



SAFETY DATA SHEET

Issue Date 8/10/15

Revision Date 8/10/15

Version 1

1. IDENTIFICATION

Product identifier

Product Name: Pen Safe

Other means of identification

Product code: F-853

Synonyms: None

Recommended use of the chemical and restrictions on use

Recommended Use: Lubricant.

Uses advised against: No information available

Details of the supplier of the safety data sheet

Supplier Address

FRONTIER PERFORMANCE LUBRICANTS INC
 PO BOX 1777
 LODI, CA 95241
 Phone: (800)-807-4496
 Fax: (209)-334-6408

Emergency telephone number

Emergency Telephone: PERS (800)-633-8253

2. HAZARDS IDENTIFICATION

Physical Hazard Classification: Flammable Aerosols, Category 1

DANGER



Physical Hazard Precautionary Statements:

- Extremely flammable aerosol.
- Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
- Do not spray on an open flame or other ignition source.
- Do not pierce or burn, even after use. Protect from sunlight.
- Do not expose to temperatures exceeding 50 °C/122°F.

Health Hazard Classification(s):

- | | |
|--|---------|
| Acute Toxicity - Oral - Level 5 | Warning |
| Acute Toxicity - Dermal - Level 5 | Warning |
| Acute Toxicity - Inhalation - Level 5 | Warning |
| Skin Corrosion/Irritation -Level 3 | Warning |
| Eye Damage/Irritation -Level 2B | Warning |
| Carcinogenicity - Level 2 | Warning |
| Specific Target Organ Toxicity (Single Exposure) – | Warning |
| Specific Target Organ Toxicity (Repeated Exposure) - | Warning |



Health Hazard Statements:

May be harmful if swallowed.
 May be harmful if swallowed and enters airways.
 May be harmful in contact with skin.
 Causes mild skin irritation.
 Causes eye irritation.
 May be harmful if inhaled.
 May cause respiratory irritation.

Suspected of causing cancer < state route of exposure if it is conclusively proven that no other routs of exposure

May cause damage to organs < or state all organs affected, if known> through prolonged or repeated exposure

3. COMPOSITION/INFORMATION ON INGREDIENTS

	CAS#	% Range		PEL	TLV
CARBON DIOXIDE	124-38-9	1%	10%	5,000 ppm	5,000 ppm; 30,000 ppm, 15
DIETHANOLAMINE	111-42-2	1%	5%	TWA: 15 mg/m ³ 8 hour(s).	TWA: 2 mg/m ³ 8 hour(s).
HYDROTREATED LIGHT DISTILLATE	64742-47-8	50%	75%	NONE ESTABLISHED BY OSHA	NONE ESTABLISHED BY OSHA
AROMATIC PETROLEUM DISTILLATES	64742-95-6	5%	10%	150 PPM	100 PPM
ISOBUTANOL	78-83-15-0	1%	5%	100 ppm TWA	50 ppm TWA
MINERAL SEAL OIL	64742-53-6	10%	25%	TWA 400 ppm	NOT DETERMINED
XYLENE *	1330-20-7	5%	10%	100 ppm	100 ppm
n-BUTYLE ACETATE	123-86-4	1%	5%	150 PPM	150 PPM

Specific chemical identity and exact percentages are withheld as Trade Secret.

4. FIRST AID MEASURES

IF SWALLOWED: Immediately call a POISON CENTER/doctor/physician.

IF INHALED: Call a POISON CENTER or doctor/physician if you feel unwell.

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

If exposed or concerned: Get medical advice/attention.

Call a POISON CENTER/doctor/physician if you feel unwell.

Get medical advice/attention if you feel unwell.

Do NOT induce vomiting.

If skin irritation occurs: Get medical advice/attention.

If eye irritation persists: Get medical advice/attention.

GENERAL:

This material is an aspiration hazard and defats the skin. Breathing vapors of high concentrations may cause CNS depression. EYE CONTACT: Slightly irritating but does not injure eye tissue.

