

SAFETY DATA SHEET

527 EcoShield[™] Biodegradable EP Rock Drill Oil ISO 100 and 220

Section 1. Identification

GHS product identifier	: 527 EcoShield™ Biodegradable EP Rock Drill Oil ISO 100 and 220	
Other means of identification	: Not available.	
Product type	: Liquid.	
Identified uses Biodegradable extreme pressure rock drill oil.		

Supplier's details	: Schaeffer Mfg. Company 102 Barton Street Saint Louis, Missouri 63104 Tel: 314-865-4100 Fax: 314-865-4107 Toll Free: 1-800-325-9962 E-Mail: safety@schaefferoil.com Web: http://www.schaefferoil.com
Emergency telephone number (with hours of	: +1 314 865-4105 (24-hour response number)

operation)

Section 2. Hazards identification

OSHA/HCS status	: This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
Classification of the substance or mixture	: SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A SKIN SENSITIZATION - Category 1
GHS label elements	
Hazard pictograms	
Signal word	: Warning
Hazard statements	: Causes serious eye irritation. May cause an allergic skin reaction.
Precautionary statements	
Prevention	: Wear protective gloves. Wear eye or face protection. Avoid breathing vapor. Wash hands thoroughly after handling. Contaminated work clothing should not be allowed ou of the workplace.

Response :	IF ON SKIN: Wash with plenty of soap and water. Wash contaminated clothing before
	reuse. If skin irritation or rash occurs: Get medical attention. IF IN EYES: Rinse
	cautiously with water for several minutes. Remove contact lenses, if present and easy
	to do. Continue rinsing. If eye irritation persists: Get medical attention.

Storage

: Not applicable.

Section 2. Hazards identification

Disposal

: Dispose of contents and container in accordance with all local, regional, national and international regulations.

Hazards not otherwise classified

Section 3. Composition/information on ingredients

: None known.

Substance/mixture

: Mixture

Ingredient name	%	CAS number
4-Nonylphenol, branched, ethoxylated	1 - 5	127087-87-0
Long-chain alkyl amine	0.1 - 1	-
Long-chain alkenyl amine	0.1 - 1	-

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures		
Eye contact	: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 20 minutes. Get medical attention.	
Inhalation	: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.	
Skin contact	: Wash with plenty of soap and water. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 20 minutes. Get medical attention. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse.	
Ingestion	: Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.	

Most important symptoms/effects, acute and delayed			
Potential acute health effects			
Eye contact	: Causes serious eye irritation.		
Inhalation	: No known significant effects or critical hazards.		
Skin contact	: May cause an allergic skin reaction.		
Ingestion	: Irritating to mouth, throat and stomach.		

Section 4. First aid measures

<u>Over-exposure signs/symptoms</u>			
Eye contact	: Adverse symptoms may include the following: pain or irritation watering redness		
Inhalation	: No known significant effects or critical hazards.		
Skin contact	: Adverse symptoms may include the following: irritation redness		
Ingestion	: No known significant effects or critical hazards.		
Indication of immediate medical attention and special treatment needed, if necessary			
Notes to physician	 Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled. 		
Specific treatments	: No specific treatment.		
Protection of first-aiders	: No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.		

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media	
Suitable extinguishing media	: Use an extinguishing agent suitable for the surrounding fire.
Unsuitable extinguishing media	: None known.
Specific hazards arising from the chemical	: No specific fire or explosion hazard.
Hazardous thermal decomposition products	: Decomposition products may include the following materials: carbon dioxide carbon monoxide
Special protective actions for fire-fighters	: No special measures are required.
Special protective equipment for fire-fighters	: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel	:	No action shall be taken involving any personal risk or without suitable training. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
For emergency responders	:	If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

Section 6. Accidental release measures

Environmental precautions	: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. U.S.A. regulations may require reporting spills of this material that could reach any surface waters. Report spills to all applicable Federal, State, Provincial and local authorities and/or the United States National Response Center at (800) 424-8802 as appropriate or required.

