

<u> Material Safety Data Sheet</u>

ROYCO^(R)

Section 1. Chemical Product and Company Identification

MSDS# **Common Name** ROYCO^(R) 43

Synonym Not available. SAE-AMS-G-4343 **Code**

Trade Name Not available.

Material Uses : Grease.

: Anderol Inc. **Manufacturer** 215 Merry Lane

> East Hanover, NJ 07936 Tel: (973) 887-7410 Fax: (973) 887-8422

: 700,010-0

Validation Date : 03/09/2004

In Case of Emergency: CHEMTREC: 800-424-9300

(United States)

Section 2. Composition, Information on Ingredients

Name	CAS#	% by Weight	UN Number
1-Decene, tetramer, mixed with 1-Decene trimer, hydrogenated	68649-12-7	15-30	Not applicable.
Calcium dinonylnaphthalene sulfonate	57855-77-3	1-3	Not applicable.
Distillates (petroleum), hydrotreated heavy naphthenic	64742-52-5	1-3	Not applicable.

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.

See Section 8 for Exposure Limits. See Section 11 for Toxicological Data.

Section 3. Hazards Identification

Physical State and Appearance

: Solid. (Grease.)

Emergency Overview

: CAUTION!

MAY CAUSE ALLERGIC SKIN REACTION. HARMFUL TO AQUATIC ORGANISMS.

MAY BE HARMFUL TO ENVIRONMENT IF RELEASED IN LARGE AMOUNTS. Avoid contact with eyes, skin and clothing. Wash thoroughly after handling.

Routes of Entry : Skin Contact. Eye contact. Ingestion.

Potential Acute Health Effects

Eyes: Slightly hazardous in case of eye contact (irritant).

Skin: Hazardous in case of skin contact (sensitizer). Slightly hazardous in case of skin contact (irritant). Skin

inflammation is characterized by itching, scaling, reddening, or, occasionally, blistering.

Inhalation: Not available. **Ingestion**: Not available.

Potential Chronic Health

Effects

: Carcinogenic Effects: Not applicable. Mutagenic Effects: Not available.

Teratogenic Effects: Not available.

Medical Conditions Aggravated by Overexposure

: Repeated or prolonged exposure is not known to aggravate medical condition.

Over-exposure : Not available. signs/symptoms

See Toxicological Information (Section 11)

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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 15 minutes. Get medical attention if irritation occurs.

Skin Contact

In case of contact, immediately flush skin with plenty of water. Get medical attention.

Inhalation

: If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

Ingestion

: Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, call a physician immediately. Have conscious person drink several glasses of water or milk.

Notes to Physician

Not available.

Section 5. Fire Fighting Measures

Flammability of the Product: May be combustible at high temperature.

Auto-ignition Temperature

: Not available. : Not available.

Flash Points Flammable Limits

: Not available.

Products of Combustion

: These products are carbon oxides (CO, CO₂). Thermal decomposition products are dependent on temperature conditions.

Fire Hazards in Presence of : Not available. Various Substances

Explosion Hazards in Presence of Various Substances

: Risks of explosion of the product in presence of mechanical impact: Not available. Risks of explosion of the product in presence of static discharge: Not available.

Fire Fighting Media and Instructions

: SMALL FIRE: Use dry chemical powder.

LARGE FIRE: Use water spray, fog or foam. Do not use water jet.

Protective Clothing (Fire)

: Fire-fighters should wear positive pressure self-contained breathing apparatus (SCBA) and full turnout gear. Be sure to use a MSHA/NIOSH approved respirator or equivalent.

Special Remarks on Fire Hazards

: Container explosion may occur under fire conditions or when heated. Cool closed containers exposed to fire with water.

Section 6. Accidental Release Measures

Small Spill and Leak

: Use appropriate tools to put the spilled solid in a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.

Large Spill and Leak

: Absorb with an inert material and put the spilled material in an appropriate waste disposal. Do not allow any potentially contaminated water including rain water, runoff from fire fighting or spills to enter any waterway, sewer or drain. Note: See section 8 for personal protective equipment and section 13 for waste disposal.

Section 7. Handling and Storage

Handling

: Avoid breathing vapors or spray mists. After handling, always wash hands thoroughly with soap and water. Avoid contact with eyes, skin and clothing. Use with adequate ventilation.

Storage

: Keep container tightly closed. Store in a dry, cool and well-ventilated area.

Section 8. Exposure Controls, Personal Protection

Engineering Controls

: Good general ventilation should be sufficient to control airborne levels. Ensure that eyewash stations and safety showers are proximal to the work-station location.

