Material Safety Data Sheet

FIR No.: 168705 **Level:** 1
Version Number: US-US-4 **Release Date:** 2010-02-11

1. Product and Company Identification

Product Name: Penetrating and Lock Lubricant

Product Code: See Attachment

Supplier: Ford Motor Company
Attention: MSDS Information, P.O. Box 1899
Dearborn, Michigan 48121
1-800-392-3673

Emergency Telephone: Poison Control Center: 1-800-959-3673
CHEMTREC: U.S. and Canada: 1-800-424-9300
CHEMTREC: International: 1-703-527-3887

2. Composition/Information on Ingredients

This chemical product is a preparation.

Chemical Name	CAS Number	Percent Concentration	Hazard Classification
STODDARD SOLVENT	8052-41-3	10-30	ACGIH/OSHA WHMIS 1 RSMS_D_ALL PEL/TLV-US HAZCOM
PETROLEUM DISTILLATES, SOLVENT-REFINED HEAVY PARAFFINIC	64741-88-4	3-7	RSMS_P_SOM RSMS_D_ALL HAZCOM
RESIDUAL OILS (PETROLEUM), SOLVENT REFINED	64742-01-4	3-7	RSMS_D_ALL RSMS_P_SOM HAZCOM
RESIDUAL OILS (PETROLEUM), HYDROTREATED	64742-57-0	3-7	RSMS_D_ALL RSMS_P_SOM HAZCOM
RESIDUAL OILS (PETROLEUM), SOLVENT DEWAXED	64742-62-7	3-7	HAZCOM RSMS_D_ALL RSMS_P_SOM
LUBRICATING OILS (PETROLEUM), C>25, HYDROTREATED BRIGHT STOCK-BASED	72623-83-7	3-7	HAZCOM RSMS_P_SOM
ISOPROPANOL	67-63-0	1-5	PEL/TLV-US ACGIH/OSHA HAZCOM SARA 313 WHMIS 1
NONANE	111-84-2	0.1-1	PEL/TLV-US WHMIS 1

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ACGIH/OSHA
HAZCOM

3. Hazards Identification

Flammable aerosol.

Health:

Inhalation of mist and vapors may irritate the nose, throat, and lungs.
This product is irritating to the eyes and skin.
Ingestion can cause gastrointestinal irritation, nausea, vomiting and diarrhea.
This product may cause central nervous system (CNS) depression.
Aspiration hazard if swallowed; can enter lungs and cause damage.
Extreme overexposure may result in unconsciousness and possibly death.

Physical and Chemical Hazards:

Contents under pressure.
May cause flash fire.
Flammable aerosol

Environment:

Material contains a chemical which is a Hazardous Air Pollutant (HAP), regulated by the United States Clean Air Act.

4. First-Aid Measures

Inhalation:

If gas/fume/vapor/dust/mist from the material is inhaled, remove the affected person immediately to fresh air.
If irritation persists, get medical attention.

Skin Contact:

For skin contact, wash immediately with soap and water.
If irritation persists, get medical attention.

Eye Contact:

In case of contact with eyes, rinse immediately with plenty of water for at least 15 minutes and seek medical attention.
If irritation persists, get medical attention.

Ingestion:

If the material is swallowed, do not induce vomiting. Get immediate medical attention or advice -- give several glasses of water or milk.

Most Important Symptoms Effects:

Headache, dizziness, nausea, and loss of coordination are indications of excessive exposure to vapors or spray mists.
Redness and itching or burning sensation may indicate eye or excessive skin exposure.

Notes to a Physician:

This material, if aspirated into the lungs, may cause chemical pneumonitis; treat the affected person appropriately.

5. Fire-Fighting Measures

Extinguishing Media:

Dry chemical, foam, carbon dioxide, water fog.

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Specific Methods:

Water may be used to cool exposed containers to prevent pressure build-up and explosion when exposed to extreme heat.

Specific Hazards:

Flammable at all temperatures above the flash point on contact with an ignition source.
Vapors are heavier than air and may travel along the ground to some distant source of ignition and flash back.
Pressurized Container: May explode when exposed to heat or flame.
Upon decomposition, this product emits carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons.
Empty container(s) may retain product residue -- solid, liquid, and/or vapor -- and can be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, static electricity, or other sources of ignition. They may explode and cause injury or death.

Protection of Firefighters:

Fire fighters should be equipped with NIOSH-approved, self-contained breathing apparatus (SCBA) and full protective clothing.

