1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Material Identity

Product Name: CHEM-COAT VULCANIZING FLUID
Product Code: 16-405

<table>
<thead>
<tr>
<th>COMPANY</th>
<th>EMERGENCY TELEPHONE NUMBER</th>
</tr>
</thead>
<tbody>
<tr>
<td>PATCH RUBBER CO.</td>
<td>Call CHEM TEL only in the event of chemical emergencies involving a spill, leak, fire, exposure, or accident involving chemicals.</td>
</tr>
<tr>
<td>P.O. BOX H</td>
<td>(800) 255-3924 North America</td>
</tr>
<tr>
<td>ROANOKE RAPIDS, NC 27870</td>
<td>(813) 248-0585 (Collect) International</td>
</tr>
<tr>
<td>TELEPHONE: (252) 536-2574</td>
<td>HEALTH EMERGENCIES</td>
</tr>
<tr>
<td></td>
<td>Call LOS ANGELES Poison Information Center</td>
</tr>
<tr>
<td></td>
<td>(24 hrs.) 1-800-356-3129</td>
</tr>
</tbody>
</table>

2. COMPOSITION/INFORMATION ON INGREDIENTS:

<table>
<thead>
<tr>
<th>Ingredient (s)</th>
<th>CAS Number</th>
<th>% (by weight)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heptane</td>
<td>142-82-5</td>
<td>46-48</td>
</tr>
<tr>
<td>Aliphatic Petroleum Distillates</td>
<td>64742-89-8</td>
<td>46-48</td>
</tr>
<tr>
<td>Zinc Dibutyl Dithiocarbamate/Dibutylamine Complex</td>
<td>35884-05-0</td>
<td>1.2 – 2.2</td>
</tr>
</tbody>
</table>

3. HAZARDS IDENTIFICATION

Potential Health Effects

Eye:
May cause mild eye irritation. Symptoms include stinging, tearing, and redness.

Skin:
Can cause skin irritation. Prolonged or repeated contact may dry the skin. Symptoms may include redness, burning, and drying and cracking of skin, burns, and other skin damage. Passage of this material into the body through the skin is possible, but it is unlikely that this would result in harmful effects during safe handling and use.
Swallowing:  
Swallowing small amounts of this material during normal handling is not likely to cause harmful effects. Swallowing large amounts may be harmful. This material can get into the lungs during swallowing or vomiting. This results in lung inflammation and other lung injury.

Inhalation:  
Breathing of vapor or mist is possible. Breathing small amounts of this material during normal handling is not likely to cause harmful effects. Breathing large amounts may be harmful. Symptoms usually occur at air concentrations higher than the recommended exposure limits (See Section 8).

Symptoms of Exposure:  
Signs and symptoms of exposure to this material through breathing, swallowing, and/or passage of the material through the skin may include: stomach or intestinal upset (nausea, vomiting, diarrhea), irritation (nose, throat, airway), central nervous system depression (dizziness, drowsiness, weakness, fatigue, nausea, headache, unconsciousness), temporary changes in mood and behavior, loss of appetite, loss of coordination, irregular heartbeat, narcosis (dazed or sluggish feeling).

Target Organ Effects:  
Mild, reversible kidney effects, central nervous system damage.

Developmental Information:  
There are no data available for assessing risk to the fetus from maternal exposure to this material.

Cancer Information:  
There is no information available. The chance of this material causing cancer is unknown.

Other Health Effects:  
No Data.

Primary Route(s) of Entry:  
Inhalation, skin absorption, skin contact, eye contact, ingestion.

4. FIRST AID MEASURES

Eyes:  
If symptoms develop, move individual away from exposure and into fresh air. Flush eyes gently with water while holding eyelids apart. If symptoms persist or there is any visual difficulty, seek medical attention.

Skin:  
Remove contaminated clothing. Flush exposed area with large amounts of water. If skin is damaged, seek immediate medical attention. If skin is not damaged and symptoms persist, seek medical attention. Launder clothing before reuse.

Swallowing:  
Seek medical attention. If individual is drowsy or unconscious, do not give anything by mouth; place individual on the left side with the head down. Contact a physician, medical facility, or poison control center for advice about whether to induce vomiting. If possible, do not leave individual unattended.
Inhalation:
If symptoms develop, move individual away from exposure and into fresh air. If symptoms persist, seek medical attention. If breathing is difficult, administer oxygen. Keep person warm and quiet; seek immediate medical attention.

Note to Physicians:
Inhalation of high concentrations of this material, as could occur in enclosed spaces or during deliberate abuse, may be associated with cardiac arrhythmias. Sympathomimetic drugs may initiate cardiac arrhythmias in persons exposed to this material. This material is an aspiration hazard. Potential danger from aspiration must be weighed against possible oral toxicity (See Section 3 – Swallowing) when deciding whether to induce vomiting. Pre-existing disorders of the following organs (or organ systems) may be aggravated by exposure to this material: skin, lung (for example, asthma-like conditions). Individuals with pre-existing heart disorders may be more susceptible to arrhythmias (irregular heartbeats) if exposed to high concentrations of this material.

5. FIRE FIGHTING MEASURES
FIRE Flash Point:  
15 F (-10 C) TCC

Explosive Limit:  
(for product) Lower 0.9 Upper 7.0%

Autoignition Temperature:  
399.0 F (203.8 C)

Hazardous Products of Combustion:  
May form: carbon dioxide and carbon monoxide, various hydrocarbons.

Fire and Explosion Hazards:  
Material is highly volatile and readily gives off vapors, which may travel along the ground or be moved by ventilation and ignited by pilot lights, other flames, sparks, heaters, smoking, electric motors, static discharge, or other ignition sources at locations distant from material handling point. Never use welding or cutting torch on or near drums (even empty) because product (even just residue) can ignite explosively.

Extinguishing Media:  
Regular foam, carbon dioxide, dry chemical.

Fire Fighting Instructions:  
Wear a self-contained breathing apparatus with a full-face piece operated in the positive pressure demand mode with appropriate turnout gear and chemical resistant personal protective equipment. Refer to the personal protective equipment section of this MSDS.

NFPA Rating: Health - 1 Flammability - 3 Reactivity - 0
6. ACCIDENTAL RELEASE MEASURES

Small Spill:
Absorb liquid on vermiculite, floor absorbent or other absorbent material.

Large Spill:
Eliminate all ignition sources (flares, flames including pilot lights, electrical sparks). Persons not wearing protective equipment should be excluded from area of spill until clean up has been completed. Stop spill at source. Prevent from entering drains, sewers, streams or other bodies of water. Prevent from spreading. If runoff occurs, notify authorities as required. Pump or vacuum transfer-spilled product to clean containers for recovery. Absorb unrecoverable product. Transfer contaminated absorbent, soil and other materials to containers for disposal. Prevent run-off to sewers, streams or other bodies of water. If run-off occurs, notify proper authorities as required, that a spill has occurred.

7. HANDLING AND STORAGE

Handling:
Containers of this material may be hazardous when emptied. Since emptied containers retain product residues (vapor, liquid, and/or solid), all hazard precautions given in the data sheet must be observed. All five-gallon pails and larger metal containers, including tank cars and tank trucks, should be grounded and/or bonded when material is transferred. Hydrocarbon solvents are basically non-conductors of electricity and can become electrostatically charged during mixing, filtering or pumping at high flow rates. If this charge reaches a sufficiently high level, sparks can form that may ignite the vapors of flammable liquids. WARNING: Sudden release of hot organic chemical vapors or mists from process equipment operating at elevated temperature and pressure, or sudden ingress of air into vacuum equipment, may result in ignitions without the presence of obvious ignition sources. Published “auto-ignition” or “ignition” temperature values cannot be treated as safe operating temperatures in chemical processes without analysis of the actual process conditions. Any use of this product in elevated temperature processes should be thoroughly evaluated to establish and maintain safe operating conditions.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Eye Protection:
Chemical splash goggles in compliance with OSHA regulations are advised; however, OSHA regulations also permit other type safety glasses. Consult your safety representative.

Skin Protection:
Wear resistant gloves (consult your safety equipment supplier). To prevent repeated or prolonged skin contact, wear impervious clothing and boots....

Respiratory Protections:
If working exposure limit(s) of product or any component is exceeded (see exposure guidelines), a NIOSH/MSHA approved air supplied respirator is advised in absence of proper environmental control. OSHA regulations also permit other NIOSH/MSHA respirators (negative pressure type) under specified conditions (see your industrial hygienist). Engineering or administrative controls should be implemented to reduce exposure.
Engineering Controls:
Provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below TLV(s).

Exposure Guidelines:

Component
HEPTANE (142-82-5)  ALPHATIC PETROLEUM DISTILLATES (64742-89-8)
OSHA VPEL 400.00 ppm – TWA  OSHA VEPL 300,000 ppm - TWA
OSHA VPEL 500.00 ppm – STEL  OSHA VEPT 400,000 ppm - STEL
ACGIH TLV 400.00 ppm – TWA  ACGIH TLV 300.000 ppm - TWA
CGIH TLV 500.00 ppm – STEL

ZINC DIBUTYL/DITHIOCARBAMATE
DIBUTYLAMINE COMPLEX (35884-05-0)

Not Established

PHYSICAL AND CHEMICAL PROPERTIES

Boiling Point:  (for product)  200.0 F (93.3 C) @ 760 mmHg
Vapor Pressure:  (for product)  40.000 mmHg @ 68.00 F
Specific Vapor Density:  3.500 - 3800
Specific Gravity:  0.729
Liquid Density:  6.07 lbs/gal.
Percent Volatiles: 93.2 – 94.2
Volatile Organic Compounds (VOC):  685g/l
Evaporation Rate:  3.05 (n-Butyl Acetate=1)
Appearance:  Milky
State:  Liquid
Odor:  Light Hydrocarbon
Solubility in Water:  Negligible
10. STABILITY AND REACTIVITY
Hazardous Polymerization: Product will not undergo hazardous polymerization.


Chemical Stability: Stable

Incompatibility: Avoid contact with: strong oxidizing agents.

11. TOXICOLOGICAL INFORMATION
(No data)

12. ECOLOGICAL INFORMATION
(No Data)

13. DISPOSAL CONSIDERATION
Waste Management Information:
Dispose of in accordance with all applicable local, state and federal regulations.

14. TRANSPORT INFORMATION

DOT Information – 49 CFR 172.101
DOT Description: 16-405
Consumer Commodity
ORM-D

RQ (Reportable Quantity) – 49 CFR 172.101 (Not Applicable)

15. REGULATORY INFORMATION:

US Federal Regulations
TSCA (Toxic Substances Control Act) Status
TSCA (United States) The intentional ingredients of this product as listed.

CERCLA RQ – 40 CFR 402.4 (a) None Listed

SARA 302 Components – 40 CFR 355 Appendix A (None)
Section 311/312 Hazard Class – 40 CFR 370.2
Immediate (X) Delayed (X) Fire (X) Reactivity ( ) Sudden Release of Pressure ( )

SARA 313 Components – 40 CFR 372.65:
Zinc – Dibutyl Dithiocarbamate/Dibutylamine complex as “Zinc Compounds”
State and Local Regulations

California Proposition 65

The following statement is made in order to comply with the California Safe Drinking Water and Toxic Enforcement Act of 1986: This product contains the following substance(s) known to the state of California to cause cancer. BENZENE

The following statement is made in order to comply with the California Safe Drinking Water and Toxic Enforcement Act of 1986: This product contains the following substance(s) known to the state of California to cause reproductive harm. BENZENE TOLUENE

New Jersey RTK Label Information

<table>
<thead>
<tr>
<th>Substance</th>
<th>CAS Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>N-Heptane</td>
<td>142-82-5</td>
</tr>
<tr>
<td>Naphtha, Solvent</td>
<td>64742-89-8</td>
</tr>
</tbody>
</table>

Pennsylvania RTK Label Information

<table>
<thead>
<tr>
<th>Substance</th>
<th>CAS Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heptane (N-)</td>
<td>142-82-5</td>
</tr>
<tr>
<td>Aliphatic Petroleum Distillates</td>
<td>64742-89-8</td>
</tr>
</tbody>
</table>

16. OTHER INFORMATION

The information accumulated herein is believed to be accurate but is not warranted to be whether originating with the company or not. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances.

DISCLAIMER OF EXPRESSED AND IMPLIED WARRANTIES

The information in this document is believed to be correct as of the date issued. HOWEVER, NO WARRANTY OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE, OR ANY OTHER WARRANTY IS EXPRESSED OR IS TO BE IMPLIED REGARDING THE ACCURACY OR COMPLETENESS OF THIS INFORMATION, THE RESULTS TO BE OBTAINED FROM HAZARDS RELATED TO ITS USE. This information and product are furnished on the condition that the person receiving them shall make his own determination as to the suitability of the product for his particular purpose and on the condition that he assumes the risk of his use thereof.

PREPARED BY: Marlo Carter