitization, Category 1
Skin Sensitization, Category 1
Germ Cell Mutagenicity, Category 1A
Specific Target Organ Toxicity (single exposure), Category 3
Specific Target Organ Toxicity (repeated exposure), Category 1
Aspiration Toxicity, Category 1

GHS Signal Word: Danger
GHS Hazard Phrases:
H226: Flammable liquid and vapor.
H315: Causes skin irritation.
H319: Causes serious eye irritation.
H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H317: May cause an allergic skin reaction.
H340: May cause genetic defects.
H335: May cause respiratory irritation.
H372: Causes damage to organs through prolonged or repeated exposure.
H304: May be fatal if swallowed and enters airways.

GHS Precaution Phrases:
P233: Keep container tightly closed.
P210: Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
P280: Wear protective gloves/protective clothing/eye protection/face protection.
P240: Ground/bond container and receiving equipment.
P241: Use explosion-proof electrical/ventilating/lighting equipment.
P243: Take precautionary measures against static discharge.
P242: Use only non-sparking tools.
P264: Wash hands thoroughly after handling.
P362+364: Take off contaminated clothing and wash it before reuse.
P261: Avoid breathing gas/mist/vapours/spray.
P284: In case of inadequate ventilation wear respiratory protection.
P272: Contaminated work clothing should not be allowed out of the workplace.
P201: Obtain special instructions before use.
P202: Do not handle until all safety precautions have been read and understood.
P271: Use only outdoors or in a well-ventilated area.
P270: Do not eat, drink or smoke when using this product.
GHS Response Phrases:
P370+378: In case of fire, use dry chemical powder to extinguish.
P303+361+353: IF ON SKIN (or hair): Remove/take off immediately all contaminated clothing. Rinse skin with water/shower.
P302+352: IF ON SKIN: Wash with plenty of soap and water.
P321: Specific treatment see instructions on label.
P332+313: If skin irritation occurs, get medical advice/attention.
P304+340: IF INHALED: If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing.
P342+311: If experiencing respiratory symptoms call a POISON CENTER or doctor/physician.
P333+313: If skin irritation or rash occurs, seek medical advice/attention.
P304+340: IF INHALED: If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing.
P337+313: If eye irritation persists, get medical advice/attention.
P305+351+338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P333+313: If skin irritation or rash occurs, seek medical advice/attention.
P308+313: IF exposed or concerned: Get medical attention/advice.
P304+340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P312: Call a POISON CENTER/doctor if you feel unwell.
P314: Get medical attention/advice if you feel unwell.
P301+310: IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P331: Do NOT induce vomiting.
P304+341: IF INHALED: If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing.
P342+311: If experiencing respiratory symptoms call a POISON CENTER or doctor/physician.
P333+313: If skin irritation or rash occurs, seek medical advice/attention.
P308+313: IF exposed or concerned: Get medical attention/advice.
P304+340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P312: Call a POISON CENTER/doctor if you feel unwell.
P314: Get medical attention/advice if you feel unwell.
P301+310: IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P331: Do NOT induce vomiting.

GHS Storage and Disposal Phrases:
P403+235: Store in cool/well-ventilated place.
P501: Dispose of contents/container to local, state and federal regulations.
P405: Store locked up.
P403+233: Store container tightly closed in well-ventilated place - if product is as volatile as to generate hazardous atmosphere.

Hazard Rating System:

<table>
<thead>
<tr>
<th>HEALTH</th>
<th>FLAMMABILITY</th>
<th>PHYSICAL</th>
<th>PPE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>0</td>
<td>X</td>
</tr>
</tbody>
</table>

OSHA Regulatory Status: This material is classified as hazardous under OSHA regulations.

Potential Health Effects (Acute and Chronic):
Inhalation Acute Exposure Effects:
May cause central nervous system depression with symptoms including dizziness, headache, nausea, fatigue, drowsiness, or unconsciousness. Severe overexposure may cause convulsions; unconsciousness; and death. Intentional misuse of this product by deliberately concentrating and inhaling can be harmful or fatal.

Cobalt metal powder is a known allergen that produces characteristic symptoms of asthma, such as wheezing, dry cough, and labored breathing. Usually the asthma symptoms appear 4-6 hours after exposure and often worsen again later in the same day.

Manganese compounds can cause central nervous system (CNS) damage by inhalation of fumes and dust. CNS effects may include drowsiness and perioral numbness. Respiratory effects may include "metal fume fever" and pleuritis. Chronic exposure may cause Parkinson-like symptoms (such as muscle weakness, tremor, slurred speech, and gait disturbances). May cause psychiatric symptoms such as nervousness and irritability.

