SECTION 1 - Product and Company Identification

Product Name: Pour Point Depressant  
Synonym: Wax dispersant; Paraffin dispersant; Ethylene vinyl acetate, EVA; Ethylene vinyl acetate copolymer; Ethylene vinyl acetate polymer  
Intended Application: Pour point reduction for waxy crude oil

Supplier: Themark Corporation  
5455 Hidalgo Street • Houston, 77056  
Phone: 412-551-9893  
Emergency Phone (24hrs): 1-613-996-6666 CanTec

SECTION 2 - Hazards Identification

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>CAS No.</th>
<th>Content ( Wt%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethylene vinyl acetate copolymer</td>
<td>24937-78-8</td>
<td>15 – 20</td>
</tr>
<tr>
<td>Poly(vinyl acetate-2-ethylhexyl acrylate)</td>
<td>25067-02-1</td>
<td>15 – 20</td>
</tr>
<tr>
<td>Isooctanal</td>
<td>70955-04-3</td>
<td>60 – 70</td>
</tr>
<tr>
<td>Proprietary solvent</td>
<td>Proprietary</td>
<td>0.5 – 2.0</td>
</tr>
<tr>
<td>Proprietary co-solvent</td>
<td>Proprietary</td>
<td>0.5 – 2.0</td>
</tr>
</tbody>
</table>

SECTION 3 - Composition/Information on Ingredients

Carcinogenic Effects: No carcinogenic effects have been observed

Mutagenic Effects: No mutagenic effects have been observed

Reproduction Toxicity: No reproductive toxicity effects have been observed

SECTION 4 - First Aid Measures

Eye Contact: If contacted with eyes, check for and remove any contact lenses. Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical attention immediately if eyes are irritated.

Skin Contact: First aid is normally not required. For contact with hot products, immediately flush skin with plenty of cold water for at least 15 minutes to dissipate heat. Remove contaminated clothing and shoes. Treat as for skin burns. Get medical attention.

Inhalation: For exposure to dusts, vapors and/or aerosols formed at elevated temperatures, move exposed person to fresh air. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention immediately.

Ingestion: Not a likely route of exposure. Wash out mouth and water. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention.
Most Important Symptoms and Effects, Both Acute and Delayed: Skin and eye burns from molten product. Skin and eye irritation from product dusts. Irritated respiratory tract from dust inhalation.

Indication of Immediate Medical Attention and Special Treatment Needed: Treat symptomatically and supportively.

SECTION 5 - Firefighting Measures

Extinguishing Media:

Suitable Extinguishing Media: Water spray (fog), dry chemical, CO₂, foams

Unsuitable Extinguishing Media: Do not use a water jet.

Special Hazards Arising from the Substance or Mixture: Acetic acid and or vinyl acetate may be released at elevated temperatures or in a fire.

Advice for Fire Fighters:

Special Protective Equipment for Fire Fighters: Fire fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Prevent mixing with alkali and amines materials.

Further Information: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving a personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool. Do not allow fire extinguishing water to contaminate surface or groundwater systems.

SECTION 6 - Accidental Release Measures

Personal Precautions, Protective Equipment and Emergency Procedures:

Advice for Non-emergency Personnel: Evacuate the danger zone; follow emergency precautions. Secure emergency assistance immediately. Avoid contact with the material; do not breath dusts. If possible, provide additional ventilation.

Advice for Emergency Responders: Do not take action without proper training and emergency equipment. See Section 8 for additional information. Evacuate surrounding areas. Eliminate all ignition sources including flares and all open flames. Avoid all contact with spilled material. Maintain adequate ventilation and wear appropriate respiratory protection.

Environmental Precautions: Avoid dispersal of spilled material, runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and Materials for Containment:

Stop spill if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, surface waters, basements or confined areas. Wash spillage into effluent treatment plant. Contain and collect spillage using appropriate personal protective equipment. Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products or if a risk assessment indicates this is necessary. Collect and contain spillage with non-combustible, absorbent material (e.g. sand, earth, vermiculite or diatomaceous earth) and place in a container for disposal according to local regulations. Use spark-proof tools and explosion proof equipment if flammable gasses, liquids or vapors are present in the spill area. Contaminated absorbent material may pose the same hazard(s) as the spilled product.