Methods and materials for containment and cleaning upSmall spill: Stop leak if without risk. Move containers from spill area. Absorb with an inert dry
material and place in an appropriate waste disposal container. Dispose of via a
licensed waste disposal contractor.Large spill: Stop leak if without risk. Move containers from spill area. Approach release from
upwind. Prevent entry into sewers, water courses, basements or confined areas.
Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth,
vermiculite or diatomaceous earth and place in container for disposal according to local
regulations (see Section 13). Dispose of via a licensed waste disposal contractor.
Contaminated absorbent material may pose the same hazard as the spilled product.
Note: see Section 1 for emergency contact information and Section 13 for waste
disposal.

Section 7. Handling and storage

Precautions for safe handling			
Protective measures	:	Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapor or mist. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.	
Advice on general occupational hygiene	:	Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. See also Section 8 for additional information on hygiene measures.	
Conditions for safe storage, including any incompatibilities	:	Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.	

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits None.	<u>S</u>	
Appropriate engineering controls	:	Good general ventilation should be sufficient to control worker exposure to airborne contaminants.
Environmental exposure controls	:	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation.

Section 8. Exposure controls/personal protection

Individual protection measures : Wash hands, forearms and face thoroughly after handling chemical products, before Hygiene measures eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location. **Eye/face protection** Wear eye protection such as safety glasses, chemical goggles, or face shields if 2 engineering controls or work practices are not adequate to prevent eye contact. **Skin protection** Hand protection : Use nitrile or oil resistant gloves. **Body protection** : Personal protective clothing such as gloves, aprons, boots and complete facial protection should be selected based on the task being performed and the risks involved. Users should determine acceptable performance characteristics of protective clothing. Consider physical requirements and other substances present when selecting protective clothina. Appropriate footwear and any additional skin protection measures should be selected Other skin protection 2 based on the task being performed and the risks involved. **Respiratory protection** : If a risk assessment indicates that respiratory protection is required, use a properly fitted, air-purifying or supplied air respirator that complies with an approved standard. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Section 9. Physical and chemical properties

<u>Appearance</u>		
Physical state	4	Liquid.
Color	1	Amber to dark brown.
Odor	1	Mild Vegetable Odor
Odor threshold	1	Not available.
рН	1	Not applicable.
Melting point/ Dropping Point	:	Not available.
Boiling point	1	>200°C (>392°F)
Flash point	1	Open cup: 201 to 216°C (393.8 to 420.8°F) [Cleveland.]
Evaporation rate	1	Not available.
Flammability (solid, gas)	1	Not available.
Lower and upper explosive (flammable) limits	1	Not available.
Vapor pressure	1	Not available.
Vapor density	1	>1 [Air = 1]
Relative density	1	0.9224 to 0.9588
Solubility	1	Negligible in water.
Partition coefficient: n- octanol/water	:	Not available.
Auto-ignition temperature	1	Not available.
Decomposition temperature	:	Not available.
Viscosity	:	Kinematic (40C): 90 to 110, 198 to 242 cSt
Volatility	1	Not available.

Section 10. Stability and reactivity

Reactivity	: No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	: The product is stable.
Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	: Avoid breathing mists and vapors.
Incompatible materials	: Reactive or incompatible with the following materials: Strong oxidizing agents.
Hazardous decomposition products	: Carbon monoxide, carbon dioxide; by products of incomplete combustion.

Section 11. Toxicological information

Information on toxicological	effects
Acute toxicity	
There is no data available.	
Irritation/Corrosion	
There is no data available.	
Sensitization	
There is no data available.	
Carcinogenicity	
There is no data available.	
Specific target organ toxic	<u>ty (single exposure)</u>
There is no data available.	
Specific target organ toxic	ty (repeated exposure)
There is no data available.	
Aspiration hazard	
There is no data available.	
Information on the likely routes of exposure	: Dermal contact. Eye contact. Inhalation. Ingestion.
Potential acute health effec	<u>ts</u>
Eye contact	: Causes serious eye irritation.
Inhalation	: No known significant effects or critical hazards.
Skin contact	: May cause an allergic skin reaction.
Ingestion	: Irritating to mouth, throat and stomach.
Symptoms related to the ph	uysical, chemical and toxicological characteristics
Eye contact	: Adverse symptoms may include the following: pain or irritation watering redness
Inhalation	: No known significant effects or critical hazards.

