MATERIAL SAFETY DATA SHEET

1. PRODUCT IDENTIFICATION AND USE

Product Name: NuKut SO 5 Product Number: MGD100
Synonyms: Soluble oil - economical – light-moderate duty
CAS Number: Blend

Company Identification: NuGeneration Technologies, LLC www.nugentec.com
100 Professional Center Drive Suite 101, Rohnert Park, CA 94928 USA
(707) 820-4080 (For product information) email: info@nugentec.com
1-800-424-9300 or 1-202-483-7616 (CHEMTREC: For emergencies)

2. HAZARDOUS INGREDIENTS

100.0% NuKut SO 5 CONTAINING: HAZARDOUS AND/OR REGULATED COMPONENTS

Chemical Name	Amount	CAS Number
SEVERELY HYDROTREATED HEAVY NAPTHENIC DISTILLATE	86.0 %	64742-52-5

NON-HAZARDOUS COMPONENTS

Chemical Name	Amount	CAS Number
EMULSIFER	14.0 %	trade-secret

Note: non-hazardous components are listed for informational purposes only.

COMPOSITION COMMENT:
California Prop 65: This product does not contain any ingredients which are know to the state of California to cause cancer, birth defects, or other reproductive harm.
SPECIAL NOTES: This product contains <0.01% water.

EXPOSURE GUIDELINES:
Severely hydro-treated heavy naphthenic distillate
OSHA PEL: 5 mg/m^3

```
*****************   EMERGENCY OVERVIEW   *****************
*  Low hazard for usual industrial or commercial         *
*  handling.  Keep out of waterways.  In case of fire,   *
*  hazardous vapors may become an inhalation hazard.     *
*  Avoid breathing mist.                                 *
*********************************************************
```

HMIS Rating -
Health: 1
Flammability: 1
Reactivity: 0
Personal Protection Index: C

NFPA Rating -
Health: 1
Flammability: 1
Reactivity: 0
Special Hazard: None

NFPA/HMIS Definitions: (0-Least, 1-Slight, 2-Moderate, 3-High, 4-Extreme). These values are obtained using the guidelines or published evaluations prepared by the National Fire Protection Association (NFPA) or the National Paint and Coating Association (for HMIS ratings).

3. PHYSICAL DATA

FORM	Liquid
COLOR	light Brown
ODOR	hydrocarbon lube oil odor
BOILING POINT	> 500 F
VAPOR PRESSURE	<0.1 mm Hg @ 70 F
VAPOR DENSITY	>10 (Air = 1)
SOLUBILITY IN WATER	Emulsifiable
SPECIFIC GRAVITY	0.91 (Water = 1)
BULK DENSITY	7.6
MELTING/FREEZING POINT	-20 F
PH	N/A
% VOLATILES	Zero %
VISCOSITY	~100 SUS @ 100F
EVAPORATION RATE	<1 (EE=1)
VOLATILE ORGANIC COMPOUNDS (VOC) ...	Nil
PH (5% B.V.)	9.8

INHALATION: No hazards expected in normal industrial use at room temperature. Vapors and/or aerosols may be irritating to eyes and respiratory tract.
INGESTION: Essentially non-toxic. Ingestion is not considered a potential route of exposure. If ingested may cause a laxative effect.
SIGNS AND SYMPTOMS OF EXPOSURE: If exposed areas are flushed promptly and thoroughly with SOAP & water, there should be little or no harm. Overexposure may lead to skin irritation or inflammation.
CHRONIC EFFECTS: Prolonged and/or repeated contact may produce mild to moderate skin irritation or inflammation.
REPRODUCTIVE HAZARDS: No reproductive hazards.
CARCINOGENICITY INFORMATION: This product has been shown not to be carcinogenic, it is not included as a carcinogen by IARC, OSHA, NTP, or EPA.
TARGET ORGAN: Skin, mucus membranes and lungs.
MEDICAL CONDITIONS AGRAVATED BY EXPOSURE: Personnel with pre-existing skin disorders and chronic respiratory diseases should avoid contact with this product.
MISCELLANEOUS: Solutions extremely slippery when spilled. Poses little or no immediate hazard.

