Safety Data Sheet

Section 1: Identification of the Substance/Mixture and of the Company/Undertaking

1.1	**Product Name**	Stera-Sheen® Total Blend Lubricant Spline and Food Contact Machine lubricant
1.2	**Identified Uses :**	Food Grade Machinery Lubricant
	Uses advised against :	None known.
1.3	**Company :**	Purdy Products Company 1255 Karl Court Wauconda, IL 60084 USA
	Customer Service:	Tel: (847) 526-5505
	General E-mail:	info@purdyproducts.com
1.4	**Emergency Phone Number :**	ChemTrec 24 hr (800) 424-9300

Section 2: Hazards Identification

2.1	**Emergency Overview:**	NOT EXPECTED TO PRODUCE SIGNIFICANT ADVERSE HEALTH EFFECTS WHEN USED AS DIRECTED. Keep container closed. Use only with adequate ventilation. Wash thoroughly after handling.
2.2	**Classification of mixture according to US and EU Regulations (OSHA 1910.1200; EU 67/548/EEC, 1999/45/EC & (EC) 1272/2008):**	Not a hazardous mixture according to US, EU, or EEC regulations. Material has no known hazards, if the recommendations for storage and handling are considered and followed.

2.3 Labelling Elements according to US & EEC Directives:

GHS Label Elements (per regulations from OSHA 1910.1200, (EC) No 1272/2008, 67/54//EEC, and 1999/45/EC):

Signal word:	No signal word required.
Hazard statements:	No statements required.
Precautionary statements:	No statements required.
Prevention:	No statements required.
Response:	No statements required.
Storage:	No statements required.
Disposal:	No statements required.
Environmental Hazards:	No statements required.
Symbol:	No symbols required.
Other hazards which do not results in	Not a PBT, vPvB substance as per the criteria of the REACH Ordinance.
OSHA/HCS status:	While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.

Section 3 - Composition/Information on Ingredients

Substance / Mixture:	Mixture.
Chemical characterization :	Lubricating grease.
According to Regulation (EC) No. 1272/2008 :	No hazardous ingredients.
According to EU Directives 67/548/EEC or 1999/45/EC:	No hazardous ingredients.

Name	%	CAS number	EC Number	Classification
1-decene, homopolymer, hydrogenated	35 - 60%	68037-01-4	500-393-3	Not classified.
Polyisobutylene	35 - 60%	9003-27-4	204-066-3	Not classified.
Fumed Silica	< 10%	112945-52-5 (old: 7631-86-9)	231-545-4	Not classified.

There are no additional ingredients present which, based on their concentrations, are classified as hazardous and require reporting in this section. GHS & CLP classifications are based on current available data from internal, national, and international sources. These classifications are subject to revision as more information becomes available.

Section 4 - First Aid Measures

4.1 **Description of Necessary First Aid Measures :**

Eye Contact: Possible discomfort if foreign substance enters eye. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention if irritation occurs.

Skin Contact: Wash exposed skin with soap and water. Get medical attention if irritation develops.

Inhalation: If inhaled, remove to fresh air. Get medical attention if symptoms appear. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.

Ingestion: If affected person is conscious, give plenty of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention if symptoms appear.

Potential acute health effects

Eye Contact: No significant health hazards identified.

Skin Contact: Prolonged or repeated contact can defat the skin and lead to irritation , cracking, and/or dermatitis.

Inhalation: Inhalation of oil mist or vapors at elevated temperatures may cause respiratory irritation.

Ingestion: No significant health hazards identified.

Over-exposure signs/symptoms Not determined.

Indication of immediate medical attention and special treatment needed, if necessary

Specific treatments: Not available.

Notes to physician: Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need medical surveillance for 48 hours.

Protection of first responders: No action shall be taken involving any personal risk or without suitable training.

Section 5 - Firefighting Measures

5.1 **Suitable extinguishing media :** On large fires use dry chemical, foam, alcohol-resistant foam or water mist (fog). On small fires use carbon dioxide (CO_2), dry chemical or water mist. Water can be used to cool fire-exposed containers. Water used to extinguish fire should not enter drainage systems, soil or stretches of water. Ensure there are sufficient retaining facilities for used water.

Unsuitable extinguishing media : Do not use water jet, which may spread fire.

5.2 **Hazards during fire fighting:** Burning produces noxious and toxic fumes. Wear appropriate breathing protection.

Hazardous combustion products: Carbon oxides (CO, CO_2), amorphous silicon.

Flammability of the product: In a fire or if heated, a pressure increase will occur and the container may burst.

Other information: Dispose of fire residues and contaminated fire extinguishing water in accordance with local regulations.