SKIN CONTACT:

Low order of toxicity. Frequent or prolonged contact may irritate and cause dermatitis. Skin contact may aggravate an existing dermatitis condition.

INHALATION:

High vapor/aerosol concentrations (greater than approximately 100 ppm) are irritating to the eyes and the respiratory tract, may cause headaches, dizziness, anesthesia, drowsiness,

unconsciousness, and other central nervous system effects, including death.

INGESTION: Small amounts of this product aspirated into the respiratory system during ingestion or vomiting may cause mild to severe pulmonary injury, possibly minimal toxicity.

FIRST AID

EYE CONTACT: Flush eyes with large amounts of water until irritation subsides. If irritation persists, get medical attention.

SKIN CONTACT: Flush with large amounts of water; use soap if available. Remove grossly contaminated clothing, including shoes, and launder before reuse.

INHALATION: Using proper respiratory protection, immediately remove the affected victim from exposure. Administer artificial respiration if breathing is stopped. Keep at rest. Call for prompt medical attention.

INGESTION: If swallowed, DO NOT induce vomiting. Keep at rest. Get prompt medical attention.

PRECAUTIONS

SPECIAL PRECAUTIONS: Health studies have shown that many hydrocarbons pose potential human health risks which may vary from person to person. As a precaution, exposure to liquids, vapors, mists or fumes should be minimized.

PERSONAL PROTECTION: For open systems where contact is likely, wear safety glasses with side shields, long sleeves, and chemical resistant gloves. Where concentrations in air may exceed the limits, work practice or other means of exposure reduction are not adequate, NIOSH/MSHA approved respirators may be necessary to prevent overexposure by inhalation.

VENTILATION: The use of mechanical dilution ventilation is recommended whenever this product is used in a confined space, is heated above ambient temperatures, or is agitated.

5. FIRE-FIGHTING MEASURES

FIRE AND EXPLOSION HAZARDS: This product releases Flammable Vapors at well below ambient temperatures and readily forms flammable mixtures with air exposed to an ignition source. It will burn in the open or be explosive in confined spaces. Its vapors are heavier than air and may travel long distances to a point of ignition, and then flash back. Alkaline/chlorine gas mixtures have produced explosions.

EXTINGUISHING MEDIA: Dry Chemical. CO2. Halogenated Extinguishing Agent. Stop Gas Flow.

SPECIAL FIREFIGHTING PROCEDURES: Gas fires should not be extinguished unless the gas flow can be stopped immediately. Allow the fire to burn itself out. If the source cannot be shut off immediately, all equipment and surfaces exposed to the fire should be cooled with water to prevent over-heating flash-backs, or explosions. Control fire until gas supply can be shut off. Use proper protective equipment. Use fresh air respirator when exposure to hazardous concentrations of toxic gases is possible.

FIRE FIGHTING: Use water spray to cool fire exposed surfaces and to protect personnel. Isolate "fuel" supply from fire. Use foam, dry chemical, or water spray to extinguish fire. Avoid spraying water directly into storage containers due to danger of boiling over. This liquid is volatile and gives off invisible vapors. Either the liquid or vapor may settle in low areas or travel some distance along the ground or surface to ignition sources where they may ignite or explode.

6. ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IN CASE CONTAINER IS PUNCTURED AND MATERIAL IS RELEASED: Clean up area by mopping or with absorbent materials and place in closed container for disposal. Consult Federal, State, and local disposal authorities.

WASTE DISPOSAL METHOD: Consult local authorities for proper waste disposal procedures. Empty de-pressurized containers can not be reused. Cans which are pressurized or contain liquid must be

disposed of in a permitted waste management facility. Consult Federal, State, and local disposal authorities for approved procedures.

7. HANDLING AND STORAGE

Use personal protective equipment as required.

Store in a well-ventilated place. Keep container tightly closed.

Store locked up.

