



Safety Data Sheet

Report Date 25-May-15

Page 1 of 4

1. Identification

Product Name : KAMMO PLUS
Synonyms : None
Product Use : Nonionic Oil Concentrate Adjuvant/Masking Agent
Manufacturer/Supplier : Helena Chemical Company
Address : 225 Schilling Blvd. Collierville, TN 38017
General Information : 901-761-0050
Transportation Emergency Number : CHEMTREC:800-424-9300

2. Hazard Identification

Signal Word : Warning (no symbol)
Skin Irritation : Skin irritation may result with prolonged contact.
Eye Irritation : Temporary eye irritation may occur with no long lasting effects.
Acute Toxicity Oral : LD50 >5,000 mg/kg (rat)
Acute Toxicity Dermal : LD50 >2,000 mg/kg (rabbit)

Hazard Categories : Oral/Dermal/Inhalation Toxicity-5/5/5; Eye/Skin Irritation-2B/3

Hazard Statement : May be harmful if swallowed
May be harmful in contact with skin
Causes eye irritation
Causes mild skin irritation
May be harmful if inhaled

3. Composition / Information on Ingredients

Component	CAS Number	Weight %
D-Limonene and other modified natural oils and selected emulsifiers.	Proprietary	100.00

4. First Aid Measures

Eye : Hold eyes open and rinse slowly and gently with water for 15 to 20 minutes. Remove contact lenses, if present, after first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for further treatment advice.
Skin : Take off contaminated clothing. Rinse skin immediately with plenty of water for 15 to 20 minutes. Call a poison control center or doctor for treatment advice.
Inhalation : Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice.
Ingestion : Call a poison control center or doctor immediately for treatment advice. Rinse mouth with water. Do not induce vomiting. Do not give anything by mouth if unconscious.

Indication of Immediate Medical Attention and Special Treatment Needed : In the event of an adverse response, treatment should be directed toward control of the symptoms.

5. Fire Fighting Measures

Extinguishing Media : Water spray, fog, alcohol foam, dry chemical and carbon dioxide.
Specific Hazards Arising from the Chemical : None noted.
Special Fire Fight Proc : Wear self-contained breathing apparatus and full protective clothing. Avoid breathing fumes.



Safety Data Sheet

Report Date 25-May-15

Page 2 of 4

6. Accidental Release Measures

- Personal Precautions** : Keep unprotected and unnecessary personnel out of spill area.
- Protective Equipment** : Splashproof goggles or face shield, impervious gloves, impervious apron and footwear. Respiratory protection not normally needed. Eyewash and emergency shower should be available in work area.
- Emergency Procedures** : Use caution as spill area will be quite slippery.
- Methods and Materials for Containment and Cleanup** : Dike and absorb spilled material with an absorbent material such as clay, sand or sawdust. Transfer to suitable containers for proper disposal. Flush spill area with water, absorb and place in same containers with other material.

7. Handling and Storage

- Precautions for Safe Handling** : Keep locked up and out of reach of children. Do not contaminate water, food or feed by storage, handling or disposal. Keep container tightly closed. Do not allow water to be introduced into the contents of the container.
- Conditions for Safe Storage** : Store in original container only. Do not store near heat or open flame. Do not store with oxidizing agents or ammonium nitrate.

8. Exposure Controls / Personal Protection

- TLV/PEL** : No TLV or PEL established for mixture.
- Appropriate Engineering Controls** : Local exhaust is sufficient.
- Personal Protective Equipment** : Splashproof goggles or face shield, impervious gloves, impervious apron and footwear. Respiratory protection not normally needed. Eyewash and emergency shower should be available in work area.

9. Physical and Chemical Properties

- Odor/Appearance** : Light yellow liquid with citrus odor.
- Flash Point, °F** : 167 Degrees F.
- Boiling Point, °F** : 380 to 515 Degrees F.
- Melting Point(Freezing point), °C** : <10 Degrees F.
- Vapor Pressure, mm Hg @ 20 °C** : No information found
- Vapor Density** : Not determined
- Solubility in Water** : Dispersible
- Molecular Formula** : Not applicable, formulated mixture.
- Density, g/mL @ 25 °C** : 0.873-0.882
- Evaporation Rate(Butyl Acetate = 1)** : Not applicable
- Octanol/Water Partition Coefficient** : No information found
- pH** : Not applicable, non-aqueous
- Flammable Limits (approximate volume % in air)** : No information found
- Auto-ignition Temperature** : 650 Degrees F. (est.)
- Decomposition temperature** : No information found

10. Stability and Reactivity

Reactivity : No information found



Safety Data Sheet

Report Date 25-May-15

Page 3 of 4

Chemical Stability : Stable
Hazardous Decomposition Products : May produce carbon dioxide and/or carbon monoxide under fire conditions.
Hazardous Polymerization : Will not occur
Conditions to Avoid : Avoid contact with oxidizing materials such as ammonium nitrate.
Incompatible Materials : Oxidizing materials, such as ammonium nitrate.

11. Toxicological Information

Acute Toxicity (Oral LD50) : >5,000 to 15,000 mg/kg (rat). May be harmful if ingested.
Acute Toxicity (Dermal LD50) : >2,000 to 20,000 mg/kg (rabbit). May be harmful in contact with skin.
Acute Toxicity Inhalation LC50 : No LC50 available. Mild irritation to the nose and throat may occur.
Likely Routes of Exposure : Skin, eyes, inhalation
Skin Irritation : Causes mild skin irritation.
Eye Irritation : Causes eye irritation.
Skin Sensitization : No sensitizing effects known.
Carcinogenic : None currently known.
Chronic Effects : None currently known.
Other Hazards : None currently known.

12. Ecological Information

Ecotoxicity : No information found
Persistence and Degradability : No information found
Bioaccumulative Potential : No information found
Mobility in Soil : No information found
Other Adverse Effects : No information found

13. Disposal Considerations

Waste Disposal Method : This material must be disposed of according to Federal, State or Local procedures under the Resource Conservation and Recovery Act.

14. Transport Information

UN Proper Shipping Name : Not regulated by DOT in non-bulk packaging. Not regulated by air (IATA) or water (IMDG).
Transport Hazard Class : None
UN Identification Number : None
Packaging Group : None
Environmental Hazards : No information found
Transport in Bulk : If shipped by ground (DOT) in bulk (>119 gallons) single packages, ship as: NA1993, Combustible Liquid, n.o.s., (Mineral Oil), PG III "ERG # 128"
Special Precautions for Transportation : No information found
Freight Classification : Adhesives, Adjuvants, Spreaders or Stickers, N.O.I. (NMFC Item 42652, Class 60)

15. Regulatory Information

National Fire Protection Association Rating :



Safety Data Sheet

Report Date 25-May-15

Page 4 of 4

Health: 1 Fire: 2 Reactivity: 0
Rating Level: (4-Extreme, 3-High, 2-Moderate, 1-Slight, 0-Minimum)

S.A.R.A Title III Hazard :
Classification (Yes/No)

Immediate(Acute) Health: Y
Delayed (Chronic) Health: N
Sudden Release of N
Pressure:
Fire: N
Reactive: N

16. Other Information

Data of Preparation/Revision : 25-May-2015