6. Accidental Release Measures

Personal Precautions:

Avoid inhalation of vapors and contact with skin and eyes.
Avoid skin contact with the spilled material.
Do not smoke or use open fire or other sources of ignition.
Eliminate all sources of ignition or flammables that may come into contact with a spill of this material.
Ventilate the contaminated area.
Wear protective gloves and, in case of splashes, goggles/face shield too.

Environmental Precautions:

Do not allow the spilled product to enter public drainage system or open water courses.
Do not allow this material to drain into sewers/water supplies.

Methods for Cleaning Up:

Stop the flow of material, if this is without risk.
Dike the spilled material, where this is possible.
Recover liquids by pumping (use an explosion proof or hand pump if recovering flammable liquids).
Absorb the spilled material with an inert absorbent (nonflammable) material.

7. Handling and Storage

Handling:

Technical Measures:

Keep this product from heat, sparks, or open flame.

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Precautions and Advice for Safe Handling:
Do not puncture or incinerate container.
Keep area ventilated. Do not smoke. Extinguish all flames, pilot lights, and heaters. Turn off stoves, electric tools and appliances, and any other sources of ignition.
Keep the container closed when not in use.

Storage:

Technical Measures:
Eliminate all sources of ignition.

Storage Conditions:
Storage temperatures should not exceed 40°C (104°F).
Store in a cool, well-ventilated area away from sources of heat.
Store this product away from strong oxidizing agents.
Keep away from children.

8. Exposure Controls/Personal Protection

Engineering Measures:
Eyewash and emergency showers are recommended.
Use adequate ventilation to control airborne concentrations below the exposure limits/guidelines. If user operations generate a vapor, dust, and/or mist, use process enclosure, local exhaust ventilation, or other engineering controls to control airborne levels below the recommended exposure limits/guidelines.

Exposure Limits:

Chemical Name	TWA	STEL/C	References
ISOPROPANOL	400(ppm)		ACGIH
	400(ppm)	980(ppm)	OSHA
NONANE	200(ppm)		ACGIH
			OSHA
STODDARD SOLVENT	100(ppm)		ACGIH
	500(ppm)	2900(ppm)	OSHA

Personal Protective Equipment:

Respiratory Protection:
If engineering controls do not maintain airborne concentrations to a level which is adequate to protect worker health, an approved respirator must be worn. Respirator selection, use and maintenance should be in accordance with the requirements of OSHA Respiratory Protection Standard 29 CFR 1910.134 and/or Canadian Standard CSA Z94.4.

Hand Protection:
The use of natural rubber gloves is recommended.
The use of nitrile-latex gloves is recommended.
The use of neoprene gloves is recommended.
The use of Viton gloves is recommended.

Eye Protection:
Do not wear contact lenses when working with this substance.
Wear chemical goggles.

Skin and Body Protection:
Wear protective clothing sufficient to cover exposed skin surfaces.
Remove contaminated clothing and wash before reuse.

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Hygiene Measures: When using this material, do not eat, drink or smoke.
Wash thoroughly after handling.

9. Physical and Chemical Properties

Specific Gravity:	0.79 H2O=1 @15°C
Physical State:	AEROSOL
Odor:	ALCOHOL
Color:	CLEAR YELLOW
pH:	N.AP
Temperature Range During which Changes in Physical State Occur:	
Freezing Point:	N.AV
Flash Point:	14 °C ASTM D3828
Explosion Properties:	
UEL:	N.AV
LEL:	N.AV
Vapor Pressure:	N.AV
Vapor Density:	>1 (AIR=1)
Solubility:	NEGLIGIBLE IN WATER
Viscosity:	2@40°C cSt ASTM D445
Evaporation Rate:	N.AV

10. Stability and Reactivity

Stability: Hazardous polymerization will not occur.
Stable at ambient and moderately elevated temperatures and pressures.

Conditions and Materials to Avoid: This product may react with strong oxidizing agents (bleach--sodium hypochlorite, calcium hypochlorite, hydrogen peroxide, permanganate, nitric acid, concentrated OXYGEN, perchlorates).

Hazardous Decomposition Products: Carbon monoxide, carbon dioxide, and other low molecular weight hydrocarbons.

11. Toxicological Information

67-63-0 ISOPROPANOL
Oral, adult rat, LD50 = 5045 mg/kg
111-84-2 NONANE
Inhalation, adult rat, LC50 = 3200 ppm (4 Hours)
67-63-0 ISOPROPANOL
Skin, adult rabbit, LD50 = 12800 mg/kg

Inhalation: Excessive inhalation of this product may cause headache, dizziness, blurred vision, nausea and vomiting.

Skin Contact: Prolonged or repeated contact with this product may dry and/or defat the skin.

