Section 1: IDENTIFICATION OF SUBSTANCE AND SUPPLIER

Product name: HANDIPATCH

Other names: Cold patch

CAS number: Unassigned

Recommended uses: Repair of asphalt surfaces

Company Details: Dricon, Firth Industries.
Address: 100 Bollard Rd., Tuakau.
Telephone Number: 0800 – 374 566
Hours: 8.00 am – 5.00 pm Monday to Friday

Emergency Telephone Number: (0800) 764-766 24 hours.

National Poisons Centre,
Department of Preventative and Social Medicine,
University of Otago,
P O Box 913,
Dunedin,
New Zealand.

Date of Revision: 8th November 2011

Section 2: HAZARDS IDENTIFICATION

Hazard Classification: Not classified as a Hazardous Substance according to the Hazardous Substances (Minimum Degrees of Hazard) Regulation 2001

HSNO Approval Number: Not applicable

HSNO Approval Number: Not applicable

Hazard classification: Not applicable

Section 3: COMPOSITION / INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>CAS number</th>
<th>Content (%w/w)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aggregate</td>
<td>Various</td>
<td>90 - 95</td>
</tr>
<tr>
<td>Asphalt Cement (as fumes)</td>
<td>8052-42-4</td>
<td>&lt;5</td>
</tr>
<tr>
<td>#2 Fuel Oil (as vapour &amp; aerosol)</td>
<td>68476-30-2</td>
<td>&lt;2</td>
</tr>
</tbody>
</table>
SAFETY DATA SHEET

HANDIPATCH

100 Bollard Road
Tuakau
New Zealand
Telephone 0800 374 566

SAFETY DATA SHEET

HANDIPATCH

Issue date 8 Nov 2011

Crystalline Silica (as quartz) | 14808-60-7 | varies

Section 4: FIRST AID MEASURES

Requirement for First Aid:
Water

Workplace Facilities: No additional requirements

First Aid Instructions:

Ingestion: Do not induce vomiting. If conscious, wash mouth with water and have person drink plenty of water. Seek medical attention or contact poison control centre.

Inhalation: Move person to fresh air. Seek medical attention for discomfort or if coughing or other symptoms do not subside.

Skin Contact: Wash with cool water and a pH neutral soap or mild skin detergent. Do not use solvent or thinners to remove material from skin. Seek medical attention for rash, irritation and dermatitis. For contact with hot material, immerse or flush skin with cold material for at least 15 minutes. Call a doctor. Do not attempt to remove solidified material, since removal may cause further tissue injury.

Eye Contact: Rinse eyes thoroughly with water for at least 15 minutes. Seek medical attention. For contact with hot material, flush with large amounts of water for at least 15 minutes. Immediately call a doctor.

Section 5: FIRE FIGHTING MEASURES

Fire and Explosion Hazards:
Is a combustible solid. Avoid breathing fumes. Combustion products may include CO, CO₂, H₂S.

Extinguishing Media and Methods:
Use extinguishing media appropriate for surrounding fire.

Hazchem Code:
Recommended Protective Clothing:
In addition to normal fire fighting equipment, a SCBA is recommended to limit exposure to combustion products when fighting any fire.

Section 6: ACCIDENTAL RELEASE MEASURES

Use a shovel to scrape up material and place material into suitable containers for recovery or disposal. Do not wash Handipatch into sewerage or drainage systems or into bodies of water (eg streams). Wear appropriate protective equipment as per Section 8.

Section 7: HANDLING AND STORAGE

For 24 hour poison advice call 0800 POISON (0800 764 766)
SAFETY DATA SHEET

HANDIPATCH

100 Bollard Road
Tuakau
New Zealand
Telephone 0800 374 566

Issue date 8 Nov 2011

General: Keep Handipatch sealed until ready for use. Stack material in a secure manner to prevent falling. Packaged Handipatch is heavy and poses such risks as sprains and strains to the back, arm, shoulders and legs during lifting. Handle with care and use appropriate control measures.

Usage: Handipatch should not be heated above 21°C (70°F) when utilizing a hot box. Cutting, crushing or grinding hardened asphalt or other crystalline silica bearing materials will release respirable crystalline silica. Use all appropriate measures of dust control or suppression, and Personal Protective Equipment PPE as described in Section 8.

Avoid contact with skin, eyes and clothing. Use additional precautions when handling hot material. Do not breathe fumes or vapour from heated material. Do not allow hot material to contact skin. Use all appropriate Personal Protective Equipment (PPE) described in Section 8.

Storage: Store in properly closed containers that are appropriately labelled and in a cool well ventilated area. Do not expose to heat, open flames, strong oxidisers or other source of ignition.

Storage Temperature: Store away from heat, all ignition sources and open flames.

Clothing: Remove and launder clothing that is soiled with Handipatch. Thoroughly wash hands and exposed skin after exposure to Handipatch.

Section 8: EXPOSURE CONTROL / PERSONAL PROTECTION

Engineering Controls: Under ordinary conditions, engineering controls are not required. Use local exhaust or general dilution ventilation when using at elevated temperatures or during activities that generate fumes, to maintain levels below exposure limits.

