1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY/UNDERTAKING

Name of Product
C5 Petroleum Resin, C5 Aliphatic Hydrocarbon Resin

Manufacturer/Distributor
Kimix Chemical Co., Ltd. Add:Rm. 706, Hongshi Mansion, No. 225 Chaowang Rd., RC- Hangzhou 310015, China
Phone +86 571 8839 2380, Fax +86 571 8839 0023
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Advice
Ms. Sherry Xie
Phone +86 571 8839 2380

Recommended Intended Purpose(s)
Road-marking Paints, Asphalt Modifier

2. COMPOSITION / INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>COMPOSITION</th>
<th>WEIGHT% RANGE</th>
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</thead>
<tbody>
<tr>
<td>Petroleum Hydrocarbon Resin</td>
<td>≥ 99</td>
</tr>
<tr>
<td>Slip Agents/Anti-blocking agents/Antioxidants/Stabilizers</td>
<td>≤ 1</td>
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Note: The product may contain varying levels of additives such as slip agents and anti-blocking agents, antioxidants and stabilizers. The composition of this mixture may be proprietary information.

In the event of a medical emergency, compositional information will be provided to a physician or nurse.

3. HAZARDS IDENTIFICATION
This product contains no hazardous components.

4. FIRST AID MEASURES

**Eyes:** Immediately flush eyes with large amounts of water for at least 15 minutes. Get immediate medical aid.

**Skin:** Wash contact areas with soap and water. For hot product: Immediately immerse in or flush affected area with large amounts of cold water to dissipate heat. Cover with clean cotton sheeting or gauze and get prompt medical attention.

**Ingestion:** Get medical attention immediately.

**Inhalation:** Immediately remove the affected victim out of contaminated area and into the fresh air. Administer artificial respiration if breathing is stopped and keep at rest.

5. FIRE FIGHTING MEASURES

**EXTINGUISHING MEDIA**

- Appropriate Extinguishing Media: Use water fog, foam, sand, dry chemical or carbon dioxide (CO2) to extinguish flames

**FIRE FIGHTING**

- Fire Fighting Instructions: Assure an extended cooling down period to prevent re-ignition. Evacuate area. Prevent run-off from fire control or dilution from entering streams, sewers or drinking water supply. Fire-fighters should use standard protective equipment and in enclosed spaces, self-contained breathing apparatus (SCBA). Use water spray to cool fire exposed surfaces and to protect personnel.
Kimix®

Material Safety Data Sheet
Printed 07.15.2010
Revision 07.15.2010
Kimresin Petroleum Resin


FLAMMABILITY PROPERTIES
- Flash Point [Method]: Not Applicable
- Flammable Limits (Approximate volume % in air): LEL: Not Determined UEL: Not Determined
- Auto ignition Temperature: Not Determined

6. ACCIDENTAL RELEASE MEASURES

NOTIFICATION PROCEDURES
- Notify relevant authorities in accordance with all applicable regulations.

PERSONAL PRECAUTIONS
- Wear protective equipment listed at Section 8

ENVIRONMENTAL PRECAUTIONS
- Prevent entry into waterways, sewers, basements or confined areas.

PILL MANAGEMENT
- Land Spill: Spilled pellets present a slipping hazard on hard surfaces.
- Water Spill: Stop leak if you can do so without risk. Confine the spill immediately with booms. Skim from surface

7. HANDLING AND STORAGE

Handling Precautions
- Avoid elevated temperatures for prolonged periods of time. Prevent small spills and leakage to avoid slip hazard. DO NOT handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. Material can accumulate static charges which may cause an electrical spark (ignition source). Apart from the specific nature of the polymer product, conditions such as humidity, sunlight and temperature have an influence on the way the product behaves during storage and handling. Special attention should be paid to avoid inappropriate stacking of palletized bags or other package units. Indeed, polymer products may be dimensionally unstable under certain conditions. Avoid conditions generating heat during transfer operations.
- Loading/Unloading Temperature: [Ambient]
- Transport Temperature: [Ambient]
- Static Accumulator: This material is a static accumulator

Storage Requirements
- Store in a cool, dry place. For resins having a softening point below 80°C, prolonged storage above 25°C will cause blocking. For resins having a softening point between 80 and 95°C, prolonged storage above 30°C will cause blocking.
- Storage Temperature: [Ambient]
- Storage Pressure: [Ambient]
- Suitable Containers/Packing: Super sacks, Bags (25kgs)
- Suitable Materials and Coatings: Paper, Steel, Polyethylene, Polypropylene
8. EXPOSURE CONTROLS / PERSONAL PROTECTION

- Note: Limits/standards shown for guidance only and please follow applicable regulations.
- EXPOSURE LIMITED
  - 5mg/m³ OSHA (respirable dust)
- ENGINEERING CONTROLS
  - Control measures to consider: Adequate ventilation should be provided so that exposure limits are not exceeded.
  - Special Precautions: Should significant vapors/fumes be generated during thermal processing of this product, it is recommended that work stations be monitored for the presence of thermal degradation by-products which may evolve at elevated temperatures (for example, oxygenated components).

