Material Safety Data Sheet

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY/UNDERTAKING

Material Name Product Code	 Pennzoil Grease Pennlith Ultra EP 2 001B2137
Manufacturer/Supplier	: Grupo Q Nicaragua S.A. Complejo Automotriz Managua Km 4 Carretera Norte Contiguo a Rolter Managua Nicaragua
Telephone	: PBX: +505 249 5252
Emergency Telephone Number	: (503) 2248-8200

2. COMPOSITION/INFORMATION ON INGREDIENTS

UN No. : Not applicable.

3. HAZARDS IDENTIFICATION	
EC Classification	: Not classified as dangerous under EC criteria.
Health Hazards	: Not expected to be a health hazard when used under normal conditions. Prolonged or repeated skin contact without proper cleaning can clog the pores of the skin resulting in disorders such as oil acne/folliculitis. High-pressure injection under the skin may cause serious damage including local necrosis. Used grease may contain harmful impurities.
Signs and Symptoms	: Local necrosis is evidenced by delayed onset of pain and tissue damage a few hours following injection. Oil acne/folliculitis signs and symptoms may include formation of black pustules and spots on the skin of exposed areas. Ingestion may result in nausea, vomiting and/or diarrhoea.
Safety Hazards	: Not classified as flammable but will burn.
Environmental Hazards	: Not classified as dangerous for the environment.
4. FIRST AID MEASURES	
General Information	: Not expected to be a health hazard when used under normal conditions.
Inhalation	: No treatment necessary under normal conditions of use. If symptoms persist, obtain medical advice.
Skin Contact	: Remove contaminated clothing. Flush exposed area with water and follow by washing with soap if available. If persistent irritation occurs, obtain medical attention. When using high pressure equipment, injection of product under the skin can

Material Safety Data Sheet

	occur. If high pressure injuries occur, the casualty should be sent immediately to a hospital. Do not wait for symptoms to develop. Obtain medical attention even in the absence of apparent wounds.
Eye Contact	: Flush eye with copious quantities of water. If persistent irritation occurs, obtain medical attention.
Ingestion	 In general no treatment is necessary unless large quantities are swallowed, however, get medical advice.
Advice to Physician	: Treat symptomatically. High pressure injection injuries require prompt surgical intervention and possibly steroid therapy, to minimise tissue damage and loss of function. Because entry wounds are small and do not reflect the seriousness of the underlying damage, surgical exploration to determine the extent of involvement may be necessary. Local anaesthetics or hot soaks should be avoided because they can contribute to swelling, vasospasm and ischaemia. Prompt surgical decompression, debridement and evacuation of foreign material should be performed under general anaesthetics, and wide exploration is essential.

5. FIRE FIGHTING MEASURES

Clear fire area of all non-emergency personnel.

Specific Hazards	:	Hazardous combustion products may include: A complex mixture of airborne solid and liquid particulates and gases (smoke). Carbon monoxide. Unidentified organic and inorganic compounds.
Suitable Extinguishing Media Unsuitable Extinguishing Media	:	Foam, water spray or fog. Dry chemical powder, carbon dioxide, sand or earth may be used for small fires only. Do not use water in a jet.
Protective Equipment for Firefighters	:	Proper protective equipment including breathing apparatus must be worn when approaching a fire in a confined space.

6. ACCIDENTAL RELEASE MEASURES

Avoid contact with spilled or released material. For guidance on selection of personal protective equipment see Chapter 8 of this Material Safety Data Sheet. See Chapter 13 for information on disposal. Observe all relevant local and international regulations.

Protective measures	:	Avoid contact with skin and eyes. Use appropriate containment to avoid environmental contamination. Prevent from spreading or entering drains, ditches or rivers by using sand, earth, or other appropriate barriers.
Clean Up Methods	:	Shovel into a suitable clearly marked container for disposal or reclamation in accordance with local regulations.