5.3 **Special protective equipment & procedures:** Fire-fighters should wear positive pressure self-contained breathing apparatus (SCBA) and full turnout gear.

Further Information: This material is not explosive as defined by established regulatory criteria. However, if containers are heated or in a fire, pressure will increase in the containers and they may burst. Cool containers with water or water spray, if safe to do so.

Section 6 - Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures: Immediately contact emergency personnel. Evacuate surrounding areas. Personal Protective Equipment must be worn. Keep unnecessary and unprotected personnel away Do not touch or walk through spilled material. Use suitable protective equipment (section 8). Follow all fire-fighting procedures (section 5).

6.2 Environmental precautions: If emergency personnel are not present, contain and collect small spillages with noncombustible absorbent material (e.g. sand, earth, vermicullite, etc.) and place in a suitable container for disposal. Prevent run-off from entering waterways & sewers or contacting soil.

6.3 Methods and materials for containment and cleaning up:

Small Spill: For small spills, add soil or other suitable absorbents, scoop up material, and place in a sealable, liquid-proof container for disposal.

Large Spill: For large spills, dike or contain spilled material to ensure runoff does not reach a waterway. Move spilled material in an appropriate container for disposal. Use appropriate absorbent materials (e.g. sand, earth, vermicullite, etc.) to absorb material if necessary. See section 13 for waste disposal information.

6.4 Other information: May form slippery or greasy layer with water.

Note: See Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7 - Handling and Storage

7.1 Precautions for safe handling: Handle in accordance with good industrial hygiene and safety practice. Keep container closed when not in use. Take precautions against static dischages.

Use appropriate personal protective equipment (see Section 8). Avoid prolonged or repeated contact with skin. Avoid breathing vapor or mist. Wash thoroughly after handling. Eating, drinking, and smoking should be prohibited in areas where this material is handled. Workers should wash hands and face before eating, drinking, or smoking.

7.2 Conditions for safe storage, including incompatibilities: Keep container tightly closed, in a cool, well-ventilated area. Empty containers may contain harmful, flammable/combustible or explosive residue or vapors. Do not cut, grind, drill, weld, reuse or dispose of containers unless adequate precautions are taken against these hazards.

Storage temperature: Minimum 0 °C, Maximum 40 °C. Stable under recommended storage conditions.

7.3 Specific uses: Lubricating grease. Refer to technical data sheet, which is available on request.

Section 8 - Exposure Controls/Personal Protection

8.1 Control parameters:

Occupational exposure limit values:

Ingredient Name	ACGIH TLV TWA	ACGIH TLV STEL	OSHA PEL TWA	EH40 (UK) TWA	Canada TWA/STEL
1-decene, homopolymer, hydrogenated	5 mg/m^3	10 mg/m^3			
Fumed Silica	0.8 mg/m^3 as dust			2.4 mg/m^3 as dust	

Recommended monitoring procedures: This product contains ingredients with exposure limits. Personal, workplace atmosphere, or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and whether additional respiratory protective equipment is needed.

8.2	**Environmental exposure controls:**	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or other modifications to process equipment will be needed to reduce emissions to acceptable levels.
	Engineering Controls:	Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective occupational exposure limits.
	Personal protection measures:	
	Hygiene measures :	Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory, and at the end of the working period. Wash contaminated clothing before re-use.
	Respiratory protection :	**Recommended: Dust mask.** Use with adequate ventilation. If ventilation is inadequate to maintain exposure limits, use a certified respirator that will protect against vapor.
	Hand protection :	**Recommended: Nitrile gloves.** Wear gloves that cannot be penetrated by chemicals or oils. The correct choice of gloves depends on the particular work conditions. Work with glove suppliers to choose gloves appropriate for your work conditions.
	Eye/face protection :	**Recommended: Safety glasses with side-shields.**
	Skin protection :	**Recommended: Lab Coat or Long-sleeved shirts & long pants.** Avoid prolonged or repeated contact with skin. Wear clothing and footwear that cannot be penetrated by chemicals or oil.
	Additional information :	These precautions are for room temperature handling. Use at elevated temperature or

Section 9 - Physical and Chemical Properties

Physical State :	Translucent Gel
Color :	Colorless.
Odor :	Odorless.
Odor Threshold.	No information available
pH:	No information available
Boiling Point:	Will ignite before reaching boiling temperature.
Melting Point:	Dropping Point > 177°C (350°F)
Flash Point:	Closed cup: >175°C (347°F) [Pensky-Martens.]
Evaporation Rate:	< 1 (Butyl acetate = 1)
Ignition Temperature:	No information available
Flammability:	No information available
Lower Explosion Limit:	No information available
Upper Explosion Limit:	No information available
Auto-ignition temperature:	No information available
Vapor Pressure:	<0.017 kPa (<.013 mm Hg) at 20°C
Relative Vapor Density:	No information available
Relative Density:	0.86 - 0.87
Solublity:	Insoluble in cold water.
Solublity in other solvents:	Soluble in mineral oils, stoddard solvents, acetone.
Partition coefficient: (n-octanol/water):	Not available.
Decomposition Temperature:	Will ignite before reaching decomposition temperature.