Section 11. Toxicological information

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Skin contact	: Adverse symptoms may include the following: irritation redness
Ingestion	: No known significant effects or critical hazards.
Delayed and immediate effec	ts and also chronic effects from short and long term exposure
Short term exposure	
Potential immediate effects	: No known significant effects or critical hazards.
Potential delayed effects	: No known significant effects or critical hazards.
<u>Long term exposure</u>	
Potential immediate effects	: No known significant effects or critical hazards.
Potential delayed effects	: No known significant effects or critical hazards.
Potential chronic health effe	ects
General	: Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.
Carcinogenicity	: No known significant effects or critical hazards.
Mutagenicity	: No known significant effects or critical hazards.
Teratogenicity	: No known significant effects or critical hazards.
Developmental effects	: No known significant effects or critical hazards.
Fertility effects	: No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

There is no data available.

Section 12. Ecological information

Toxicity

There is no data available.

Persistence and degradability

There is no data available.

Bioaccumulative potential

There is no data available. Mobility in soil	
Soil/water partition coefficient (Koc)	: Not available.
Other adverse effects	: No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling empty containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

	DOT Classification	IMDG	IATA
UN number	Not regulated.	Not regulated.	Not regulated.
UN proper shipping name	-	-	-
Transport hazard class(es)	-	-	-
Packing group	-	-	-
Environmental hazards	No.	No.	No.
Additional information	-	-	-

AERG : Not applicable

Special precautions for user : Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport in bulk according : Not available.

to Annex II of MARPOL 73/78 and the IBC Code

Section 15. Regulatory information

U.S. Federal regulations	: TSCA 8(a) PAIR: 4-Nonylphenol, branched, ethoxylated; Siloxanes and Silicones, di-Me
	TSCA 8(a) CDR Exempt/Partial exemption: Not determined
	United States inventory (TSCA 8b): Not determined.
	Clean Water Act (CWA) 307: Toluene
	Clean Water Act (CWA) 311: Toluene
Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs)	: Not listed
Clean Air Act Section 602 Class I Substances	: Not listed

Section 15. Regulatory information

Clean Air Act Section 602 Class II Substances	: Not listed
DEA List I Chemicals (Precursor Chemicals)	: Not listed
DEA List II Chemicals (Essential Chemicals)	: Not listed

<u>SARA 302/304</u>

Composition/information on ingredients

No products were found.

SARA 304 RQ : Not applicable.

SARA 311/312

Classification : Immediate (acute) health hazard

Composition/information on ingredients

Name	%	Fire hazard	Sudden release of pressure	Reactive	Immediate (acute) health hazard	Delayed (chronic) health hazard
4-Nonylphenol, branched, ethoxylated	1 - 5	No.	No.	No.	Yes.	No.
Long-chain alkyl amine	0.1 - 1	No.	No.	No.	Yes.	No.
Long-chain alkenyl amine	0.1 - 1	No.	No.	No.	Yes.	No.

SARA 313

No products were found.

State regulations

Massachusetts

None of the components are listed.None of the components are listed.

New York New Jersey

: None of the components are listed.

Pennsylvania

: None of the components are listed.

California Prop. 65

WARNING: This product contains less than 1% of a chemical known to the State of California to cause birth defects or other reproductive harm.

Ingredient name	Cancer		Maximum acceptable dosage level
Toluene	No.	Yes.	7000 μg/day (ingestion) 13000 μg/day (inhalation)

Section 16. Other information

Hazardous Material Information System (U.S.A.)

Health: 1 Flammability: 1 Physical hazards: 0

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks Although HMIS® ratings are not required on SDSs under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller.

The customer is responsible for determining the PPE code for this material.

National Fire Protection Association (U.S.A.)

Health: 1 Flammability: 1 Instability: 0

Section 16. Other information

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