I - CHEMICAL PRODUCT IDENTIFICATION

PRODUCT NAME: Break-Down  
PRODUCT CODE: BD1Q  
PRODUCT CLASS: Formulated food processing antifoam  

Date Prepared: 9/27/12  
Prepared by: Safety Department

II - HAZARDS IDENTIFICATION SUMMARY

Eyes: Liquid mists and sprays may cause eye irritation.  
Skin: No significant adverse health effects are expected from short-term exposure.  
Ingestion: If swallowed, no significant adverse health effects are anticipated. A laxative effect may result. However, aspiration during ingestion or vomiting can cause serious lung damage.  
Inhalation: No significant adverse health effects are expected from short-term exposure.

Medical Conditions Aggravated: None known  
Routes of Entry: ND  
Target Organs: ND  
Emergency Overview: Not expected to present a hazard under anticipated use conditions. If swallowed contact a physician. Aspiration of material into the lungs can cause severe damage. Spills can cause a slipping hazard.

IIII - COMPOSITION INFORMATION ON INGREDIENTS

OSHA Hazardous Components (29 CFR 1910.1200)  
White Mineral Oil: 25-35%  
Hydrophobic Silica: 3-8%  
Emulsifiers: 5-10%

Occupational Exposure Limit  
OSHA (USA): TWA: 5 mg/m3 (oil mist)  
ACGIH (USA): TWA: 5 mg/m3 STEL: 10 mg/m3 (oil mist)  
Water: 55-75%

IV - FIRST AID MEASURES

Eyes: Check for and remove contact lenses. Flush eyes with cool, clean water while occasionally lifting and lowering the eyelids. Seek medical attention if excessive tearing, redness or pain persists.  
Skin: Remove contaminated clothing. Wipe off excess material. Wash skin with soap and water. Thoroughly clean contaminated clothing prior to reuse. Discard contaminated leather goods. If material is injected beneath the skin, seek immediate medical attention.

Ingestion: Do not give anything to drink unless advised by physician. If significant amounts are ingested seek medical help immediately.  
Inhalation: In case of overexposure, remove the person to fresh air.  
Antidotes: Treat symptomatically. No specific antidote available.  
Note to Physician: All treatments should be based on observed signs and symptoms of distress in the patient. Consideration should be given to the possibility that overexposure to materials other than this product may have occurred.

V - FIRE-FIGHTING MEASURES

Flashpoint: 177ºC (351ºF)  
Method: PMCC  
Flammable Limits: NA  
Autoignition Temperature: AP 400ºC (752ºF)  
OSHA Flammability Class: IIIIB combustible material, slightly combustible  
Extinguishing Media: Dry chemical, waterfog, CO2

Hazardous Decomposition Products: CO2, CO, smoke, fumes, unburned hydrocarbons  
Special Properties: This material can burn but will not readily ignite. It will produce flammable vapors when heated above its flash point. In enclosed spaces heated vapor can ignite with explosive force. Mists or sprays may burn at temperatures below the flash point.  
Fire Fighting Equipment: Firefighters should wear NIOSH/MSHA approved self-contained breathing apparatus and full protective clothing.

VI - ACCIDENTAL RELEASE MEASURES

Do not handle damaged containers or spilled material without appropriate protective equipment. Stop leaks if you can do so without risk. For small spills, absorb or cover with dry earth, sand or other inert absorbent and place in containers for disposal. Contain large spills to prevent entry into waterways or sewers.

VII - HANDLING AND STORAGE

MINIMUM STORAGE TEMPERATURES: 32º F  
MAXIMUM STORAGE TEMPERATURES: 120º F  
Handling: Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to flames, sparks, heat or other ignition sources. Dispose of unused contents and containers in compliance to state, federal and local regulations.  
Storage: Do not store with strong oxidizing agents or at temperatures > 120º F or in direct sunlight for extended periods.
**VIII - EXPOSURE CONTROLS/PERSONAL PROTECTION**

Personal Protection: Safety glasses, non-absorbent clothing, chemical resistant gloves. Nitrile rubber gloves or equivalent. Clean and impervious, such as a lab coat.

Engineer Controls: Provide exhaust ventilation to keep concentration of mists or vapors within established limits. An eye wash station should be near work areas using this product.

Respiratory: Not required under normal operating conditions.

