Conforms to ANSI Z400.5-2004 Standard (United States, Canada, Mexico, Brazil).



Material Safety Data Sheet ROYCO 482

1. Product and company identification		
Product name	: ROYCO 482	
Material uses	: Lubricant.	
Supplier/Manufacturer	: Anderol, Inc., a Chemtura Company 215 Merry Lane East Hanover, NJ 07936 Tel: (973) 887-7410 Fax: (973) 887-8422	
MSDS #	: EH1070	
MILSPEC#	: MIL-C-6529C Am 2 Type II	
Validation date	: 07/31/2007	
MSDS authored by:	: Atrion Regulatory Services, Inc.	
In case of emergency	: CHEMTREC: 800-424-9300 (United States) CANUTEC (613) 996-6666 (Canada)	
2. Hazards ide	ntification	
Dhusical state	- Limited	

Physical state	Liquid.	
Odor	Hydrocarbon (Slight.)	
Hazard status	This material is classified hazardous under OSHA regulations in the United States, the WHMIS Controlled Product Regulation in Canada, the NOM-018-STPS-2000 in Mexic and Brazil NBR 14725:2001.	
Emergency overview	WARNING!	
	CAUSES EYE AND SKIN IRRITATION.	
	Irritating to eyes and skin. Avoid breathing vapor or mist. Avoid contact with eyes, sk and clothing. Wash thoroughly after handling.	in
Routes of entry	Skin contact. Eye contact. Ingestion.	
Potential acute health effect		
Inhalation	No known significant effects or critical hazards.	
Ingestion	No known significant effects or critical hazards.	
Skin	Irritating to skin.	
Eyes	Irritating to eyes.	
Potential chronic health effe		
Chronic effects	No known significant effects or critical hazards.	
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.	
Over-exposure signs/sympt	\$	
Inhalation	No specific data.	
Ingestion	No specific data.	
Skin	Adverse symptoms may include the following: irritation redness	



2. Hazards identification

Eyes

: Adverse symptoms may include the following: pain or irritation watering redness

Medical conditions aggravated by over-

exposure

See toxicological information (section 11)

3. Composition/information on ingredients

: None known.

United States		
Name	CAS number	%
Distillates (Petroleum), Hydrotreated Heavy Paraffinic	64742-54-7	30 - 60

Canada								
Name							CAS number	%
Distillates (Petroleum), Hydrotreated He	eavy Paraffinic						64742-54-7	30 - 60
		Mexico						
			Cla	Issifi	catio	on		
Name	UN number	IDLH	н	F	R	Special	CAS number	%
Distillates (Petroleum), Hydrotreated Heavy Paraffinic	Not regulated.	-	1	1	0		64742-54-7	30 - 60
		Brazil						
Name							CAS number	%
Distillates (Petroleum), Hydrotreated Heavy Paraffinic				64742-54-7	30 - 60			

There are no 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.

4. First aid measures

Eye contact	: Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 20 minutes. Get medical attention if irritation occurs.
Skin contact	: Wash with soap and water. Get medical attention if irritation occurs.
Inhalation	 If inhaled, remove to fresh air. If not breathing, give artificial respiration. Get medical attention if symptoms appear.
Ingestion	: Do not induce vomiting. Never give anything by mouth to an unconscious person. Get medical attention if symptoms appear.
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	 No specific treatment. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.



5. Fire-fighting measures

: In a fire or if heated, a pressure increase will occur and the container may burst.
: Use an extinguishing agent suitable for the surrounding fire.
: None known.
: 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.
: The final products of combustion are carbon oxides and water. Nitrogen, sulfur and metal oxides may also be produced in some cases.
: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

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 spilled material. Avoid breathing vapor 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 spilled 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	:	Stop leak if without risk. Move containers from spill area. Approach 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 (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.

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. Do not breathe vapor or mist. Do not ingest. Avoid contact with eyes, skin and clothing. 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 unlabeled containers. Use appropriate containment to avoid environmental contamination.