4. FIRE AND EXPLOSION DATA

FLAMMABLE PROPERTIES Autoignition Temperature: 329.4 C (624.9 F)
COC Flash Point: 165.6 C (330.1 F)
FLAMMABLE LIMITS IN AIR LEL: 1.0 AP % UEL: 7.0 AP %
FLAMMABLE PROPERTIES: This product is considered Slightly Combustible! OSHA/NFPA Class-IIIB Combustible Liquid.
EXTINGUISHING MEDIA: Carbon dioxide, foam, or dry powder.
FIRE & EXPLOSION HAZARDS: Can release vapors that form explosive mixtures at temperatures at or above the flashpoint.
FIRE FIGHTING INSTRUCTIONS: Contain runoff water. Contaminated extinguishing water must be disposed of in accordance with applicable regulations. As in any fire, wear self-contained breathing apparatus pressure-demand MSHA/NIOSH (approved or equivalent) and full protective gear. Avoid breathing smoke, fumes, and decomposition products. Evacuate non-emergency personnel to a safe area. Water runoff can cause environmental damage. Comply with all laws and regulations.
COMBUSTION PRODUCTS:
Dense smoke may be generated while burning. Carbon Monoxide, carbon dioxide, and other oxides may be generated as products of combustion.

5. REACTIVITY DATA

STABILITY: Stable.
POLYMERIZATION: Hazardous polymerization will not occur.
INCOMPATIBILITY WITH OTHER MATERIALS: Avoid contact with strong oxidizing agents.
DECOMPOSITION: Decomposition may produce fumes, smoke, oxides of carbon and hydrocarbons. Decomposition will not occur if handled and stored properly.
CONDITIONS TO AVOID: This material is safe under normal storage and handling conditions.
COMBUSTION PRODUCTS:
Dense smoke may be generated while burning. Carbon Monoxide, carbon dioxide, and other oxides may be generated as products of combustion.

6. TOXICOLOGICAL PROPERTIES

EYE: May cause slight irritation.
SKIN: Not expected to be a skin irritant.
INHALATION:
No hazards expected in normal industrial use at room temperature. Vapors and/or aerosols may be irritating to eyes and respiratory tract.
INGESTION: Essentially non-toxic. Ingestion is not considered a potential route of exposure. If ingested may cause a laxative effect.
SIGNS AND SYMPTOMS OF EXPOSURE: If exposed areas are flushed promptly and thoroughly with SOAP & water, there should be little or no harm. Overexposure may lead to skin irritation or inflammation.
CHRONIC EFFECTS: Prolonged and/or repeated contact may produce mild to moderate skin irritation or inflammation.
REPRODUCTIVE HAZARDS: No reproductive hazards.
CARCINOGENICITY INFORMATION: This product has been shown not to be carcinogenic, it is not included as a carcinogen by IARC, OSHA, NTP, or EPA.
TARGET ORGAN: Skin, mucus membranes and lungs.
MEDICAL CONDITIONS AGRAVATED BY EXPOSURE:
Personnel with pre-existing skin disorders and chronic respiratory diseases should avoid contact with this product.
MISCELLANEOUS: Solutions extremely slippery when spilled. Poses little or no immediate hazard.
EYE EFFECTS:
This product is minimally irritating to the eyes upon direct contact.
SKIN EFFECTS: This product is not expected to cause any skin irritation upon direct single or repeated contact.
ACUTE ORAL EFFECTS: No know hazards in normal industrial use.
ACUTE INHALATION EFFECTS: This product has a low vapor pressure and is not expected to present an inhalation hazard at ambient conditions. Caution should be taken to prevent aerozolization or misting of this product. The permissible exposure limit (PEL) and Threshold Limit value (TLV) for this product as oil mist is 5 mg/m3. Exposures below 5 mg/m3 appear to be without significant health risk. The short term exposure limit for this product as an oil mist is 10 mg/m3.
REPRODUCTION AND BIRTH EFFECTS: There are no known or reported effects on reproductive function or fetal development.
CHRONIC EFFECTS: There are no known or reported effects from repeated exposure.
Severely Hydro-treated Heavy Naphthenic Distillate
Test Code: Oral LD50 Species: Rat Results: > 5,000 mg/kg

7. PREVENTITIVE MEASURES

RECOMMENDED STORAGE TEMPERATURE
Minimum: 4.4 C (39.9 F) Maximum: 48.9 C (120.0 F)

