ColdGrip CM-4IQ is a combination additive added to virgin asphalt to produce low VOC (volatile organic compound) asphalt cutback, replacing both petroleum-based solvents and adhesion promoters which are typically used. ColdGrip CM-4IQ improves the ease and efficiency with which highly oxidized asphalt is incorporated from RAP and reintroduced back into the new mix, yielding lower material costs and a safer, environmentally friendly cold mix alternative to traditional cold mix.

**APPLICATIONS**
- Cold Patch Stockpile Mix
- Cold Mix Paving

**FEATURES**

**ECO-FRIENDLY AND LOW VOC**
Used to produce low VOC, environmentally friendly cold patch mix

**SAVES MONEY**
Reduces mix cost by enabling higher RAP utilization allowing for less virgin aggregate and asphalt usage
Chemically incorporates oxidized asphalt from RAP without impacting low temperature cracking resistance or workability of cold mix

**PERMANENT PATCH LIFE**
Chemically binds asphalt to aggregate and the patch to the pothole walls and bottom, even in the presence of water, preventing aggregate loss and extending patch life permanently

**BETTER OPERATIONAL EFFICIENCY**
Simplifies production with only one easy-to-handle additive required
Allows cutback to easily coat cold, wet, and dusty RAP and virgin aggregates, eliminating headaches, wasted time and added costs due to coating challenges

**SAFER**
Cutback is non-hazardous, non-flammable and contains no polycyclic aromatic hydrocarbons (PAHs)

**LONGER MIX SHELF LIFE**
Preserves workability of the mix in stockpiles and bags

**COMPATIBILITY**

**ASPHALT**
Compatible with most asphalts

**AGGREGATES**
Compatible with various mineralogies including various RAP, granite, diabase, diorite, basalt, traprock, chert, limestone, dolomite, marble, sandstone and slag

**USE COLDGRIP CM-4IQ WHEN YOU NEED:**
- A permanent, eco-friendly and low VOC cold patch
- Better profitability
- Simplified and easier-to-produce cold mix
USAGE RECOMMENDATIONS

CUTBACK ASPHALT:
- Cold Mix Paving: 10-15% by weight of cutback
- Cold Patch Stockpile Mix: 20-35% by weight of total liquid
- Usage rate should be determined by user based on the amount of RAP incorporated into the mix and climatic conditions

OPTIONS FOR ADDING COLDGRIP CM-4IQ TO ASPHALT:
1. Add to asphalt storage tank and agitate mechanically or through pump circulation
2. Add at asphalt terminal by injecting into asphalt line as transport tanker is being charged
3. Add by in-line injecting into the asphalt line between the asphalt flow meter and the plant injection point, preferably after flowing through an in-line static mixer

PHYSICAL CHARACTERISTICS

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance, 77 °F (25 °C)</td>
<td>Dark-Colored Liquid</td>
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<tr>
<td>Odor</td>
<td>Mild Hydrocarbon</td>
</tr>
<tr>
<td>Density, 77 °F (25 °C)</td>
<td>7.7 lb/gal (0.9 kg/L)</td>
</tr>
<tr>
<td>Viscosity, 77 °F (25 °C)</td>
<td>140 cP</td>
</tr>
<tr>
<td>TSCA Inventory</td>
<td>Listed</td>
</tr>
<tr>
<td>DSL Inventory</td>
<td>Not Listed</td>
</tr>
<tr>
<td>C.A.S. Number</td>
<td>Proprietary</td>
</tr>
</tbody>
</table>

The density and viscosity data reported are typical and not specifications. Typical ranges for density and viscosity values are ± 2 and ± 20%.

HANDLING AND STORAGE

Always handle ColdGrip products in accordance with Safety Data Sheet (SDS) and Road Science Asphalt Additives Handling and Storage Guidelines document. Avoid product contamination with other materials. Recommended handling temperature range is 32–120 °F (0–50 °C).

AVAILABILITY

ColdGrip CM-4IQ is available in 275 gal/1,000 L IBC totes (1,950 lb/884.5 kg net weight) and 55 gal/208 L metal drums (400 lb/181.4 kg net weight).

TECHNICAL SUPPORT

To request additional product information, contact your regional Road Science representative. You can also contact us at 918-960-3800 or customerservice@roadscience.net, or visit our website at www.roadscience.net.