Section 10 - Stability and Reactivity

10.1	**Reactivity :**	No dangerous reactions known under conditions of normal use.
10.2	**Stability :**	Stable under normal conditions. Will not undergo hazardous polymerization.
10.3	**Possibility of hazardous reactions :**	Under normal conditions, hazardous polymerization or decomposition will not occur.
10.4	**Conditions to avoid :**	High temperatures, open flames. Avoid inhalation of vapor, spray or mist.
10.5	**Materials to avoid :**	Strong oxidizing and reducing agents, acids, and bases.
10.6	**Hazardous decomposition products :**	Carbon oxides (CO, CO_2), amorphous sulfur.

Section 11 - Toxicological Information

Information on the likely routes of exposure

Inhalation: Inhalation of oil mist or vapors at elevated temperatures may cause respiratory irritation.

Ingestion: No significant health hazards identified.

Skin contact: Prolonged or repeated contact can defat the skin and lead to irritation, cracking & dermatitis.

Eye contact: No significant health hazards identified.

Acute toxicity:

Inhalation: No adverse effects are normally expected.

Ingestion: See table below.

Skin contact: No adverse effects are normally expected.

Eye contact: May cause temporary discomfort.

Product/Ingredient name	Result	Species	Dose	Exposure / Source
1-decene, homopolymer, hydrogenated	LD50 Oral	Rat	> 5000 mg/kg	-
Polyisobutylene	LD50 Oral	Rat	>2000 mg/kg	-
Fumed silica	LD50 Dermal	Rabbit	> 5000 mg/kg	-
	LC0 Inhalation	Rat	0.139 mg/L (max. attainable in expts.)	4 hours, Literature No deaths occurred.
	LD50 Oral	Rat	> 10 000 mg/kg	Literature

Potential chronic health effects

Chronic Toxicity: Not Available

Irritation / Corrosion: Not irritating to Skin or Eyes (rabbit, literature)

Repeated Dose Toxicity (Oral): Oral: No negative effects

Repeated Dose Toxicity (Inhaled): Inhalative: No irreversible changes; No indication of silicosis.

Sensitizer: Not Available

Carcinogenicity: Not carcinogenic, according to established ACGIH, IARC, NTP, OSHA & EU regulatory criteria.

Mutagenicity: Not mutangenic, according to established regulatory criteria.

Teratogenicity: Not teratogenic or embryotoxic, according to established regulatory criteria.

Reproductive Toxicity: Not a reproductive toxin, according to established regulatory criteria.

Human Experience: Silicosis & other respiratory tract illnesses were not observed in connection with this product.

Toxicokinetics, metabolism and distribution: No specific information is available.

Other Health Hazard Information: One component of this product is a powder that is hazardous by inhalation. This hazard is not relevant to the current "gel" form of the product, which is not in a respirable form.

Based on product test data from this and similar products.

Section 12 - Ecological Information

12.1 Aquatic Ecotoxicity effects Not readily biodegradable. This product shows a low bioaccumulation potential.

Product/Ingredient name	Result	Species	Exposure
1-decene, homopolymer, hydrogenated	EC50 >1000 mg/L WAF	Daphnia	48 hours
Fumed silica	LC50 > 10 000 mg/L	Fish (Brachydanio rerio)	96 hours (OECD 203)
	EC50 > 10 000 mg/L	Aquatic Invertebrates (Daphnia magna)	24 hours (OECD 202)

12.2 Persistence and degradability Solid material, insoluble in water. Not readily biodegradable.

12.3 Bioaccumulative Potential Low bioaccumulation potential.

Product/Ingredient name	$Log(P_{ow})$	BCF	Potential
1-decene, homopolymer, hydrogenated	--	>10	Low

12.4 Mobility in Soil

Soil/water partition coefficient (KOC): Not available

Mobility: This product is not likely to move rapidly with surface or groundwater flows because of its low water solubility. This product is not likely to volatilise rapidly into the air because of its low vapor pressure.

12.4 PBT & vPvB assessment:

PBT No (P: No; B:No; T:No)

vPvB No (vP: No; vB:No)

Germany water class (WGK): 1, Slightly hazardous to waters.

Other adverse effects: No known significant effects or critical hazards.

