

Material Safety Data Sheet ROYCO 581

Product and company identification

Product name : ROYCO 581

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 # : EH1069

MILSPEC# : Mil-C-6529C Am 2 Type 1

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 identification

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 Mexico

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, skin

and clothing. Wash thoroughly after handling.

Routes of entry : Skin contact. Eye contact. Ingestion.

Potential acute health effects

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 effects

Chronic effects
 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.
 No known significant effects or critical hazards.

Over-exposure signs/symptoms

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 overexposure : None known.

See toxicological information (section 11)

3. Composition/information on ingredients

	Uni	ted Sta	tes					
Name							CAS number	%
Distillates (Petroleum), Hydrotreated Heavy Paraffinic						64742-54-7	5 - 10	
		Canada	<u> </u>					
Name							CAS number	%
Distillates (Petroleum), Hydrotreated Heavy Paraffinic					64742-54-7	5 - 10		
		Mexico						
		Classification						
Name	UN number	IDLH	Н	F	R	Special	CAS number	%
Distillates (Petroleum), Hydrotreated Heavy Paraffinic	Not regulated.	-	1	1	0		64742-54-7	5 - 10
		Brazil						
Name							CAS number	%
Distillates (Petroleum), Hydrotreated Heavy Paraffinic						64742-54-7	5 - 10	

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.

Date of issue : 07/31/2007 Page: 2/7



Fire-fighting measures **5** .

Extinguishing media

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

Suitable

: Use an extinguishing agent suitable for the surrounding fire.

Not suitable

: None known.

Special exposure hazards

: 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.

Hazardous combustion products

The final products of combustion are carbon oxides and water. Nitrogen, sulfur and metal oxides may also be produced in some cases.

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.

Accidental release measures 6.

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.

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.

Exposure controls/personal protection 8.

United States

Product name

Exposure limits

Distillates (petroleum), hydrotreated heavy paraffinic

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

Date of issue : 07/31/2007 Page: 3/7



Canada

Product name Exposure limits

Distillates (Petroleum), Hydrotreated Heavy Paraffinic ACGIH TLV (United States).

TWA: 5 mg/m³ 8 hour(s).

Mexico

Product name Exposure limits

Distillates (Petroleum), Hydrotreated Heavy Paraffinic ACGIH TLV (United States).

TWA: 5 mg/m³ 8 hour(s).

Brazil

Product name Exposure limits

Distillates (Petroleum), Hydrotreated Heavy Paraffinic

ACGIH TLV (United States).

TWA: 5 mg/m³ 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

: B

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.

9. Physical and chemical properties

Physical state : Liquid.
Color : Amber.

Odor : Hydrocarbon (Slight.)

Specific gravity : 0.89

Flash point : Open cup: 284°C (543.2°F) (Cleveland.).

Date of issue : 07/31/2007 Page: 4/7



10. Stability and reactivity

Stability and reactivity

: The product is stable.

Conditions of instability

: None known.

Incompatibility with various

substances

products

Reactive or incompatible with the following materials: oxidizing materials.

: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Hazardous polymerization

Hazardous decomposition

Will not occur. **Conditions of reactivity** : None known.

11. Toxicological information

Acute Effects

: Irritating to eyes. Eyes Skin : Irritating to skin.

No known significant effects or critical hazards. Inhalation Ingestion No known significant effects or critical hazards.

Potential chronic health

effects

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.

Date of issue : 07/31/2007 Page: 5/7



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: No products were found. 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.

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.

California Prop. 65

Canada

WHMIS (Canada)

: No products were found.

: 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.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

Mexico

Classification

Health 1 0 Reactivity Special

HAZARD RATINGS

- 4- Extreme
- 3- Serious
- 2- Moderate
- 1- Slight

0- Minimal

This product, (and its ingredients) is (are) listed on national inventories, or is (are) exempted from being listed, in Australia (AICS), in Europe (EINECS/ELINCS), in Korea (TCCL), in Japan (METI), in the Philippines (RA6969).

Date of issue : 07/31/2007 Page: 6/7



The Restriction of Hazardous Substances in Electrical and Electronic Equipment (ROHS) Directive (2002/95/EC) : In compliance.

16. Other information

Label requirements : CAUSES EYE AND SKIN IRRITATION.

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

Health 1
Flammability 1
Physical hazards 0
Personal protection B

HAZARD RATINGS

4- Extreme 3- Serious 2- Moderate

1- Slight 0- Minimal

See section 8 for more detailed information on personal protection.

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

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



References : ANSI Z400.1, MSDS Standard, 2004. - Manufacturer's Material Safety Data Sheet. -

29CFR Part1910.1200 OSHA MSDS Requirements. - 49CFR Table List of Hazardous Materials, UN#, Proper Shipping Names, PG. - Canada Gazette Part II, Vol. 122, No. 2. Registration SOR/88-64, 31 December 1987. Hazardous Products Act "Ingredient Disclosure List" - Canadian Transport of Dangerous Goods, Regulations and Schedules, Clear Language version 2005. - Official Mexican Standards NOM-018-STPS-2000 and

NOM-004-SCT2-1994. Brazil NBR 14725:2001.

Responsible name : Mr. Max Naggar

Date of issue : 07/31/2007

Date of previous issue : 03/31/2006

Version : 5

ANDEROL, ROYCO, PQ, and AOSyn are registered trademarks of Anderol, Inc., a Chemtura Company.

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.



Date of issue : 07/31/2007 Page: 7/7