VENTILATION REQUIREMENT:	Use adequate level exhaust ventilation. Note: Where carbon monoxide may be generated, special ventilation may be required. Local exhaust recommended when appropriate to control employee exposure.
RESPIRATORY PROTECTION:	Based on contamination level and working limits of the respirator, use a respirator approved by NIOSH/MSHA.
EYES:	Face shield and goggles or chemical goggles should be worn.
GLOVES:	Impervious gloves should be worn. Gloves contaminated with the product should be discarded. Polyfluorinated polyethylene has been suggested.
OTHER CLOTHING EQUIPMENT:	Standard work clothing. Standard work shoes; discard if shoes can not be decontaminated. Store contaminated clothing in well ventilated cabinets or closed containers. Wash contaminated clothing and dry before reuse.
RESPIRATORY PROTECTION:	In situations where vapor concentrations exceed the recommended exposure limits, a NIOSH approved organic vapor cartridge or air-supplying respirator should be worn.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

Do not breathe dust/fume/gas/mist/vapours/spray.

Avoid breathing dust/fume/gas/mist/vapours/spray.

Wash hands and exposed areas thoroughly after handling.

Use only outdoors or in a well-ventilated area.

Use personal protective equipment as required.

VENTILATION REQUIREMENT:	Use adequate level exhaust ventilation. Note: Where carbon monoxide may be generated, special ventilation may be required. Local exhaust recommended when appropriate to control employee exposure.
RESPIRATORY PROTECTION:	Based on contamination level and working limits of the respirator, use a respirator approved by NIOSH/MSHA. EYES: Face shield and goggles or chemical goggles should be worn.
GLOVES:	Impervious gloves should be worn. Gloves contaminated with the product should be discarded. Polyfluorinated polyethylene has been suggested.
OTHER CLOTHING EQUIPMENT:	Standard work clothing. Standard work shoes; discard if shoes can not be decontaminated. Store contaminated clothing in well ventilated cabinets or closed containers. Wash contaminated clothing and dry before reuse.

RESPIRATORY PROTECTION: In situations where vapor concentrations exceed the recommended exposure limits, a NIOSH approved organic vapor cartridge or air-supplying respirator should be worn.

9. PHYSICAL AND CHEMICAL PROPERTIES

Flash Point (CCP): LVL 3 AEROSOL
 Boiling Point for Product: N/D
 Vapor Pressure for Product: N/D
 Vapor Density for Product: N/D
 Specific Gravity: N/D
 V.O.C.: <25% by weight
 Water Solubility: NIL
 Appearance: AEROSOL SPRAY
 PH: N/D

10. STABILITY AND REACTIVITY

STABILITY: Stable
 CONDITIONS TO AVOID: Temperatures above 130 degree F.
 HAZARDOUS POLYMERIZATION: Will not occur
 MATERIALS AND CONDITIONS TO AVOID INCOMPATIBILITY: Strong oxidizing agents
 HAZARDOUS DECOMPOSITION PRODUCTS: None

11. TOXICOLOGICAL INFORMATION

DIETHANOLAMINE 111-42-2
 Acute oral toxicity: LD50: 3,300 mg/kg
 Acute dermal toxicity: LD50: 12,200 mg/kg

HYDROTREATED LIGHT DISTILLATE 64742-47-8
 Acute oral toxicity: LD 50 Rat: > 8,000 mg/kg
 Acute inhalation toxicity: LD 50 Rat: > 2500 ppm, 4 h
 Acute dermal toxicity: LD 50 Rabbit: > 4,000 mg/kg

AROMATIC PETROLEUM DISTILLATES 64742-95-6
 Aspiration hazard, do not induce vomiting.

ISOBUTANOL 78-83-15-0
 Acute oral toxicity: LD-50: rat: 3,350 mg/kg
 Acute dermal toxicity: LD-50: rabbit: 2,460 mg/kg
 Acute inhalation toxicity: LC50 rat: > 5.25 mg/l 5 hr

MINERAL SEAL OIL 64742-53-6
 Acute oral toxicity: LD 50 Rat: > 5,000 mg/kg
 Acute dermal toxicity: LD 50 Rabbit: > 2,000 mg/kg

Routes of exposure:

Inhalation, Skin contact

Eye contact: May cause mild eye irritation. Symptoms include stinging, tearing, and redness.