Skin Contact Acute Exposure Effects:
May cause mild transient skin irritation. Symptoms may include redness, itching, and
burning of the skin. Repeated or prolonged skin contact can produce moderate irritation (dermatitis). The severity of irritation will depend on the amount of material that is applied to the skin and the speed and thoroughness that it is removed.

Data for cobalt metal powder has shown the potential to cause allergic contact dermatitis if there is prior sensitization. Most rashes associated with cobalt occur on the hands and appear within the first year of occupational exposure to cobalt.

Eye Contact Acute Exposure Effects:
This material is an eye irritant. May cause transient mild eye irritation with short-term contact with liquid sprays or mists. Symptoms include stinging, watering, redness, and swelling.

Ingestion Acute Exposure Effects:
Harmful or fatal if swallowed. If swallowed, this material may irritate the mucous membranes of the mouth, throat, and esophagus. It can readily be absorbed by the stomach and intestinal tract. Symptoms include a burning sensation of the mouth and esophagus, nausea, vomiting, dizziness, staggering gait, drowsiness, loss of consciousness, and delirium, as well as additional central nervous system (CNS) effects. Due to its light viscosity, there is the danger of aspiration into the lungs during vomiting, which can result in severe lung damage or death.

Chronic Exposure Effects:
Reports have associated repeated and prolonged overexposure to solvents with irreversible brain and nervous system damage. Prolonged or repeated contact may cause dermatitis. Chronic effects of ingestion and subsequent aspiration into the lungs may cause pneumatocele (lung cavity) formation and chronic lung dysfunction.

Target Organs:
kidneys, lungs, liver, mucous membranes, upper respiratory tract, skin, central nervous system, eye, lens or cornea

Medical Conditions Generally Aggravated By Exposure:
Diseases of the skin, liver, kidneys, central nervous system, respiratory system.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>CAS #</th>
<th>Hazardous Components (Chemical Name)</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>64742-47-8</td>
<td>Hydrotreated light distillate (petroleum)</td>
<td>60.0 -100.0 %</td>
</tr>
<tr>
<td>8030-70-4</td>
<td>Fatty acids, tall-oil, manganese salts</td>
<td>&lt;10.0 %</td>
</tr>
<tr>
<td>8052-41-3</td>
<td>Stoddard solvent {Mineral spirits; Aliphatic Petroleum Distillates; White spirits}</td>
<td>&lt; 5.0 %</td>
</tr>
<tr>
<td>22464-99-9</td>
<td>Zirconium 2-Ethylhexanoate {Hexanoic acid, 2-ethyl-, zirconium salt}</td>
<td>&lt; 5.0 %</td>
</tr>
<tr>
<td>27253-31-2</td>
<td>Neodecanoic acid, cobalt salt</td>
<td>&lt; 5.0 %</td>
</tr>
<tr>
<td>61789-51-3</td>
<td>Cobalt naphthenate</td>
<td>&lt; 5.0 %</td>
</tr>
</tbody>
</table>

Additional Chemical Information

Specific percentage of composition is being withheld as a trade secret.
4. FIRST AID MEASURES

**Emergency and First Aid Procedures:**

**Skin:**
Immediately begin washing the skin thoroughly with large amounts of water and mild soap, if available, while removing contaminated clothing. Seek medical attention if irritation develops or persists.

**Eyes:**
Immediately begin to flush eyes with water, remove any contact lens. Continue to flush the eyes for at least 15 minutes. Seek medical attention.

**Inhalation:**
Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get immediate medical attention.

**Ingestion:**
If swallowed, do NOT induce vomiting. Seek immediate medical attention. Call a physician, hospital emergency room, or poison control center immediately. Never give anything by mouth to an unconscious person.

**Signs and Symptoms Of Exposure:**
See Potential Health Effects.

5. FIRE FIGHTING MEASURES

**NFPA Class II**

**Flash Pt:** 114.00 F  **Method Used:** Setaflash Closed Cup (Rapid Setaflash)

**Explosive Limits:**
- LEL: No data.
- UEL: No data.

**Autoignition Pt:** No data.

**Suitable Extinguishing Media:**
Use carbon dioxide, dry powder, water spray, or foam.

**Unsuitable Extinguishing Media:**
None known.

**Fire Fighting Instructions:**
Self-contained respiratory protection should be provided for fire fighters fighting fires in buildings or confined areas. Storage containers exposed to fire should be kept cool with water spray to prevent pressure build-up. Stay away from heads of containers that have been exposed to intense heat or flame.