PERSONAL PROTECTION

- Personal protective equipment selections vary based on potential exposure conditions such as applications, handling practices, concentration and ventilation. Information on the selection of protective equipment for use with this material as below.

Respiratory Protection:
- No special requirements under ordinary conditions of use and with adequate ventilation.
- If engineering controls do not maintain airborne contaminant concentrations at a level which is adequate to protect worker health, an approved respirator may be appropriate. Respirator selection, usage, and maintenance must be in accordance with regulatory requirements, if applicable.
- For high airborne concentrations, use an approved supplied-air respirator, operated in positive pressure mode. Supplied air respirators with an escape bottle may be appropriate when oxygen levels are inadequate, gas/vapor warning properties are poor, or if air purifying filters capacity/rating may be exceeded.

Hand Protection:
- Any specific glove information provided is based on published literature and glove manufacturer data. Glove suitability and breakthrough time will differ depending on the specific use conditions. Contact the glove manufacturer for specific advice on glove selection and breakthrough times for your use conditions. Inspect and replace worn or damaged gloves.
- If product is hot, thermally protective gloves are recommended. If contact with forearms is likely, wear gauntlet style gloves.

Eye Protection:
- Safety glasses with side shields are recommended.

Skin and Body Protection:
- Any specific clothing information provided is based on published literature or manufacturer data.
- If product is hot, thermally protective, chemical resistant apron and long sleeves are recommended.

General Protective Measures
- Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Discard contaminated clothing and footwear that cannot be cleaned. Practice good housekeeping.
9. PHYSICAL AND CHEMICAL PROPERTIES

GENERAL INFORMATION

Appearance: Buff in Solid
Odor: None to Mild petrochemical
Odor Threshold: Not Determined

IMPORTANT HEALTH, SAFETY, AND ENVIRONMENTAL INFORMATION

Specific Gravity: 0.96-0.99
Flash Point [Method]: Not Applicable
Flammable Limits (Approximate volume % in air): LEL: Not Determined UEL: Not Determined
Boiling Point / Range: Not Applicable
Vapor Density (Air = 1): Not Applicable
Vapor Pressure: Not Applicable
Evaporation Rate (N-Butyl Acetate = 1): Not Applicable
Acid Value (mgKOH/mg): 0.6 Max
Log Pow (n-Octanol/Water Partition Coefficient): Not Applicable
Solubility in Water: Insoluble
Solubility in Organic solvent: Soluble
Melt Viscosity: 250 Max

OTHER INFORMATION

Freezing Point: Not Determined
Softening Point (Ring & Balt, °C): 98°C - 105°C
Molecular Weight: 800 - 2000
Hygroscopic: No

10. STABILITY AND REACTIVITY

Stability: Stable under normal conditions.
Conditions to Avoid: Open flames, high temperatures
Materials to Avoid (incompatibility): Strong oxidizers
Hazardous Decomposition: Carbon Monoxide, Carbon Dioxide; Will not occur.
Hazardous Polymerization: Will not occur.

11. TOXICOLOGICAL INFORMATION

Route of Exposure Conclusion (Based on test data for structurally similar materials)
INHALATION Toxicity: Minimally Toxic.
   Irritation: Negligible hazard at ambient/normal handling temperatures
INGESTION Toxicity: Minimally Toxic.
Skin/ Eye: Toxicity: Minimally Toxic
   Irritation: Negligible irritation to skin/eyes at ambient temperatures
12. ECOLOGICAL INFORMATION
The information given is based on data available for the material, the components of the material, and similar materials.

ECOTOXICITY
Not expected to be harmful/chronic toxicity to aquatic organisms

MOBILITY
Low solubility and floats and is expected to migrate from water to the land.
Expected to partition to sediment and wastewater solids.

PERSISTENCE AND DEGRADABILITY
Expected to be persistent.
Bioaccumulation Potential: low.

13. DISPOSAL CONSIDERATIONS
Disposal recommendations based on material as supplied. Disposal must be in accordance with current applicable laws and regulations, and material characteristics at time of disposal.

DISPOSAL RECOMMENDATIONS
- Suitable routes of disposal are supervised incineration, preferentially with energy recovery, or appropriate recycling methods in accordance with applicable regulations and material characteristics at the time of disposal.

14. TRANSPORT INFORMATION
LAND: Not Regulated for Land Transport
SEA (IMDG): Not Regulated for Sea Transport according to IMDG-Code
AIR (IATA): Not Regulated for Air Transport

15. REGULATORY INFORMATION
Material is not hazardous as defined by the EU Dangerous Substances/Preparations Directives.

EU LABELING: No labeling required according Criteria of European Directive 67/548/EEC and its subsequent amendments. This product is listed as a UVCB (Unknown, Variable Composition or Biological) Chemical at CAS Registry Number 64742-16-1

16. OTHER INFORMATION
The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. This information applies only to the product designated above and does not necessarily apply to its use in combination with other materials, products, chemical compounds, structures or processes.