Eyes and Face: Safety glasses with side shield.

Work Hygienic Practices: Do not store, use, and/or consume foods, beverages, tobacco products, or cosmetics in areas where this material is stored. Wash hands and face carefully before eating, drinking, using tobacco, applying cosmetics, or using the toilet. Wash exposed skin promptly to remove accidental splashes of contact with this material.

**IX - PHYSICAL AND CHEMICAL PROPERTIES**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Odor</td>
<td>mild organic</td>
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<tr>
<td>Appearance</td>
<td>liquid</td>
</tr>
<tr>
<td>Color</td>
<td>opaque white</td>
</tr>
<tr>
<td>pH</td>
<td>NA</td>
</tr>
<tr>
<td>Solubility in Water</td>
<td>emulsifies</td>
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<tr>
<td>Density</td>
<td>NA</td>
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<tr>
<td>Particle Size</td>
<td>ND</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>0.94 - 0.98</td>
</tr>
<tr>
<td>Viscosity</td>
<td>ND</td>
</tr>
</tbody>
</table>

**X - STABILITY AND REACTIVITY**

Stable: Stable

Conditions to Avoid: Keep away from heat, sparks, open flame and strong oxidizing conditions

Hazardous Polymerization: Not expected to occur

Hazardous Decomposition: CO2, CO, smoke, fumes, unburned hydrocarbons and trace oxides of sulfur or nitrogen

Incompatible Materials: Strong oxidizers

**XI - TOXICOLOGICAL INFORMATION**

Acute Oral (rat): > 5,000 mg/kg

Acute Dermal (rabbit): > 2,000 mg/kg

Eye Irritation: ND

Skin Irritation: ND

Mineral oil mists are reported to have low acute and subacute toxicities in animals. Effects from single and short term exposure to high concentrations of mineral oil mists well above applicable workplace limits include lung inflammatory reaction, lipoid granuloma formation and lipoid pneumonia. Exposure at lower levels at or near workplace limits produced no significant toxicological effects. Long term (up to two years) exposure produced no reported carcinogenic effects in any animal species tested.

**XII - ECOLOGICAL INFORMATION**

ND

**XIII - DISPOSAL CONSIDERATIONS**

Hazard characteristics and regulatory waste stream classification can change with product use. Accordingly, it is the responsibility of the user to determine the proper storage, transportation, treatment and/or disposal methodologies for spent materials and residues at the time of disposition.

Conditions of use may cause this material to become a “hazardous waste” as defined by Federal and State regulations. It is the user’s responsibility to determine if the material is a RCRA “hazardous waste” at the time of disposal. Transportation, treatment, storage and disposal of waste material must be conducted in accordance with RCRA regulations (40 CFR 260 through 40 CFR 271). State and local regulations may be more restrictive. Contact the RCRA/Superfund hotline at (800) 424-9346 or your regional EPA office for guidance concerning specific disposal issues.

**XIV - TRANSPORT INFORMATION**

DOT Status, Proper Shipping Name, Hazard Class: Not regulated

Packing Group(s), UNNA ID, Emergency Response guide No.: NA

MARPOL III Statutes: Not a DOT “Marine Polluant” per 49 CFR 171.8

Reportable Quantity: Not established

Placards: None required

HAZMAT STTC No.: Not assigned

**XV - REGULATORY INFORMATION**

NFPA Ratings: Least = 0

Slight = 1

Moderate = 2

High = 3

Severe = 4

Health: 1

Fire: 1

Reactivity: 0

Special Hazards: None Specified

TSCA Inventory: All components are listed on the TSCA inventory

CERCLA: No component identified

SARA 302/304: No component identified

CA Proposition 65: No component identified

SARA 311/312: No hazard identified

NJ Right To Know: Petroleum oil

SARA 313: No component identified

CWA: Under Section 311 of the Clean Water Act this material is classified as an oil and spills into water ways that produce a visible sheen must be reported.

**XVI - OTHER INFORMATION**

The information in this MSDS is given in good faith based on our experience and data presented in various technical publications. It is the user’s responsibility to determine the suitability of this information for the adoption of safety precautions as may be necessary. The information contained herein is furnished without warranty of any kind.

MSDS - Break-Down

ND = No Data / NA = Not Applicable

KALO, Inc.