8. Exposure controls/personal protection

Product name

United States

Distillates (Petroleum), Hydrotreated Heavy Paraffinic

Exposure limits

ACGIH TLV (United States). TWA: 5 mg/m³ 8 hour(s). OSHA PEL 1989 (United States). TWA: 5 mg/m³ 8 hour(s).

Royco* aviation lubricants	ROYCO 482
Ca	nada
Product name	Exposure limits
Distillates (Petroleum), Hydrotreated Heavy Paraffinic	ACGIH TLV (United States). TWA: 5 mg/m ³ 8 hour(s). OSHA PEL 1989 (United States). TWA: 5 mg/m ³ 8 hour(s).
Me	exico
Product name	Exposure limits
Distillates (Petroleum), Hydrotreated Heavy Paraffinic	ACGIH TLV (United States). TWA: 5 mg/m ³ 8 hour(s).
В	razil
Product name Distillates (Petroleum), Hydrotreated Heavy Paraffinic	Exposure limits ACGIH TLV (United States). TWA: 5 mg/m ³ 8 hour(s). OSHA PEL 1989 (United States). TWA: 5 mg/m ³ 8 hour(s).

Consult local authorities for acceptable exposure limits.

Recommended monitoring procedures	:	If 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/or the necessity to use respiratory protective equipment.
Engineering measures	:	No special ventilation requirements. Good general ventilation should be sufficient to control worker exposure to airborne contaminants. If this product contains ingredients with exposure limits, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure below any recommended or statutory limits.
Personal protection		
Eye protection	:	Safety glasses with side shields.
Skin protection/Body	:	Not applicable.
Respiratory protection	:	Not applicable.
Hand protection	:	Natural rubber (latex).
HMIS Code/Personal protective equipment	:	В
Personal protection in case of a large spill	:	Safety glasses, goggles or face shield. Impervious gloves. Full suit. Boots. Wear MSHA/NIOSH-approved self-contained breathing apparatus or equivalent and full protective gear.
Hygiene measures	:	Wash hands, forearms and face thoroughly after handling compounds and before eating, smoking and using the lavatory and at the end of the day. Follow good industrial hygiene practice.
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.



Physical and chemical properties 9

Physical state	: Liquid.
Color	: Amber.
Odor	: Hydrocarbon (Slight.)
Specific gravity	: 0.90 (Water = 1)
Flash point	: Open cup: 290°C (554°F) (Cleveland.).

10. Stability and reactivity

11 Taxiaalagiaal	information
Conditions of reactivity	: None known.
Hazardous polymerization	: Will not occur.
Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.
Incompatibility with various substances	: Reactive or incompatible with the following materials: oxidizing materials.
Conditions of instability	: None known.
Stability and reactivity	: The product is stable.

11. Toxicological information

Acute Effects	
Eyes	: Irritating to eyes.
Skin	: Irritating to skin.
Inhalation	: No known significant effects or critical hazards.
Ingestion Potential chronic health effects	 No known significant effects or critical hazards. Carcinogenic effects: Not applicable. Mutagenic effects: Not applicable. Teratogenic effects: Not applicable.

12. Ecological information

Environmental effects : No known significant effects or critical hazards.

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

13. Disposal considerations

Waste disposal The generation of waste should be avoided or minimized wherever possible. 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. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Disposal should be in accordance with applicable regional, national and local laws and regulations. Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees.

14. Transport information

NAERG

: Not applicable.