Personal Protective Equipment (PPE):

Respiratory Protection: Under ordinary conditions, no respiratory protection is required. Wear an approved respirator that is properly fitted and is in good condition when exposed to dust or fumes above exposure limits.

Eye Protection: Wear AS/NZS 1337 approved eyeglasses, goggles or face shield when handling QPR, to prevent contact with eyes.

Skin Protection: Wear leather or cloth work gloves to prevent skin contact and insulated gloves when handling hot material.

Foot Protection: Wear approved hard-toe safety boots when handling Handipatch.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Black Solid</td>
</tr>
<tr>
<td>Physical State</td>
<td>Granular Solid</td>
</tr>
<tr>
<td>Odour</td>
<td>Slight petroleum odour</td>
</tr>
<tr>
<td>Vapour Pressure</td>
<td>NA</td>
</tr>
<tr>
<td>Vapour Density</td>
<td>NA</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>2.6 – 2.8</td>
</tr>
<tr>
<td>Flashpoint</td>
<td>NA</td>
</tr>
<tr>
<td>Upper/ Lower Flammability Limit</td>
<td>NA</td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>NA</td>
</tr>
<tr>
<td>pH (in water)</td>
<td>NA</td>
</tr>
<tr>
<td>Boiling Point</td>
<td>295-705°C (563-1301 °F)</td>
</tr>
<tr>
<td>Freezing Point</td>
<td>NA</td>
</tr>
<tr>
<td>Viscosity</td>
<td>NA</td>
</tr>
<tr>
<td>Solubility in Water</td>
<td>Insoluble</td>
</tr>
<tr>
<td>Auto-Ignition Temperature</td>
<td>NA</td>
</tr>
</tbody>
</table>
Section 10: STABILITY AND REACTIVITY

**Stability:** Stable under ambient conditions. Avoid contact with incompatible materials, excessive heat, and sources of ignition and open flames.

**Incompatibility:** Handipatch is incompatible with strong acids or bases, and oxidising agents such as nitrates, chlorates and peroxides.

**Hazardous Polymerization:** None

**Hazardous Decomposition:** When heated may liberate H$_2$S and various hydrocarbons

Section 11: TOXICOLOGICAL INFORMATION

**Eyes:** Airborne dust may cause immediate or delayed irritation or inflammation. Contact with Handipatch can cause moderate eye irritation, redness, and itchiness. Exposure requires immediate first aid to prevent damage to the eye. If heated, product will cause severe thermal burns.

**Skin Contact:** May cause dry skin, discomfort, irritation and dermatitis. Repeated contact may cause abrasion from asphalt cement. If heated, product will cause severe thermal burns.

**Inhalation (acute):** When heated Handipatch may release irritating fumes or vapours such as smoke, CO$_2$, CO and unburned hydrocarbons. H$_2$S and other sulphur-containing gases can evolve from this product at elevated temperatures. Exposure to fumes or vapours may cause irritation of the nose and throat, and symptoms such as headache, dizziness, loss of concentration and drowsiness. Cutting, crushing or grinding hardened asphalt will release dust. Breathing dust may cause lung, nose or throat irritation, including choking, depending on the degree of exposure.

**Inhalation (chronic):** Risk of injury depends on duration and level of exposure

**Silicosis:** Handipatch contains traces of crystalline silica. Cutting, crushing or grinding hardened asphalt will release respirable crystalline silica. Prolonged or repeated inhalation can cause silicosis, a seriously disabling and fatal lung disease.

**Carcinogenicity:** Handipatch is not listed as a carcinogen; however it does contain trace amounts of crystalline silica that is classified by IARC as a known carcinogen.

**Ingestion:** Ingestion of Handipatch may result in nausea, vomiting, diarrhoea and restlessness. Chewing asphalt has caused gastrointestinal effects. Stomach obstruction has been reported in individuals who have chewed and swallowed asphalt.

**Medical Conditions:** Pre-existing skin conditions can be aggravated by exposure.

Section 12: ENVIRONMENTAL INFORMATION

**Environmental effects:** Prevent this product from entering waterways, drains and sewers.
Section 13: DISPOSAL CONSIDERATIONS

Product and containers may be placed in drums and disposed of in accordance with local regulations to an approved landfill. Recycle product where possible.

Section 14: TRANSPORT INFORMATION

Road and rail: No regulatory transport requirements.
UN number: None.
Dangerous goods class: Not applicable.
Hazchem code: Not applicable.

Section 15: REGULATORY INFORMATION

Regulatory status: Not classified as a Hazardous Substance according to the Hazardous Substances (Minimum Degrees of Hazard) Regulation 2001

Section 16: OTHER INFORMATION

Additional information None

Although reasonable care has been taken in the preparation of this document, Dricon (A division of Firth Industries) extends no warranties and makes no representations as to the accuracy or completeness of the information contained therein, and assumes no responsibility regarding the suitability for the user’s intended purposes or for the consequences of its use. Each individual should make a determination as to the suitability of the information for their particular purpose (s).