**Flammable Properties and Hazards:**
No data available.

6. ACCIDENTAL RELEASE MEASURES

**Steps To Be Taken In Case Material Is Released Or Spilled:**
Vapors may cause flash fire or ignite explosively.

**Clean up:**
Keep unnecessary people away; isolate hazard area and deny entry. Stay upwind, out of low areas, and ventilate closed spaces before entering. Shut off ignition sources; keep flares, smoking or flames out of hazard area. Use non-sparking tools. Use proper bonding and grounding methods for all equipment and processes. Keep out of waterways and bodies of water. Be cautious of vapors collecting in small enclosed spaces, sewers, low lying areas, confined spaces, etc.

**Small spills:**
Take up with sand, earth or other noncombustible absorbent material and place in a plastic container where applicable.

**Large spills:**
Dike far ahead of spill for later disposal.
Waste Disposal: Dispose in accordance with applicable local, state and federal regulations.

7. HANDLING AND STORAGE

Precautions To Be Taken in Handling:
- Read carefully all cautions and directions on product label before use. Since empty container retains residue, follow all label warnings even after container is empty. Dispose of empty container according to all regulations. Do not reuse this container.
- Do not use this product near any source of heat or open flame, furnace areas, pilot lights, stoves, etc.
- Do not use in small enclosed spaces, such as basements and bathrooms. Vapors can accumulate and explode if ignited.
- Do not spread this product over large surface areas because fire and health safety risks will increase dramatically.

Precautions To Be Taken in Storing:
- Keep container tightly closed when not in use. Store in a cool, dry place. Do not store near flames or at elevated temperatures.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

<table>
<thead>
<tr>
<th>CAS #</th>
<th>Partial Chemical Name</th>
<th>OSHA TWA</th>
<th>ACGIH TWA</th>
<th>Other Limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>64742-47-8</td>
<td>Hydrotreated light distillate (petroleum)</td>
<td>No data.</td>
<td>TLV: 200 mg/m3</td>
<td>No data.</td>
</tr>
<tr>
<td>8030-70-4</td>
<td>Fatty acids, tall-oil, manganese salts</td>
<td>CEIL: 5 mg/m3</td>
<td>TWA: 0.02 mg/m3 (resp.) 0.1 mg/m3 (IHL)</td>
<td>No data.</td>
</tr>
<tr>
<td>8052-41-3</td>
<td>Stoddard solvent {Mineral spirits; Aliphatic Petroleum Distillates; White spirits}</td>
<td>PEL: 500 ppm</td>
<td>TLV: 100 ppm</td>
<td>No data.</td>
</tr>
<tr>
<td>22464-99-9</td>
<td>Zirconium 2-Ethylhexanoate {Hexanoic acid, 2-ethyl-, zirconium salt}</td>
<td>TWA: 5 mg/m3</td>
<td>TWA: 5 mg/m3</td>
<td>No data.</td>
</tr>
<tr>
<td>27253-31-2</td>
<td>Neodecanoic acid, cobalt salt</td>
<td>No data.</td>
<td>No data.</td>
<td>No data.</td>
</tr>
<tr>
<td>61789-51-3</td>
<td>Cobalt naphthenate</td>
<td>No data.</td>
<td>No data.</td>
<td>No data.</td>
</tr>
</tbody>
</table>

Respiratory Equipment (Specify Type):
- For OSHA controlled work places and other regular users - Use only with adequate ventilation under engineered air control systems designed to prevent exceeding the appropriate TLV.
- If a respirator is required to maintain exposure limits below exposure limits, wear a properly maintained and fitted NIOSH approved respirator for organic solvent vapors.
- A dust mask does not provide protection against vapors.

Eye Protection:
- Where contact with the eyes or face is likely, chemical splash goggles should be worn to prevent eye contact.

Protective Gloves:
- Wear gloves with as much resistance to the chemical ingredients as possible. Glove materials such as nitrile rubber may provide protection. Glove selection should be based on chemicals being used and conditions of use. Consult your glove supplier for additional information. Gloves contaminated with product should be discarded and not reused.

Other Protective Clothing:
- Various application methods can dictate use of additional protective safety equipment,
such as impermeable aprons, etc., to minimize exposure.

Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits.

If the work area is not well ventilated, do not use this product.