Section 13 - Disposal Considerations

Product disposal: Avoid contact of spilled material with soil and prevent runoff entering surface waterways. Dispose

Packaging disposal: Do not burn or use a cutting torch on the empty drum. Observe national regulations.

Hazardous waste: Not classified as a hazardous waste for disposal purposes.

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Section 14 - Transport Information

Not classified as hazardous for transport (ADR, RID, IMO, IMDG, IATA/ICAO)

14.1 International transport regulations

Regulatory Information	UN Number	Proper shipping name	Classes	Packing Group	Label	Additional Information
DOT Classification	Not regulated	-	-	-	-	-
TDG Classification	Not regulated	-	-	-	-	-
ADR/RID Class	Not regulated	-	-	-	-	-
IMDG Class	Not regulated	-	-	-	-	-
IATA-DGR Class	Not regulated	-	-	-	-	-

Section 15 - Regulatory Information

15.1 Safety, health and environmental regulations / legislation specific for the substance or mixture:

North American Regulations:

HCS Classification: Not regulated

United States inventory (TSCA 8b): All components are listed or exempted.

CERCLA Hazardous substances: None of the components are listed.

Canadian Regulations (WHMIS): Not a WHMIS controlled material

Clean Water Act (CWA) 307 / 311: None of the components are listed.

Clean Air Act (CAA) 112:

Accidental Release Prevention: None of the components are listed.

Regulated Flammable Substances: None of the components are listed.

Regulated Toxic Substances: None of the components are listed.

Hazardous Air Pollutants (HAPs) None of the components are listed.

Class I & Class II substances: None of the components are listed.

SARA 302/304/311/312

Extremely hazardous substances:	None of the components are listed.
Emergency planning and notification:	None of the components are listed.
Hazardous chemicals:	None of the components are listed.
SDS distribution:	None of the components are listed.
DEA List I (Precursor Chemicals):	None of the components are listed.
DEA List II (Essential Chemicals):	None of the components are listed.

US State Regulations:

Connecticut Carcinogen Reporting	None of the components are listed.
Connecticut Hazardous Material Survey	None of the components are listed.
Florida Substances Act	None of the components are listed.
Illinois Chemical Safety Act	None of the components are listed.
Illinois Toxic Substances Disclosure Act	None of the components are listed.
Louisiana Reporting	None of the components are listed.
Louisiana Spill	None of the components are listed.
Massachusetts Spill	None of the components are listed.
Massachusetts Substances	None of the components are listed.
Michigan Critical Material	None of the components are listed.
Minnesota Hazardous Substances	None of the components are listed.
New Jersey Hazardous Substances	None of the components are listed.
New Jersey Spill	None of the components are listed.
New Jersey Toxic Catastrophe Prevention Act	None of the components are listed.
New York Acutely Hazardous Substances	None of the components are listed.
New York Toxic Chemical Release Reporting	None of the components are listed.
Pennsylvania RTK Hazardous Substances	None of the components are listed.
Rhode Island Hazardous Substances	None of the components are listed.

EU Regulations

General Classification:	Non-hazardous, according to EU Directives 67/548/EEC and 1999/45/EC (including
REACH SVHC List, (EC) 1907/2006:	This product does not contain SVHC (Substances of Very High Concern, 16 Dec 2013 list)
Major Accident Hazard Legislation:	Directive 96/82/EC Update: 2003 does not apply.
Water contaminating class (Germany):	WGK 1, Slightly hazardous
Hazard symbols or phrases	No symbols or phrases required.
Risk phrases:	No phrases required.
Safety phrases	No phrases required.

International regulations:

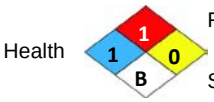
Australia Inventory (AICS):	All ingredients listed, exempted or notified.
Canada Inventory (DSL/NDSL):	All ingredients listed, exempted or notified.
China Inventory (IECSC):	All ingredients listed, exempted or notified.
European Inventory (EINECS/ELINCS):	All ingredients listed, exempted or notified.
Korea Invetory (KECI / TCCL):	All ingredients listed, exempted or notified.
Japan Inventory (ENCS/ISHL/MITI):	All ingredients listed, exempted or notified.
New Zealand Inventory (NZIoC):	All ingredients listed, exempted or notified.
Philippines Inventory (PICCS):	All ingredients listed, exempted or notified.
United States Inventory (TSCA 8b):	All ingredients listed, exempted or notified.

Section 16 - Other Information

Hazardous Material Information System:
HMIS (USA):

Health	1
Flammability	1
Physical Hazards	0
Personal Protection	B

National Fire Protection Association (U.S.A.)
NFPA (USA):



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