SECTION 7 - Handling and Storage

Precautions for Safe Handling: Observe all label precautions. Use appropriate personal protective equipment (see section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapor or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material.

Advice on Protection Against Fire and Explosion: Keep away from flames and sources of ignition – including static.

Conditions for Safe Storage, Including Any Incompatibilities: Store in accordance with local regulations. Store in a segregated and approved area. Store in original or bulk storage container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10) and food and drink. Eliminate all ignition sources. Separate from oxidizing materials, amines and alkalis.

Bulk storage should be in approved vessels, preferably steel that is grounded and vented Keep use containers tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

Specific End Uses: No other additional special end uses are anticipated.
**SECTION 8 - Exposure Control / Personal Protection**

**Control Parameters:** Personal, workplace or environmental monitoring may be necessary to ensure exposures are below recommended and legal limits.

**Exposure Limits:** ACGIH, NIOSH, OSHA (US), Mexico, and EU have not developed specific exposure limits. Nuisance dust exposure limits are 100mg/m3 and 30 mg/m3 for respirable particles (8 hr TWA). Use recommended safe handling practices to minimize unnecessary exposure.

**Exposure Limits for Chemicals Which May Be Generated During Processing:** During processing residual vinyl acetate may be released into the work environment. Maintain ventilation to ensure exposure limits are below 10 ppm TWA 8 hr and 15 ppm STEL 15 min (US); 5 ppm TWA and 10 ppm (EU). Vinyl acetate is classified as A3 carcinogen (animals).

**Exposure Controls:** Engineering measures: Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits.

**Individual Protection Measures:** Hygiene measures: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Discard contaminated clothing or wash thoroughly before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

**Eye/Face Protection:** Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to product dusts, liquid splashes or mists. Goggles should be worn where eye contact is possible.

**Hand Protection:** Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is required.

**Glove Material:** Cotton or plastic (thermal resistant)

**Glove Thickness:** 0.7 mm or thicker

**Break Through Time:** > 240 minutes

**Other Protective Equipment:** Flame retardant antistatic protective clothing may be required if used in areas where flammables are processed.

**Respiratory Protection:** A properly fitted air purifying respirator or air supply respirator should be worn if a risk assessment indicates that respiratory protection is necessary. Respirator selection must be based upon known or measured levels of exposure.

**Environmental Exposure Controls:** Ventilation and engineering controls to protect workers and ventilate work area to at or below recommended employee exposure levels. Technical measures are preferred over use of personal protective equipment. Environmental controls, such as scrubber or thermal oxidizer may be required to prevent process releases to the atmosphere. Do not empty or flush into drains.

**SECTION 9 - Physical and Chemical Properties**

**Information on basic physical and chemical properties:** Slightly soluble in hydrocarbon solvents.

**Physical State:** Flowable white slurry

**Appearance:** White (off-white, clear or pigmented)

**Color:** White to off-white

**Physical Form:** Slurry

**Odor:** Faint odor

**Odor Threshold:** Not available

**Texture:** Flowable liquid slurry

**pH:** Not applicable

**Freezing Point:** -50°C

**Boiling Point:** Not available

**Evaporation Rate:** Not applicable

**Flash Point:** >67°C

**LEL:** Not applicable

**OSHA Flammability Class:** Not applicable

**UEL:** Not applicable

**Autoignition:** Not available

**Vapor Pressure:** Not applicable

**Vapor Density (air = 1):** Not applicable

**SECTION 10 - Reactivity and Stability Data**

**Reactivity:** No hazardous reactivity.

**Chemical Stability:** Stable at normal temperatures and pressure

**Possibility of Hazardous Reactions:** Does not react at normal processing temperatures.

**Conditions to Avoid:** Avoid dust-air mixtures, static generation. Avoid contact with incompatible materials

**Incompatible Materials:** Avoid strong oxidizing materials.

**Hazardous Decomposition Products:** Thermal decomposition will yield oxides of carbon and/or acetic acid and vinyl acetate.