Use only with adequate ventilation to prevent buildup of vapors. Do not use in areas where vapors can accumulate and concentrate, such as basements, bathrooms or small enclosed areas. Whenever possible, use outdoors in an open air area. If using indoors open all windows and doors and maintain a cross ventilation of moving fresh air across the work area. If strong odor is noticed or you experience slight dizziness, headache, nausea or eye-watering -- STOP -- ventilation is inadequate. Leave area immediately and move to fresh air.

Engineer Controls (Ventilation etc.): Wash hands thoroughly after use and before eating, drinking, or smoking.

Do not eat, drink, or smoke in the work area.

Discard any clothing or other protective equipment that cannot be decontaminated.

Facilities storing or handling this material should be equipped with an emergency eyewash and safety shower.

Engineering Controls

Work/Hygienic/Maintenance Practices:

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical States: [ ] Gas [ X ] Liquid [ ] Solid

Appearance and Odor: No data available.

Melting Point: No data.

Boiling Point: > 300.00 F

Autoignition Pt: No data.

Flash Pt: 114.00 F Method Used: Setaflash Closed Cup (Rapid Setaflash)

Explosive Limits:

LEL: No data.

UEL: No data.

Specific Gravity (Water = 1): 0.799 - 0.82

Vapor Pressure (vs. Air or mm Hg): No data.

Vapor Density (vs. Air = 1): < 1

Evaporation Rate: < 1

Solubility in Water: No data.

Percent Volatile: No data.

VOC / Volume: 711.0000 G/L

10. STABILITY AND REACTIVITY

Stability: Unstable [ ] Stable [ X ]

Conditions To Avoid - No data available.

Instability:

Incompatibility - Materials To Avoid: Oxidizing agents, reducing agents, strong acids, alkalies,

Hazardous Decomposition or Byproducts: Carbon monoxide, carbon dioxide, trace sulfur oxides, cobalt oxide, manganese oxide, zirconium oxide

Possibility of Hazardous Reactions:

Will occur [ ] Will not occur [ X ]
Klean Strip Japan Drier
SAFETY DATA SHEET

11. TOXICOLOGICAL INFORMATION

Toxicological Information: This product has not been tested as a whole. Refer to section 2 for acute and chronic effects.

Carcinogenicity/Other Information:
- IARC 2B - Possibly Carcinogenic to Humans
- ACGIH A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans

<table>
<thead>
<tr>
<th>CAS #</th>
<th>Hazardous Components (Chemical Name)</th>
<th>NTP</th>
<th>IARC</th>
<th>ACGIH</th>
<th>OSHA</th>
</tr>
</thead>
<tbody>
<tr>
<td>64742-47-8</td>
<td>Hydrotreated light distillate (petroleum)</td>
<td>n.a.</td>
<td>n.a.</td>
<td>A4</td>
<td>n.a.</td>
</tr>
<tr>
<td>8030-70-4</td>
<td>Fatty acids, tall-oil, manganese salts</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
</tr>
<tr>
<td>8052-41-3</td>
<td>Stoddard solvent {Mineral spirits; Aliphatic Petroleum Distillates; White spirits}</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
</tr>
<tr>
<td>22464-99-9</td>
<td>Zirconium 2-Ethylhexanoate {Hexanoic acid, 2-ethyl-, zirconium salt}</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
</tr>
<tr>
<td>27253-31-2</td>
<td>Neodecanoic acid, cobalt salt</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
</tr>
<tr>
<td>61789-51-3</td>
<td>Cobalt naphthenate</td>
<td>n.a.</td>
<td></td>
<td>2B</td>
<td>A3</td>
</tr>
</tbody>
</table>

12. ECOLOGICAL INFORMATION

General Ecological Information: This product has not been tested as a whole.

13. DISPOSAL CONSIDERATIONS

Waste Disposal Method:
- Dispose of in accordance with local, state, and federal laws.
- Do not place material in general trash.
- Do not allow material to enter bodies of water or sewers.