7. HANDLING AND STORAGE

General Precautions	:	Use local exhaust ventilation if there is risk of inhalation of
		vapours, mists or aerosols. Properly dispose of any

contaminated rags or cleaning materials in order to prevent fires. Use the information in this data sheet as input to a risk assessment of local circumstances to help determine appropriate controls for safe handling, storage and disposal of this material. Handling : Avoid prolonged or repeated contact with skin. Avoid inhaling vapour and/or mists. When handling product in drums, safety footwear should be worn and proper handling equipment should be used. Keep container tightly closed and in a cool, well-ventilated Storage : place. Use properly labelled and closeable containers. Storage Temperature: 0 - 50°C / 32 - 122°F **Recommended Materials** For containers or container linings, use mild steel or high : density polyethylene. PVC. **Unsuitable Materials** ÷ Additional Information Polyethylene containers should not be exposed to high temperatures because of possible risk of distortion.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Material Safety Data Sheet

Occupational Exposure Limits

Material	Source	Туре	ppm	mg/m3	Notation
Oil mist, mineral	ACGIH	TWA		5 mg/m3	
		[Mist.]			
	ACGIH	STEL		10 mg/m3	
		[Mist.]			
Additional Inform	nation	Due to the pr mists and due		solid consistency, to occur.	generation of
Exposure Contro	ols				necessary will vary
					ns. Select controls
				nt of local circums	
				ude: Adequate ve	
					eated, sprayed or
				er potential for air	
		concentration			
Personal Protect	tive			nent (PPE) should	Imeet
Equipment				andards. Check wi	
Respiratory P	rotection			s ordinarily require	
· · · · · · · · · · · · · · · · · · ·				dance with good i	
				uld be taken to av	
				ntrols do not main	
				hich is adequate h	
					ent suitable for the
				and meeting releva	
		Check with re	spiratory pro	tective equipment	suppliers. Where
		air-filtering re	spirators are	suitable, select ar	appropriate
		combination	of mask and f	filter. Select a filter	suitable for
		combined par >65°C(149 °F		nic gases and vap	ours [boiling point
Hand Protect	ion	Where hand	contact with t	he product may oo nt standards (e.g.	

Material Safety Data Sheet

		US: F739) made from the following materials may provide suitable chemical protection: PVC, neoprene or nitrile rubber gloves. Suitability and durability of a glove is dependent on usage, e.g. frequency and duration of contact, chemical resistance of glove material, glove thickness, dexterity. Always seek advice from glove suppliers. Contaminated gloves should be replaced. Personal hygiene is a key element of effective
		hand care. Gloves must only be worn on clean hands. After using gloves, hands should be washed and dried thoroughly. Application of a non-perfumed moisturizer is recommended.
Eye Protection	:	Wear safety glasses or full face shield if splashes are likely to occur.
Protective Clothing	:	Skin protection not ordinarily required beyond standard issue work clothes.
Monitoring Methods	:	Monitoring of the concentration of substances in the breathing zone of workers or in the general workplace may be required to confirm compliance with an OEL and adequacy of exposure controls. For some substances biological monitoring may also be appropriate.
Environmental Exposure Controls	:	Minimise release to the environment. An environmental assessment must be made to ensure compliance with local environmental legislation.

9. PHYSICAL AND CHEMICAL PROPERTIES

Odour	: Slight hydrocarbon.	
рН	: Not applicable.	
Initial Boiling Point and	: Data not available	
Boiling Range		
Flash point	: > 140 °C / 284 °F (COC)	
Upper / lower Flammability	: Typical 1 - 10 %(V) (based on mineral oil)	
or Explosion limits		
Auto-ignition temperature	: > 320 °C / 608 °F	
Vapour pressure	: < 0,5 Pa at 20 °C / 68 °F (estimated value(s))	
Water solubility	: Negligible.	
n-octanol/water partition	: > 6 (based on information on similar products)	
coefficient (log Pow)		
Kinematic viscosity	: Data not available	
Vapour density (air=1)	: > 1 (estimated value(s))	
Evaporation rate (nBuAc=1)		
\Box vaporation rate (IIDUAC=1)		

10. STABILITY AND REACTIVITY

Conditions to Avoid Materials to Avoid	 Stable. Extremes of temperature and direct sunlight. Strong oxidising agents. Hazardous decomposition products are not expected to form during normal storage.
-------------------------------------------	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

11. TOXICOLOGICAL INFORMATION

Basis for Assessment	:	Information given is based on data on the components and the toxicology of similar products.