Skin contact: May cause mild skin irritation. Symptoms may include redness and burning of skin.

Ingestion: Swallowing small amounts of this material during normal handling is not likely to cause

Inhalation:	harmful effects. Swallowing large amounts may be harmful. This material can get into the lungs during swallowing or vomiting. This results in lung inflammation and other lung injury. Breathing of vapor or mist is possible.	
Aggravated Medical Condition:	Preexisting disorders of the following organs (or organ systems) may be aggravated by exposure to this material:, lung (for example, asthma-like conditions)	
Symptoms:	Signs and symptoms of exposure to this material through breathing, swallowing, and/or passage of the material through the skin may include:, stomach or intestinal upset (nausea, vomiting, diarrhea), irritation (nose, throat, airways)	
Carcinogenicity:	This product (or a component) is a petroleum-derived material. Similar materials and certain compounds occurring naturally in petroleum oils have been shown to cause skin cancer in laboratory animals following repeated exposure without washing or removal.	
XYLENE *	1330-20-7	
	TWA: 100 ppm	
	TLV: 100 ppm	
n-BUTYLE ACETATE	123-86-4	
Acute oral toxicity:	LD50 rat:	10,768 mg/kg
Acute dermal toxicity	LD50 rabbit:	17,601 mg/kg
Acute inhalation toxicity:	LC50 rat:	2,000 4 hours

Potential Acute Health Effects:

12. ECOLOGICAL INFORMATION

ISOBUTANOL	78-83-15-0	
Toxicity		
Acute toxicity Fish		LC-50 (Fathead Minnow, 96 h): 1,430 mg/l
Aquatic invertebrates		EC-50 (Water Flea, 96 h): 1,220 mg/l

XYLENE * 1330-20-7

This product is a mobile liquid. This product is non biodegradable. It does not accumulate or biomagnify in the environment.

If applicable, IARL, NPT and OSHA carcinogens and chemicals subject to the reporting requirements of SARA Title III, Section 313 are identified in Section III with an "***". Additional ecological information is Not Determined.

13. DISPOSAL CONSIDERATIONS

Dispose of contents/container in accordance with local regulations.

WASTE DISPOSAL METHOD: Consult local authorities for proper waste disposal procedures. Empty de-pressurized containers can not be reused. Cans which are pressurized or contain liquid must be disposed of in a permitted waste management facility. Consult Federal, State, and local disposal authorities for approved procedures.

14. TRANSPORT INFORMATION

DOT Proper Shipping Name: UN1950
Aerosols,non-flammable, (each not exceeding 1L capacity) 2.2, LIMITED QUANTITY

15. REGULATORY INFORMATION

	CAS#	PEL	TLV
CARBON DIOXIDE	124-38-9	5,000 ppm	5,000 ppm; 30,000 ppm, 15
DIETHANOLAMINE	111-42-2	TWA: 15 mg/m ³ 8 hour(s).	TWA: 2 mg/m ³ 8 hour(s).
HYDROTREATED LIGHT DISTILLATE	64742-47-8	NONE ESTABLISHED BY OSHA	NONE ESTABLISHED BY OSHA
AROMATIC PETROLEUM DISTILLATES	64742-95-6	150 PPM	100 PPM
ISOBUTANOL	78-83-15-0	100 ppm TWA	50 ppm TWA
MINERAL SEAL OIL	64742-53-6	TWA 400 ppm	NOT DETERMINED
XYLENE *	1330-20-7	100 ppm	100 ppm
n-BUTYLE ACETATE	123-86-4	150 PPM	150 PPM

16. OTHER INFORMATION

If applicable, IARL, NPT and OSHA carcinogens and chemicals subject to the reporting requirements of SARA Title III, Section 313 are identified above with an "**"

Issue Date	8/10/15
Revision Date	8/10/15
Revision Note	Not applicable

Disclaimer

The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet