MSDS NO: 0159
PATCH RUBBER COMPANY
MATERIAL SAFETY DATA SHEET

Product Name: BLACK ROPE RUBBER
Product Code No.: 16-501, 18-121
Page: 1 of 4
Issue Date: Feb. 6, 2012

MANUFACTURER:
PATCH RUBBER COMPANY
P.O. BOX H
ROANOKE RAPIDS, N.C. 27870
Call CHEM TEL only in the event of chemical emergencies involving a spill, leak, fire, exposure, or accident involving chemicals.
P.O. BOX H
ROANOKE RAPIDS, N.C. 27870
(800) 255-3924 North America
(813) 248-0585 (Collect) International

TELEPHONE: (252) 536-2574

MANUFACTURER:
Call CHEM TEL only in the event of chemical emergencies involving a spill, leak, fire, exposure, or accident involving chemicals.
P.O. BOX H
ROANOKE RAPIDS, N.C. 27870
(800) 255-3924 North America
(813) 248-0585 (Collect) International

TELEPHONE: (252) 536-2574

HEALTH EMERGENCIES:
Call LOS ANGELES Poison Information Center
(24 hrs.) 1-800-356-3129

PRODUCT IDENTIFICATION

PRODUCT NAME: BLACK ROPE RUBBER
DOT PROPER SHIPPING NAME: N/A
ID NUMBER: N/A
DOT HAZARD CLASSIFICATION: N/A

SECTION I - HAZARDOUS COMPONENTS

<table>
<thead>
<tr>
<th>Components</th>
<th>Percent</th>
<th>Exposure Limits</th>
<th>Units</th>
<th>Agency</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carbon Black</td>
<td>25.6 Wt. %</td>
<td>3.5 mg/ M³</td>
<td>OSHA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CAS NO: 1333-86-4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Zinc Oxide</td>
<td>4.9 Wt. %</td>
<td>15 mg/M³</td>
<td>OSHA</td>
<td>*PEL</td>
<td></td>
</tr>
<tr>
<td>CAS NO: 1314-13-2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sulfur</td>
<td>2.4 Wt. %</td>
<td>5 (Resp), 15 (Total) Mg M³</td>
<td>OSHA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CAS NO: 7704-34-9</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Limits as nuisance dust.

Chemicals subject to the reporting requirements of SARA 313 and 40 CFR 372: Zinc Oxide as “Zinc Compounds”.
SECTION II - EMERGENCY AND FIRST AIR PROCEDURES **** EMERGENCY****

Have physician call Los Angeles Poison Information Center (24 Hrs)
(800) 356-3129

INHALATION (BREATHING): Not expected to be compound-related effect. Remove to fresh air. If not breathing, give artificial respiration, preferable mouth-to-mouth. If breathing is difficult, give oxygen. Call a physician at once.

SKIN CONTACT: Compound-related effects not expected to require first aid. If any irritation develops or persists, see a physician.

INGESTION: Compound-related effects not expected. If ingested treat symptoms.

SECTION III - HEALTH HAZARDS/ROUTES OF ENTRY

PRIMARY ROUTE OF ENTRY: Inhalation (∗)  Skin ( )  Ingestion ( )

∗ During hot processing, e.g./ curing

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: No applicable information available.

ACUTE HEALTH HAZARDS & EXPOSURE SYMPTOMS:

None known or expected. Ingredients bound to rubber so inhalation exposure during handling not a problem. Exposure to volatiles released during hot processing such as curing may cause respiratory nose or eye irritation in some people.

CHRONIC HEALTH HAZARDS & EXPOSURE SYMPTOMS:

Long term inhalation exposure to concentrated hot processing fumes have been reported to reduce lung function and cause chronic bronchitis.

CARCINOGENICITY:

Rubber compound not listed by NTP, IARC, OSHA or otherwise known to be a carcinogen.

SECTION IV - SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION:

Not normally needed for routine handling. If curing fumes are a problem, a NIOSH approved air purifying respirator with HEPA filters may be used. Select and use respirators in accordance with OSHA 1910.134 and the respirator manufacturer.
VENTILATION:

Good manufacturing practice demands that inhalation of fumes and volatiles from further hot processing of rubber compounds must be avoided. Exhaust ventilation is usually necessary for operations which produce fumes, such as curing. Provide effective exhaust ventilation at all operations capable of producing fumes to prevent routine inhalation.

OTHER PROTECTIVE EQUIPMENT:

Gloves are needed when handling hot rubber to prevent burns.

WORK AND HYGIENE PRACTICES:

Maintain good personal hygiene when working with rubber compounds. Wash hands and other exposed skin surfaces thoroughly at all breaks and at end of the work shift.

SECTION V - REACTIVITY DATA

STABILITY: Stable

CONDITIONS TO AVOID: None known.

INCOMPATIBLE MATERIALS: No known materials to avoid.

HAZARDOUS DECOMPOSITION PRODUCTS: Oxides of carbon and sulfur under burning conditions.

HAZARDOUS POLYMERIZATION: Will not occur.

CONDITIONS TO AVOID: None known.

SECTION VI - SPILL OR LEAK PROCEDURES **HIGHWAY /RAILWAY SPILLS**

CALL CHEM TEL 1-800-255-3924 North America
(Collect) 1-813-248-0585 International

PRECAUTIONS IN CASE OF RELEASE OR SPILL:

Uncontaminated product may be picked and used; contaminated product or used product should be handled as solid waste.

WASTE DISPOSAL METHOD:

Dispose of in accordance with local, state, or federal regulations regarding disposal of polymeric waste.

SECTION VII - STORAGE AND SPECIAL PRECAUTIONS

HANDLING AND STORAGE PRECAUTIONS: Store in cool, dry location.
OTHER PRECAUTIONS:
A class of materials called nitrosoamines are carcinogens in animals and therefore are suspected of causing cancer in humans. Because many rubber materials contain amine based ingredients, trace residual amounts (well below 0.1%) of nitrosoamine are likely to exist in most rubber compounds as a result of being formed in earlier processing steps.

Subjecting this product to certain processing steps can form higher amounts of nitrosoamines which are believed to present a health hazard. Avoid mixing or exposing this product with: nitrates, nitrites, nitrogen oxides or other nitrosoamines as potentially hazardous levels of nitrosoamines will be formed. Salt bath curing (using nitrate/nitrite salts) can be expected to produce hazardous amounts of volatile nitrosoamines. Emissions from such processes must be exhausted. Employees must avoid inhaling fumes from hot rubber processing.

SECTION VIII - FIRE & EXPLOSION HAZARD DATA
FLASHPOINT: N/A
FLAMMABLE LIMITS: Not established.
EXTINGUISHING MEDIA: Water or dry chemical, carbon dioxide.
SPECIAL FIRE FIGHTING PROCEDURES: Wear full body protective clothing and full face piece, self-contained breathing apparatus operated in positive-pressure mode.
UNUSUAL FIRE & EXPLOSION HAZARDS: DO NOT enter confined or enclosed space without proper protective equipment; i.e., self-contained breathing apparatus. Burning may produce oxides of carbon and sulfur.

SECTION IX - PHYSICAL DATA
APPROX. BOILING POINT: N/A
VAPOR DENSITY (AIR = 1): N/A
VAPOR PRESSURE: N/A
EVAPORATION RATE (N-Butyl Acetate =1): N/A
% VOLATILE: N/A
% SOLUBILITY IN WATER: Insoluble
SPECIFIC GRAVITY: 1.11
APPEARANCE: Black
ODOR: Characteristic Rubber Odor

SECTION X - DOCUMENTARY INFORMATION
ISSUE DATE: Feb. 6, 2012
PREV. DATE: Jan. 15, 2009
MSDS NO: 0158
PRODUCT CODE NO: 16-501, 18-121
PREV. PROD. CODE NO: 16-501, 18-121
PREV. MSDS NO: 0158

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 assume the risk of his use thereof.

PREPARED BY: Marlo Carter