SAFETY DATA SHEET

PEERLESS [™] OG2



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

Identification of the substance or mixture			
Product name	: PEERLESS [™] OG2		
Code	: PLOG2		
Use of the substance/mixture	: Peerless OG Greases are calcium sulfonate thickened greases designed for high temperature multipurpose automotive and industrial applications such as chassis, bearings, and oven conveyors.		
Company/undertaking identific	ation		
Supplier	: Petro-Canada Europe Lubricants Limited Wellington House, Starley Way Birmingham International Park Solihull B37 7HB, United Kingdom Tel: +44 (0) 121 781 7264 Fax: +44 (0) 121 781 7401		
e-mail address of person responsible for this SDS	: EUSDS@suncor.com		
Emergency telephone number	: Suncor Energy: (001) 403-296-3000 Canutec Transportation: (001) 613-996-6666 Poison Control Centre: Consult local telephone directory for emergency number(s).		

2. HAZARDS IDENTIFICATION

The product is classified as dangerous according to Directive 1999/45/EC and its amendments.

Classification : Xi; R36

Human health hazards : Irritating to eyes.

See Section 11 for more detailed information on health effects and symptoms.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance/preparation	:	Mixture
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Ingredient name	CAS number	%	EC number	Classification	l
Benzenesulfonic acid, C10-16-alkyl derivs., calcium salts	68584-23-6	1 - 10	271-529-4	Xi; R36	[1]
Bis(nonylphenyl)amine	36878-20-3	1 - 10	253-249-4	R53	[1]
Sulfonic acids, petroleum, calcium salts	61789-86-4	1 - 10	263-093-9	Xi; R36	[1]
Benzenesulfonic acid, mono-C16-24-alkyl derivs., calcium salts	70024-69-0	1 - 10	274-263-7	Xi; R36	[1]
calcium dodecylbenzenesulphonate	26264-06-2	1 - 5	247-557-8	Xi; R41, R38	[1]
See section 16 for the full text of the R-phrases declared above					

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.

[1] Substance classified with a health or environmental hazard

[2] Substance with a workplace exposure limit

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

4. FIRST AID MEASURES

First-aid measures	
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.
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.
Skin contact	: Wash skin thoroughly with soap and water or use recognised skin cleanser. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse.
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 10 minutes. Get medical attention.
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.
Notes to physician	 Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

See Section 11 for more detailed information on health effects and symptoms.

5. FIRE-FIGHTING MEASURES

Extinguishing media : Use an extinguishing agent suitable for the surrounding fire. **Suitable** Not suitable : None known. **Special exposure hazards** : In a fire or if heated, a pressure increase will occur and the container may burst. Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. **Products of combustion** : Carbon oxides (CO, CO2), sulphur oxides (SOx), calcium oxides (CaOx), smoke and irritating vapours as products of incomplete combustion. Fire-fighters should wear appropriate protective equipment and self-contained **Special protective** ÷. breathing apparatus (SCBA) with a full face-piece operated in positive pressure equipment for fire-fighters mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents. Remark : Do not pressurise, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions	:	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Avoid breathing vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see Section 8).
Environmental precautions	:	Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
Methods for cleaning up		
Small spill	-	Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

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6. ACCIDENTAL RELEASE MEASURES

Large spill

: Stop leak if without risk. Move containers from spill area. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. 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. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spill product.

7. HANDLING AND STORAGE

Handling	Put on appropriate personal protective equipment (see Section 8). 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. Remove contaminated clothing and protective equipment before entering eating areas. Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapour 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.
Storage	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 unlabelled containers. Use appropriate containment to avoid environmental contamination.
Packaging materials	
Recommended	Use original container.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure limit values

Ingredient name		Occupational exposure limits
No exposure limit value know	•	
Recommended monitoring procedures	atm of tl prot met nati	his product contains ingredients with exposure limits, personal, workplace hosphere or biological monitoring may be required to determine the effectiveness he ventilation or other control measures and/or the necessity to use respiratory tective equipment. Reference should be made to European Standard EN 689 for thods for the assessment of exposure by inhalation to chemical agents and ional guidance documents for methods for the determination of hazardous stances.
Exposure controls		
Occupational exposure controls	con ingr othe	special ventilation requirements. Good general ventilation should be sufficient to trol worker exposure to airborne contaminants. If this product contains redients with exposure limits, use process enclosures, local exhaust ventilation or er engineering controls to keep worker exposure below any recommended or sutory limits.
Hygiene measures	eati App Wa	sh hands, forearms and face thoroughly after handling chemical products, before ing, smoking and using the lavatory and at the end of the working period. propriate techniques should be used to remove potentially contaminated clothing. sh contaminated clothing before reusing. Ensure that eyewash stations and ety showers are close to the workstation location.
Respiratory protection	star be l	e a properly fitted, air-purifying or air-fed respirator complying with an approved ndard if a risk assessment indicates this is necessary. Respirator selection must based on known or anticipated exposure levels, the hazards of the product and safe working limits of the selected respirator. Recommended: organic vapour r
Hand protection	be v this	emical-resistant, impervious gloves complying with an approved standard should worn at all times when handling chemical products if a risk assessment indicates is necessary. commended: neoprene, nitrile, polyvinyl alcohol (PVA), Viton®.
Eye protection		ety eyewear complying with an approved standard should be used when a risk essment indicates this is necessary to avoid exposure to liquid splashes, mists or ts.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Skin protection	: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.		
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 engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.		