14. TRANSPORT INFORMATION

LAND TRANSPORT (US DOT):

- DOT Proper Shipping Name: Paint related material
- DOT Hazard Class: 3 FLAMMABLE LIQUID
- UN/NA Number: UN1263 Packing Group: III

Additional Transport Information:
The shipper/supplier may apply one of the following exceptions: Combustible Liquid, Consumer Commodity, Limited Quantity, Viscous Liquid, Does Not Sustain Combustion, or others, as allowed under 49CFR Hazmat Regulations. Please consult 49CFR Subchapter C to ensure that subsequent shipments comply with these exceptions.
15. REGULATORY INFORMATION

EPA SARA (Superfund Amendments and Reauthorization Act of 1986) Lists

<table>
<thead>
<tr>
<th>CAS #</th>
<th>Hazardous Components (Chemical Name)</th>
<th>S. 302 (EHS)</th>
<th>S. 304 RQ</th>
<th>S. 313 (TRI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>64742-47-8</td>
<td>Hydrotreated light distillate (petroleum)</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>8030-70-4</td>
<td>Fatty acids, tall-oil, manganese salts</td>
<td>No</td>
<td>No</td>
<td>Yes-Cat. N450</td>
</tr>
<tr>
<td>8052-41-3</td>
<td>Stoddard solvent {Mineral spirits; Aliphatic Petroleum Distillates; White spirits}</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>22464-99-9</td>
<td>Zirconium 2-Ethylhexanoate {Hexanoic acid, 2-ethyl-, zirconium salt}</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>27253-31-2</td>
<td>Neodecanoic acid, cobalt salt</td>
<td>No</td>
<td>No</td>
<td>Yes-Cat. N096</td>
</tr>
<tr>
<td>61789-51-3</td>
<td>Cobalt naphthenate</td>
<td>No</td>
<td>No</td>
<td>Yes-Cat. N096</td>
</tr>
</tbody>
</table>

This material meets the EPA 'Hazard Categories' defined for SARA Title III Sections 311/312 as indicated:
- [X] Yes [ ] No Acute (immediate) Health Hazard
- [X] Yes [ ] No Chronic (delayed) Health Hazard
- [X] Yes [ ] No Fire Hazard
- [ ] Yes [X] No Sudden Release of Pressure Hazard
- [ ] Yes [X] No Reactive Hazard

Other US EPA or State Lists

<table>
<thead>
<tr>
<th>CAS #</th>
<th>Hazardous Components (Chemical Name)</th>
<th>Other US EPA or State Lists</th>
</tr>
</thead>
<tbody>
<tr>
<td>64742-47-8</td>
<td>Hydrotreated light distillate (petroleum)</td>
<td>CAA HAP, ODC: No; CWA NPDES: No; TSCA: Yes - Inventory; CA PROP.65: No</td>
</tr>
<tr>
<td>8030-70-4</td>
<td>Fatty acids, tall-oil, manganese salts</td>
<td>CAA HAP, ODC: Yes - Cat.; CWA NPDES: No; TSCA: Yes - Inventory; CA PROP.65: No</td>
</tr>
<tr>
<td>8052-41-3</td>
<td>Stoddard solvent {Mineral spirits; Aliphatic Petroleum Distillates; White spirits}</td>
<td>CAA HAP, ODC: No; CWA NPDES: No; TSCA: Yes - Inventory; CA PROP.65: No</td>
</tr>
<tr>
<td>22464-99-9</td>
<td>Zirconium 2-Ethylhexanoate {Hexanoic acid, 2-ethyl-, zirconium salt}</td>
<td>CAA HAP, ODC: No; CWA NPDES: No; TSCA: Yes - Inventory; CA PROP.65: No</td>
</tr>
<tr>
<td>27253-31-2</td>
<td>Neodecanoic acid, cobalt salt</td>
<td>CAA HAP, ODC: Yes - Cat.; CWA NPDES: No; TSCA: Yes - Inventory; CA PROP.65: No</td>
</tr>
<tr>
<td>61789-51-3</td>
<td>Cobalt naphthenate</td>
<td>CAA HAP, ODC: Yes - Cat.; CWA NPDES: No; TSCA: Yes - Inventory; CA PROP.65: No</td>
</tr>
</tbody>
</table>

Regulatory Information: This product is regulated by the United States Consumer Product Safety Commission and is subject to certain labeling requirements under the Federal Hazardous Substances Act. These requirements differ from the classification criteria and hazard information required for safety data sheets (SDS). The product label also includes other important information, including directions for use, and should always be read in its entirety prior to using the product.

16. OTHER INFORMATION

Revision Date: 05/24/2017
Preparer Name: W.M. Barr EHS Dept (901)775-0100
Additional Information About This Product: No data available.
Company Policy or Disclaimer: The information contained herein is presented in good faith and believed to be accurate as of the effective date shown above. This information is furnished without warranty of any kind. Employers should use this information only as a supplement to other information gathered by them and must make independent determination of suitability and completeness of information from all sources to assure proper use of these
materials and the safety and health of employees. Any use of this data and information must be determined by the user to be in accordance with applicable federal, state and local laws and regulations.