



Keystone Lubricants Division
Total Fina Elf Lubricants USA, Inc.
5 N. Stiles Street, Linden NJ 07036

REVISION DATE
04-NOV-02

DATE ISSUED
30-DEC-02

IDENTIFICATION AND EMERGENCY INFORMATION

PRODUCT NAME: KSL 111 - SAFEGARD	PRODUCT #: 800170
CHEMICAL NAME: N/A - Mixture	CAS #'S: Mixture
PRODUCT APPEARANCE AND ODOR: Clear liquid, low odor	CHEMICAL FAMILY: _____
SYNONYMS: Synthetic lubricating fluid	EMERGENCY TELEPHONE: 1-908-862-9300

COMPONENTS AND HAZARD INFORMATION

COMPONENTS:	W/W	HAZARD DATA (TLV, LD50, LC50, ETC.):
Aliphatic solvent CAS NO. 64742-47-8		300 ppm TWA (manufacturer recommended)
Fatty acid esters CAS No. n/a (mixture)	n/e	

HAZARDOUS MATERIALS IDENTIFICATION SYSTEM (HMIS):

Health	Flammability	Reactivity
1	2	0

TRANSPORTATION INFORMATION

TRANSPORTATION INFORMATION:
DOT SHIPPING INFO:
AEROSOLS, Class 2.2 (Non-Flammable Gases)
UN 1950, PG None
Note: see 49 CFR 173.306 for Limited Quantity provisions

EMERGENCY FIRST AID

EYE CONTACT:
If splashed into the eyes, flush with clear water for 15 minutes or until irritation subsides. If irritation persists, call a physician.

SKIN CONTACT:
In case of skin contact, remove contaminated clothing and wash skin thoroughly with soap and water.

INHALATION:
If overcome by vapor, remove from exposure and call a physician immediately. If breathing is irregular or has stopped, start resuscitation, administer oxygen, if available.

Keystone Lubricants Division
Total Fina Elf Lubricants USA, Inc.
5 N. Stiles Street, Linden NJ 07036

REVISION DATE
04-NOV-02

DATE ISSUED
30-DEC-02

EMERGENCY FIRST AID

INGESTION:

If ingested, DO NOT induce vomiting; call a physician immediately.
Possible aspiration hazard.

FIRE AND EXPLOSION HAZARD INFORMATION

FLASHPOINT (MINIMUM):

For solvent: Combustible, 142°F TCC

AUTOIGNITION TEMPERATURE:

>392°F

NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) - HAZARD IDENTIFICATION:

Health	Flammability	Reactivity
1	2	0

The Aerosol Flammability test (per 49 CFR 173.306(i)) did not produce a flame extension exceeding 18 inches with full valve opening and did not flash back to the valve with any degree of valve opening, thus this product is classified as Non-Flammable per the DOT Regulations.

HANDLING PRECAUTIONS:

Keep product away from heat, sparks, pilot lights, static electricity, and open flame.

FLAMMABLE OR EXPLOSIVE LIMITS (Approximate percent by volume in air):

Estimated values: Lower Flammable Limit N/E Upper Flammable Limit N/E

EXTINGUISHING MEDIA AND FIRE FIGHTING PROCEDURES:

Foam, water spray (fog), dry chemical, carbon dioxide and vaporizing liquid type extinguishing agents may all be suitable for extinguishing fires involving this type of product, depending on size or potential size of fire and circumstances related to the situation. Plan fire protection and response strategy through consultation with local fire protection authorities or appropriate specialists.

Water may be ineffective, but water should be used to keep fire-exposed containers cool. If a leak or spill has ignited, use water spray to disperse the vapors and to protect men attempting to stop a leak. Water spray may be used to flush spills away from exposures. Minimize breathing gases, vapor, fumes or decomposition products. Use supplied-air breathing equipment for enclosed or confined spaces or as otherwise needed.