9. PHYSICAL AND CHEMICAL PROPERTIES

General information		
<u>Appearance</u>		
Physical state	Semi-solid.	
Colour	Cream-white	
Odour	Mild petroleum oil like.	
Important health, safety and	vironmental information	
Flash point	Mineral Oil Blend: Open cup: 193°C (379.4°F) [Cleveland.]	
Auto-ignition temperature	Mineral Oil Blend: Fire Point: 220°C (428°F)	
Relative density	Mineral Oil Blend: 0.875 kg/L @ 15°C (59°F)	
Solubility	Insoluble in water.	
Viscosity	73 cSt @ 40°C (104°F), 9.4 cSt @ 100°C (212°F), VI=92	
Pour point	Mineral Oil Blend: <-8°C (18°F)	
Penetration	276 (60 strokes) @ 25°C (77°F)	
Dropping Point	304°C (579°F)	

10. STABILITY AND REACTIVITY

Chemical stability	The product is stable.	
Materials to avoid	Reactive with oxidising agents.	
Hazardous decomposition products	May release COx, SOx, CaOx, smoke and irritating vapours when heated t decomposition.	to

11. TOXICOLOGICAL INFORMATION

Potential acute health effect	s		
Inhalation	:	No known significant effects or critical hazards.	
Ingestion	:	No known significant effects or critical hazards.	
Skin contact	:	No known significant effects or critical hazards.	
Eye contact	:	Irritating to eyes.	
Acute toxicity			
Conclusion/Summary	:	Not available.	
Potential chronic health effe	cts		
Chronic toxicity			
Conclusion/Summary	:	Not available.	
Irritation/Corrosion			
Conclusion/Summary	:	Not available.	
Sensitiser			
Conclusion/Summary	:	Not available.	
Carcinogenicity			
Conclusion/Summary	:	Not available.	
Mutagenicity			
Conclusion/Summary	:	Not available.	
Teratogenicity			
Conclusion/Summary	:	Not available.	
Reproductive toxicity			
Conclusion/Summary	1	Not available.	
Chronic effects	:	No known significant effects or critical hazards.	
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11. TOXICOLOGICAL INFORMATION

: Not listed as carcinogenic by OSHA, NTP or IARC.			
: No known significant effects or critical hazards.			
: No known significant effects or critical hazards.			
: No known significant effects or critical hazards.			
: No known significant effects or critical hazards.			
<u>toms</u>			
: No specific data.			
: No specific data.			
: No specific data.			
: Adverse symptoms may include the following: irritation watering redness			

12. ECOLOGICAL INFORMATION

Environmental effects	: No known significant effects or critical hazards.
Aquatic ecotoxicity	
Conclusion/Summary	: Not available.
Biodegradability	
Conclusion/Summary	: Not available.
Other adverse effects	: No known significant effects or critical hazards.

13. DISPOSAL CONSIDERATIONS

Methods of disposal: The generation of waste should be avoided or minimised wherever possible.
Significant quantities of waste product residues should not be disposed of via the
foul sewer but processed in a suitable effluent treatment plant. Dispose of surplus
and non-recyclable products via a licensed waste disposal contractor. Disposal of
this product, solutions and any by-products should at all times comply with the
requirements of environmental protection and waste disposal legislation and any
regional local authority requirements. 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 emptied containers that have not been cleaned or rinsed out. Empty
containers or liners may retain some product residues. Avoid dispersal of spilt
material and runoff and contact with soil, waterways, drains and sewers.

Hazardous waste

: The classification of the product may meet the criteria for a hazardous waste.

14. TRANSPORT INFORMATION

International transport regulations Regulatory **UN number Proper shipping name Classes** PG* Label Additional information information **ADR/RID Class** Not regulated. **ADN/ADNR Class** Not Not available. Not available. available. **IMDG Class** Not regulated. **IATA Class** Not regulated.

PG* : Packing group

15. REGULATORY INFORMATION

EU regulations

Classification and labeling have been determined according to EU Directives 67/548/EEC and 1999/45/EC (including amendments) and take into account the intended product use.

Hazard symbol or symbols



Risk phrases	: R36- Irritating to eyes.
Safety phrases	: S2- Keep out of the reach of children. S46- If swallowed, seek medical advice immediately and show this container or label.
International regulations	
Canada inventory	: All components are listed or exempted.
United States inventory (TSCA 8b)	: All components are listed or exempted.
Europe inventory	: All components are listed or exempted.
International lists	: Australia inventory (AICS): All components are listed or exempted. China inventory (IECSC): All components are listed or exempted. Japan inventory: All components are listed or exempted. Korea inventory: All components are listed or exempted.

Philippines inventory (PICCS): All components are listed or exempted.

16. OTHER INFORMATION				
Full text of R-phrases referred to in sections 2 and 3 - Europe	R41- Risk of serious damage to eyes. R36- Irritating to eyes. R38- Irritating to skin. R53- May cause long-term adverse effects in the aquatic environment.			
Full text of classifications referred to in sections 2 and 3 - Europe	Xi - Irritant			
Key data sources	Available upon request. ™ Trademark of Suncor Energy Inc. Used under licence.			
<u>History</u>				
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For Product Safety Information: (001) 905-804-4752

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

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