SHELF LIFE: (in original, sealed containers)
>10 years @ 4.4 C >3 years @ 48.9 C
HANDLING (PERSONNEL): Avoid contact with eyes, skin, and clothing. Empty drums should be completely drained (triple rinsed), properly bunged, and promptly returned to a drum reconditioner, or properly disposed of. Wash hands thoroughly after handling. Wash contaminated clothing before reuse.
HANDLING (PHYSICAL ASPECTS):
Eliminate all sources of ignition - heat, sparks, flame, electricity, impact and friction. Keep container closed to avoid contamination. Avoid contact with strong oxidizing agents. Avoid extreme temperatures.
STORAGE PRECAUTIONS: Store in a cool dry place. Do not stack drums more than three pallets high. Store in a tightly closed container.
MISCELLANEOUS: Do not stack over three pallets high.
ENGINEERING CONTROLS: Good general ventilation should be sufficient to control airborne levels. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.
EYE / FACE PROTECTION REQUIREMENTS: When splashing of the material may occur, chemical goggles and a face shield are recommended. This material does not have established exposure limits. A NIOSH/MSHA approved air purifying respirator with an organic vapor cartridge or canister may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits.
SKIN PROTECTION REQUIREMENTS: Wear protective gloves to minimize skin contact. Nitrile rubber and PVC are suitable protective materials; Neoprene is recommended. Wash hands thoroughly after handling.
RESPIRATORY PROTECTION REQUIREMENTS: Under normal use conditions, with adequate ventilation, no special handling equipment is required. When there is potential for airborne exposures in excess of applicable limits, wear NIOSH/MSHA approved respiratory protection.
MISCELLANEOUS: Where an apron and protective clothing.
SAFEGUARDS (PERSONNEL):
Eliminate all sources of ignition - heat, sparks, flame, electricity, impact and friction. Evacuate non-emergency personnel to a safe area. Review Fire Fighting Measures and Handling (Personnel) Sections before proceeding with clean-up. Wear appropriate personal protective equipment.
INITIAL CONTAINMENT: Floor may become slippery. Contain spilled material. Absorb spills with inert material. Wash area to prevent slipping. Treat or dispose of waste material in accordance with all local, state/provincial, and national requirements.
LARGE SPILLS PROCEDURE:
Forms smooth, slippery surfaces on floors, posing an accident risk. Clean up spills immediately, observing precautions in Protective Equipment section. Absorb spill with inert material (e g, dry sand or earth), then place in a chemical waste container. After removal, flush contaminated area thoroughly with soap and water. Dispose of in an approved sanitary landfill. Treat or dispose of waste material in accordance with all local, state/provincial, and national requirements. May be a regulated waste. Materials should be recycled if possible.
SMALL SPILLS PROCEDURE:
Floor may become slippery. Absorb spills with inert material. Avoid disposal into waste water treatment facilities. After cleaning spill with absorbent material wash area with soap and water. Treat or dispose of waste material in accordance with all local, state/provincial, and national requirements.
WASTE DISPOSAL:
Uncleaned empty containers should be disposed of in the same manner as the contents. Recycling of this material is recommended if possible, otherwise incinerate or bury in an approved sanitary landfill. Treat or dispose of waste material in accordance with all local, state/provincial, and

national requirements. For additional waste disposal information contact your local NuGenTec representative at (888) 99-NuGen or (209) 234-5930.
CONTAMINATED MATERIALS: Wash contaminated clothing before reuse.
CONTAINER DISPOSAL: Clean out containers prior to disposal. Misuse of containers may be hazardous. Empty containers can be dangerous if used to store toxic, flammable, or reactive materials. Cutting or welding containers might cause fire, explosion, or toxic fumes from residues. Do not pressurize or expose to open flames or heat. Keep container closed and drum bungs in place.
MISCELLANEOUS:
Maximize product use for reuse or recycling. Conditions may cause this product to become 'hazardous waste' as defined by state or federal laws.

8. FIRST AID MEASURES

EYE CONTACT FIRST AID:
Hold eyelids apart and flush eyes with plenty of water for at least 15 minutes. Get medical attention if irritation develops or persists.
SKIN CONTACT FIRST AID:
Immediately wash skin with plenty of soap and water while removing contaminated clothing and shoes. Get medical attention if irritation develops or persists.
INHALATION FIRST AID:
Although this product is not known to cause respiratory problems, if breathing is difficult, remove to fresh air and provide oxygen. Get medical attention if cough or other symptoms develop.
Remove from area of exposure. Seek immediate medical attention if respiratory irritation or distress continues.
INGESTION FIRST AID:
Ingestion is not considered a potential route of exposure. May act as a laxative. Give water or milk and induce vomiting. Get medical attention immediately.
STATEMENT OF PRACTICAL TREATMENT:
Always have plenty of water available for first aid.
NOTES TO PHYSICIAN:
Treat patient symptomatically.

9. PREPARATION DATE OF MSDS

Prepared By.....: Donato Polignone
Title.....: Product Manager
Approval Date.....: June 4, 2007
Supercedes Date...: November 2, 2004
PRD Number.....: MGD100 (Official Copy)

ADDITIONAL INFORMATION:
The data in this Material Safety Data Sheet relates only to the specific material designated herein. It does not relate to use in combination with any other material or in any process.

****

This information is furnished without warranty, expressed or implied, except that it is accurate to the best knowledge of NuGeneration Technologies, LLC. The data on this sheet are related only to the specific material designated herein. NuGeneration Technologies, LLC assumes no legal responsibility for use or reliance upon these data.

****

END OF MSDS