Note: The inclusion of the phrase "water may be ineffective" is to indicate that although water can be used to cool and protect exposed material, water may not extinguish the fire unless used under favorable conditions by experienced fire fighters trained in fighting all types of flammable liquid fires.

DECOMPOSITION PRODUCTS UNDER FIRE CONDITIONS:

Fumes, smoke, carbon monoxide, aldehydes and other decomposition products, in the case of incomplete combustion.

"EMPTY" CONTAINER WARNING:

"Empty" containers retain residue (liquid and/or vapor) and can be dangerous. DO NOT PRESSURIZE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND OR EXPOSE SUCH CON-

Keystone Lubricants Division
Total Fina Elf Lubricants USA, Inc.
5 N. Stiles Street, Linden NJ 07036

REVISION DATE
04-NOV-02

DATE ISSUED
30-DEC-02

FIRE AND EXPLOSION HAZARD INFORMATION

TAINERS TO HEAT, FLAME, SPARKS OR OTHER SOURCES OF IGNITION; THEY MAY EXPLODE AND CAUSE INJURY OR DEATH. Do not attempt to clean since residue is difficult to remove.

All containers should be disposed of in an environmentally safe manner and in accordance with governmental regulations.

HEALTH AND HAZARD INFORMATION

EXPOSURE LIMIT FOR TOTAL PRODUCT: N/E

VARIABILITY AMONG INDIVIDUALS:

Health studies have shown that many petroleum hydrocarbons and synthetic lubricants pose potential human health risks which vary from person to person. As a precaution, exposure to liquids, vapors, mists, or fumes should be minimized.

EFFECTS OF OVEREXPOSURE (Signs and symptoms of exposure):

Prolonged or repeated skin contact with this product tends to remove skin oils possibly leading to irritation and dermatitis; however, based on human experience and available toxicological data, this product is judged to be neither a "corrosive" nor an "irritant" by OSHA criteria. Product contacting the eye may cause irritation.

Product has a low order of oral and dermal toxicity. Possible aspiration hazard. Induced vomiting may cause aspiration of product into the lungs. (See Emergency First Aid Section).

PHYSICAL DATA

The following data are approximate or typical values and should not be used for precise design purposes. FOR SOLVENT:

BOILING RANGE:
Approximately 360°F to 419°F

VAPOR PRESSURE:
3 mm Hg @ 100°F, approximate
ASTM D 2897

SPECIFIC GRAVITY 60°F
N/E

VAPOR DENSITY (AIR = 1):
Greater than 1

MOLECULAR WEIGHT:
Mixture, wide range

PERCENT VOLATILE BY VOLUME:
85

pH:
Essentially neutral

EVAPORATION RATE @ 1 ATM. AND 25°C
(77°F):
(n-BUTYL ACETATE = 1)
Less than 0.1

POUR, CONGEALING OR MELTING POINT:
n/e

SOLUBILITY IN WATER @ 1 ATM. AND
25°C (77°F):
Negligible; less than 0.1%

Keystone Lubricants Division
Total Fina Elf Lubricants USA, Inc.
5 N. Stiles Street, Linden NJ 07036

REVISION DATE
04-NOV-02

DATE ISSUED
30-DEC-02

REACTIVITY

This product is stable and will NOT react violently with water. Hazardous polymerization will not occur. Avoid contact with strong oxidants such as liquid chlorine, concentrated oxygen, sodium hypochlorite or calcium hypochlorite.

DECOMPOSITION PRODUCTS UNDER FIRE CONDITIONS

Fumes, smoke, carbon monoxide, and other decomposition products, in the case of incomplete combustion.

CONDITIONS TO AVOID

Keep product away from ignition sources, such as heat, sparks, pilot lights, static electricity, and open flames.