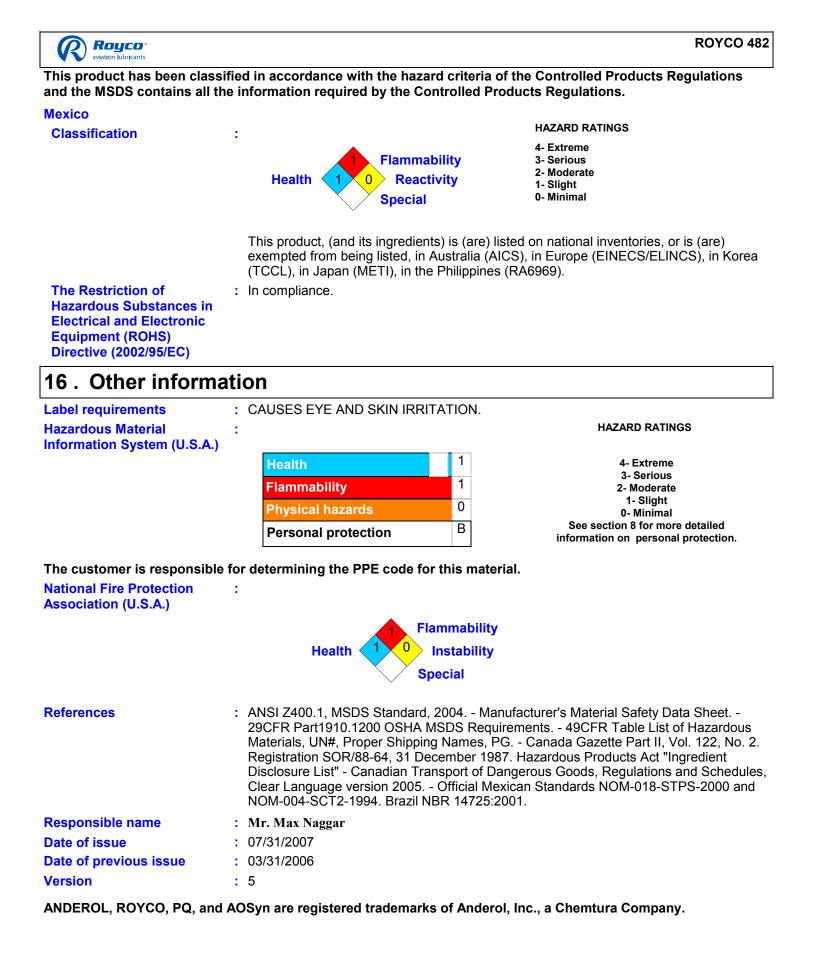
Regulatory information

UN/ IMDG/ IATA DOT/ TDG : Not regulated.



15. Regulatory information

United States	
HCS Classification	: Irritating material
U.S. Federal regulations	: United States inventory (TSCA 8b): All components are listed or exempted.
	SARA 302/304/311/312 extremely hazardous substances: No products were found. SARA 302/304 emergency planning and notification: No products were found. SARA 302/304/311/312 hazardous chemicals: No products were found. SARA 311/312 MSDS distribution - chemical inventory - hazard identification: No products were found.
	Clean Water Act (CWA) 307: Zinc, Bis(Dipentylcarbamodithioato-S,S')-, (T-4)-
	Clean Water Act (CWA) 311: No products were found.
	Clean Air Act (CAA) 112 accidental release prevention: No products were found.
	Clean Air Act (CAA) 112 regulated flammable substances: No products were found.
	Clean Air Act (CAA) 112 regulated toxic substances: No products were found.
State regulations	 Connecticut Carcinogen Reporting: None of the components are listed. Connecticut Hazardous Material Survey: None of the components are listed. Florida substances: None of the components are listed. Illinois Chemical Safety Act: None of the components are listed. Illinois Toxic Substances Disclosure to Employee 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. Miengan Critical Material: 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 Spill: None of the components are listed. New York Acutely Hazardous Substances: 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. New York Toxic Chemical Release Reporting: None of the components are listed. Rhode Island Hazardous Substances: None of the components are listed.
California Prop. 65	: No products were found.
Canada	
WHMIS (Canada)	: Class D-2B: Material causing other toxic effects (Toxic).
Canadian lists	 CEPA Toxic substances: None of the components are listed. Canadian ARET: None of the components are listed. Canadian NPRI: None of the components are listed. Alberta Designated Substances: None of the components are listed. Ontario Designated Substances: None of the components are listed. Quebec Designated Substances: None of the components are listed.
Canada inventory	: Canada inventory: All components are listed or exempted.





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.