Effective Date 06/24/2009

according to EC directive 2001/58/EC

Material Safety Data Sheet

Acute Oral Toxicity Acute Dermal Toxicity Acute Inhalation Toxicity Skin Irritation		Expected to be of low toxicity: LD50 > 5000 mg/kg Expected to be of low toxicity: LD50 > 5000 mg/kg Not considered to be an inhalation hazard under normal conditions of use. Expected to be slightly irritating. Prolonged or repeated skin contact without proper cleaning can clog the pores of the skin resulting in disorders such as oil acne/folliculitis.
Eye Irritation	:	Expected to be slightly irritating.
Respiratory Irritation	:	Inhalation of vapours or mists may cause irritation.
Sensitisation	:	Not expected to be a skin sensitiser.
Repeated Dose Toxicity	:	Not expected to be a hazard.
Mutagenicity	:	Not considered a mutagenic hazard.
Carcinogenicity	:	Product contains mineral oils of types shown to be non- carcinogenic in animal skin-painting studies. Highly refined mineral oils are not classified as carcinogenic by the International Agency for Research on Cancer (IARC). Other components are not known to be associated with carcinogenic effects.
Reproductive and Developmental Toxicity	:	Not expected to be a hazard.
Additional Information	:	Used grease may contain harmful impurities that have accumulated during use. The concentration of such harmful impurities will depend on use and they may present risks to health and the environment on disposal. ALL used grease should be handled with caution and skin contact avoided as far as possible. High pressure injection of product into the skin may lead to local necrosis if the product is not surgically removed.

12. ECOLOGICAL INFORMATION

Ecotoxicological data have not been determined specifically for this product. Information given is based on a knowledge of the components and the ecotoxicology of similar products.

Acute Toxicity	:	Poorly soluble mixture. May cause physical fouling of aquatic organisms. Expected to be practically non toxic: LL/EL/IL50 > 100 mg/l (to aquatic organisms) (LL/EL50 expressed as the nominal amount of product required to prepare aqueous test extract). Mineral oil is not expected to cause any chronic effects to aquatic organisms at concentrations less than 1 mg/l.
Mobility	:	Semi-solid under most environmental conditions. Floats on water. If it enters soil, it will adsorb to soil particles and will not be mobile.
Persistence/degradability	:	Expected to be not readily biodegradable. Major constituents are expected to be inherently biodegradable, but the product contains components that may persist in the environment.
Bioaccumulation	:	Contains components with the potential to bioaccumulate.
Other Adverse Effects	:	Product is a mixture of non-volatile components, which are not expected to be released to air in any significant quantities. Not expected to have ozone depletion potential, photochemical ozone creation potential or global warming potential.

Material Safety Data Sheet

13. DISPOSAL CONSIDERATIONS	
Material Disposal :	Recover or recycle if possible. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste classification and disposal methods in compliance with applicable regulations. Do not dispose into the environment, in drains or in water courses.
Container Disposal	Dispose in accordance with prevailing regulations, preferably to a recognised collector or contractor. The competence of the collector or contractor should be established beforehand.
Local Legislation	Disposal should be in accordance with applicable regional, national, and local laws and regulations.

14. TRANSPORT INFORMATION

ADR

This material is not classified as dangerous under ADR regulations.

RID

This material is not classified as dangerous under RID regulations.

IMDG

This material is not classified as dangerous under IMDG regulations.

IATA (Country variations may apply)

This material is not classified as dangerous under IATA regulations.

15. REGULATORY INFORMATION

The regulatory information is not intended to be comprehensive. Other regulations may apply to this material.

EC Classification	:	Not classified as dangerous under EC criteria.
EINECS	:	All components listed.
TSCA	:	All components listed.

16. OTHER INFORMATION

MSDS Version Number	:	1.0
MSDS Effective Date	:	06/24/2009
MSDS Revisions	:	A vertical bar () in the left margin indicates an amendment from the previous version.
MSDS Regulation	:	The content and format of this safety data sheet is in accordance with Commission Directive 2001/58/EC of 27 July 2001, amending for the second time Commission Directive

Material Safety Data Sheet

MSDS Distribution	91/155/EEC.The information in this document should be made available to all who may handle the product.
Disclaimer	: This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.