TOXICITY

ORAL (Acute)	N/E
DERMAL (Acute)	N/E
EYE	N/E
INHALATION (Acute)	N/E
CHRONIC, SUBCHRONIC, ETC.	N/E

Medical Conditions Aggravated by Exposure: Unknown

This product does NOT contain any ingredients identified as carcinogenic by IARC, NTP, or OSHA.

SARA Section 313 Status: This material is not known to contain any chemicals on the SARA Section 313 list at a concentration greater than 1.0 percent or carcinogenic chemical on that list at a concentration greater than 0.1 percent.

SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:

Shut off and eliminate all ignition sources. Keep people away. Recover free product. Add sand, earth or other suitable absorbent to spill area. Minimize breathing vapors. Minimize skin contact. Ventilate confined spaces. Open all windows and doors. Keep product out of sewers and watercourses by diking or impounding. Advise authorities if product has entered or may enter sewers, watercourses or extensive land areas. Assure conformity with local regulations. Continue to observe precautions for volatile, combustible vapors from absorbed material.

WASTE DISPOSAL METHOD: (Consult federal, state, or local authorities for proper disposal procedures.)

Assure conformity with applicable disposal regulations. Dispose of absorbed material at an approved waste site or facility.



Keystone Lubricants Division
Total Fina Elf Lubricants USA, Inc.
5 N. Stiles Street, Linden NJ 07036

REVISION DATE
04-NOV-02

DATE ISSUED
30-DEC-02

PROTECTION AND PRECAUTIONS

VENTILATION: (Always maintain below permissible exposure limits.)

Use local exhaust to capture vapor, mist or fumes, if necessary.
Provide ventilation sufficient to prevent exceeding recommended exposure limit or buildup of explosive concentrations of vapor in air.

RESPIRATORY PROTECTION: (Use only NIOSH approved equipment.)

Normally not needed at ambient temperatures. Use supplied air respiratory protection in confined or enclosed spaces, if needed. Use filter, dust, fume, or mist respirator type under misting conditions. Use can or cartridge; gas or vapor respirator type under conditions exceeding TWA standard.

PROTECTIVE GLOVES:

Use chemical-resistant gloves, if needed, to avoid prolonged or repeated skin contact.

EYE PROTECTION:

Use splash goggles or face shield when eye contact may occur.

OTHER PROTECTIVE EQUIPMENT:

Use chemical-resistant apron or other impervious clothing, if needed, to avoid contaminating regular clothing which could result in prolonged or repeated skin contact.

WORK PRACTICES/ENGINEERING CONTROLS:

Keep containers closed when not in use. Do not handle near heat, sparks, flame, or strong oxidants. DO NOT PUNCTURE OR INCINERATE CONTAINER!

PERSONAL HYGIENE:

Minimize breathing vapor, mist, or fumes. Avoid prolonged or repeated contact with skin. Remove contaminated clothing; launder or dry-clean before reuse. Remove contaminated shoes and thoroughly clean before reuse; discard if oil-soaked. Cleanse skin thoroughly after contact, before breaks and meals, and at end of work period. Product is readily removed from skin by waterless hand cleaners followed by washing thoroughly with soap and water.

PREPARED BY: Luke McHale

REGULATORY MANAGER

THE ABOVE INFORMATION IS ACCURATE TO THE BEST OF OUR KNOWLEDGE. HOWEVER, SINCE DATA, SAFETY STANDARDS, AND GOVERNMENT REGULATIONS ARE SUBJECT TO CHANGE AND THE CONDITIONS OF HANDLING AND USE, OR MISUSE BEYOND OUR CONTROL, SELLER MAKES NO WARRANTY, EITHER EXPRESS OR IMPLIED, WITH RESPECT TO THE COMPLETENESS OR CONTINUING ACCURACY OF THE INFORMATION CONTAINED HEREIN AND DISCLAIMS ALL LIABILITY FOR RELIANCE THEREON. USER SHOULD SATISFY HIMSELF THAT HE HAS ALL CURRENT DATA RELEVANT TO HIS PARTICULAR USE.