Chronic (Long Term) Toxicity: Base oil severely refined: Not carcinogenic in animal studies. Representative material passes IP-346, Modified Ames test, and/or other screening tests.
Prolonged or repeated occupational overexposure to solvents has been linked to permanent brain and nervous system damage.
There may be some small amount of aromatic hydrocarbons (benzene, toluene, and xylene) in Stoddard solvent. Although the toxicity of Stoddard solvent is not attributable to any one type of constituent, the aromatic components are considered to be more toxic than the other components of Stoddard solvent.
Long-term overexposure may cause blood, liver and kidney effects.

12. Ecological Information

Mobility: The product contains volatile organic compounds which will evaporate easily from all surfaces.

Ecotoxocity: This product contains isopropanol which may be harmful to aquatic life.

13. Disposal Considerations

Waste from Residues: Dispose of waste material according to Local, State, Federal, and Provincial Environmental Regulation.
Do not puncture or incinerate containers. Large number of aerosol containers may require handling as a hazardous waste. Consult local, state, federal, or provincial agency for proper disposal method in your area.

Contaminated Packaging: No consideration given when disposed of according to local, state, and Federal regulations.

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14. Transport Information

U.S. Department of Transportation (DOT) 49 - CFR 172.101

Proper Shipping Name: Aerosols

UN Number: UN1950

Hazard Class / Division: 2.1

Reportable Quantity (per packaging):

CAS	RQ	Name
91-20-3	>100000	NAPHTHALENE
100-41-4	>100000	ETHYLBENZENE

Regulated Quantity:

Bulk	Non-Bulk	Limited Quantity
X	X	

Label: FLAMMABLE GAS

Canadian Transportation of Dangerous Goods (T.D.G.) - TDGR Schedule II

Proper Shipping Name: AEROSOLS

UN Number: UN1950

Hazard Class / Division: 2.1

Packing Group:

Regulated Quantity:

Bulk	Non-Bulk	Limited Quantity
X	X	

Label: FLAMMABLE GAS

Secretary of Communication and Transportation (SCT) - NOM-002-SCT2/1994 (Mexico)

Proper Shipping Name:	AEROSOLES
UN Number:	UN1950
Hazard Class/Division:	2.1

Regulated Quantity:

Bulk	Non-Bulk	Limited Quantity
X	X	

Label: FLAMMABLE GAS

International and Domestic Air Transportation - ICAO & IATA Section 4.2

Proper Shipping Name:	AEROSOLS, FLAMMABLE
UN Number:	UN1950
Hazard Class/Division:	2.1
Label:	FLAMMABLE GAS

International Water Transportation - IMDG Code Amendment 31-02

Proper Shipping Name:	AEROSOLS
UN Number:	UN1950
Hazard Class/Division:	2.1
Ems Number:	2-13

Regulated Quantity:

Bulk	Non-Bulk	Limited Quantity
X	X	

Label: FLAMMABLE GAS

15. Regulatory Information

This product contains trace amounts of chemicals (<0.01%) being listed on California Prop 65 list.
This product contains a toxic chemical or chemicals subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.
Material contains a chemical which is a Ford Motor Company Material of Concern. Use and release of this material should be minimized to the greatest extent possible.

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16. Other Information

Key/Legend: N.AP = Not applicable; N.AV = Not available; ND = Not determined or No data; TLV = Threshold limit value; TWA = Time-weighted average; STEL = Short-term exposure limit; C = Ceiling limit

HMIS and NFPA Hazard Class Information:

HMIS Hazard Class:	Health: 2 (Moderate)	Flammability: 3 (Serious)	Physical Hazard: 1 (Slight)
NFPA Hazard Class:	Health: 2 (Moderate)	Flammability: 3 (Serious)	Instability: 1 (Slight)

The following sections contain revisions OR NEW statements.

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Preparation Information:

The chemical identification and properties for this material were provided by the manufacturer. For Canadian locations, a manufacture's MSDS is available upon request. Health and safety information has been evaluated by the Occupational and Environmental Health Sciences Department, Ford Motor Company, Diagnostic Service Center II, 1800 Fairlane Drive, Allen Park, MI 48101, USA.

Disclaimer:

The information on this data sheet represents our current data and is accurate to the best of our knowledge as to the proper handling of this product under normal conditions and in accordance with the application specified on the packaging and/or technical guidance literature. Any other use of the product which involves using the product in combination with any other product or any other process is the responsibility of the user.

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Attachment

Product Code	Container Size	Part of Kit	Kit Product Code
XL-1	12 oz.		