**SECTION 11 - Toxicological Information**

**Information on toxicological effects:**

**Acute Oral Toxicity LD₅₀, Rat:** Non toxic

**Dermal LD₅₀, Rabbit:** No skin irritation

**Acute Inhalation Toxicity:** No data available

**Skin Irritation:** Non irritating

**Eye Irritation (Rabbit):** No eye irritation
Reproduction Toxicity: No reproductive toxicity effects.

Wax dispersant; Paraffin dispersant; Ethylene Pour Point Depressant

SECTION 1 - Product and Company Identification

5455 Hidalgo Street • Houston, 77056

by medical personnel. Never give anything by mouth to an ingestion: immediately.

Inhalation: Remove contaminated clothing and shoes. Treat as for skin cold water for at least 15 minutes to dissipate heat.

First aid is normally not required. For contact eye irritation from product dusts. Irritated respiratory tract skin and eye burns from molten product. Skin and eye irritation from product dusts. Irritated respiratory tract. Most important symptoms and effects, both acute and transient.

SECTION 2 - Hazards Identification

Suitable extinguishing media: Do not take action if this can be done without risk. Use water spray to keep fire. No action shall be taken involving a personal risk or oxygen by trained personnel. Loosen tight clothing such as mixing with alkali and amines materials.

Fire fighters

Advice for fire fighters:

Extinguishing media: Water spray. Use dry powder or carbon dioxide (CO2)...

SECTION 3 - Stability and Reactivity

Autoignition: Not applicable

UEL: >67°C

Boiling point: -50°C

Evaporation rate:

Reactivity: No

Flowable liquid slurry

Odor:

 physical and chemical properties:

Slightly soluble in hydrocarbon solvents.

Possible process releases to the atmosphere. Do not empty or flush into drains.

Do not allow product to enter surface waters, wastewater or soil.

Additional ecological information: Do not allow product...

Waste treatment methods: The generation of waste should be avoided or minimized wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe way. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Avoid dispersal of spilled material and runoff...

US DOT information: No classification assigned.

TDG information: No classification assigned.

ADR Information: No classification assigned.

RID Information: No classification assigned.

IATA Information: No classification assigned.

ICAO Information: No classification assigned.

IMDG Information: No classification assigned.

SECTION 15 - Regulatory Information

Safety, health and environmental regulations/legislation specific for the substance or mixture:

U.S. Federal Regulations

This product is not listed under SARA Section 302 (40 CFR 355 Appendix A), SARA Section 311/312 (40 CFR 370.21), SARA Section 313 (40 CFR 372.65), CERCLA (40 CFR 302.4), TSCA 12(b), or require an OSHA process safety plan.

SARA Section 311/312 (40 CFR 370 Subparts B and C)

Acute Health: No Chronic Health: No Fire: No Pressure: No Reactive: No

U.S. State Regulations

This product is not listed on the state lists from CA, MA, MN, NJ or PA. Not listed under California Proposition 65.

Global Harmonized System of Classification and Labelling (GHS)

This product has been checked for country-specific published classifications according to the Globally Harmonized System of Classification and Labelling (GHS).

Australia GHS Classifications: No published information available.

European Union GHS Classifications: No published information available.

Indonesia GHS Classifications: No published information available.

Japan GHS Classifications: No published information available.

Korea GHS Classifications (SV): No published information available.

New Zealand GHS Classifications: No published information available.

South Africa GHS Classifications: No published information available.

Taiwan GHS Classifications: No published information available.

Chemical Safety Assessment:

Themark Corporation has not conducted a chemical safety assessment for this product.

SECTION 16 - Disclaimer

The information and recommendations herein are taken from data contained in independent, industry recognized references. Although reasonable care has been taken in the preparation of the information herein, Themark Corporation makes no guarantee, warranty (express or implied) or other representation and assume no responsibility as to the accuracy or suitability of such information for application of the information, since conditions of its use are beyond control of these companies. Themark Corporation shall not bear any liability whatsoever for any loss or damage incurred in connection with the use of this substance.