Personal Protection

Eyes: Safety glasses. **Body**: Lab coat.

Respiratory: A respirator is not needed under normal and intended conditions of product use.

Hands: Chemical resistant gloves.

Feet: Shoes.

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Protective Clothing (Pictograms)



Personal Protection in Case of a Large Spill

: Splash goggles. Full suit. Vapor respirator. Boots. Chemical resistant gloves. A self-contained breathing apparatus should be used to avoid inhalation of the product.

Exposure Limits

1-Decene, tetramer, mixed with 1-Decene trimer,

hydrogenated

Calcium dinonylnaphthalene sulfonate

Distillates (petroleum), hydrotreated heavy naphthenic

ACGIH TLV (United States).

TWA: 5 mg/m³ 8 hour(s). Form: Mist

Not available.

ACGIH TLV (United States).

TWA: 5 mg/m³ 8 hour(s). Form: Mist

OSHA PEL Z2 (United States).

TWA: 5 mg/m³ 8 hour(s). Form: Mist STEL: 10 mg/m3 15 minute(s). Form: Mist

Consult local authorities for acceptable exposure limits.

Section 9. Physical and Chemical Properties

Physical State and

: Solid. (Grease.)

appearance

Tan.

Color Slight. Odor

Molecular Weight Not applicable. **Molecular Formula** Not applicable. pH (1% Soln/Water) : Not applicable. **Boiling/Condensation Point** : Not available. **Pourpoint** : Not available.

Specific Gravity Weighted average: 0.88 (Water = 1)

Vapor Pressure Not available. Vapor Density Not available. Volatility Not available. **Odor Threshold** Not available. **Evaporation Rate** Not available.

VOC 1 (%)

Viscosity Not available.

LogK_{ow} The product is more soluble in octanol.

Partially soluble in methanol, n-octanol, acetone. **Solubility**

Insoluble in cold water, hot water.

Section 10. Stability and Reactivity

Stability and Reactivity

: The product is stable.

Conditions of Instability

: Not available.

Incompatibility with

: Reactive with oxidizing agents.

Various Substances

Hazardous Decomposition

: Not available.

Products

Hazardous Polymerization : Will not occur.

Section 11. Toxicological Information

Toxicity Data

Ingredient Name Test Oral Route Result >5000 mg/kg Species Rat LD50 Distillates (petroleum), hydrotreated heavy naphthenic

Chronic Effects on Humans : Not available.

Other Toxic Effects on

: Hazardous in case of skin contact (sensitizer).

Humans

Slightly hazardous in case of skin contact (irritant), of eye contact (irritant).

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Special Remarks on Toxicity: Not available.

to Animals

Special Remarks on Other : No

: Not available.

Toxic Effects on Humans

Section 12. Ecological Information

Ecotoxicity Data

<u>Ingredient Name</u> <u>Species</u> <u>Period</u> <u>Result</u>

BOD and COD : Not available.

Biodegradable/OECD : Not available.

Mobility : Not available.

Products of Degradation

: These products are carbon oxides (CO, CO₂) and water, sulfur oxides (SO₂, SO₃). Some metallic oxides.

Toxicity of the Products of Biodegradation

: The product itself and its products of degradation are not toxic.

Special Remarks on the

: Not available.

Products of Biodegradation

Section 13. Disposal Considerations

Waste Information

: Waste must be disposed of in accordance with federal, state and local environmental control regulations. Incinerate waste materials.

Consult your local or regional authorities.

Section 14. Transport Information

Regulatory Information	UN Number	Proper Shipping Name	Class	Packing Group	Label	Additional Information
United States (DOT)	Not regulated.	-	-			-
Canada (TDG)	Not regulated.	-	-			-
Mexico (NOM-004-SCT2-1994)	Not regulated.	-	-			-
Brazil	Not regulated.	-	-			-
IMDG Code	Not regulated.	-	-	-		-
IATA-DGR Class	Not regulated.	-	-	-		-

NAERG: Not applicable.

Section 15. Regulatory Information

HCS Classification

: Sensitizing material

U.S. Federal Regulations

: TSCA 8(b) inventory: All components listed.

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.

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.

OADA 04/104/04/05/05/17/312 Hazardous chemicals. No products were found.

SARA 311/312 MSDS distribution - chemical inventory - hazard identification: No products were found.

SARA 313 Ingredient Name % by Weight

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Form R - Reporting Requirements

: No products were found.

Supplier Notification

: No products were found.

State Regulations

: New Jersey: Octadecanoic Acid, 12-Hydroxy-; Lithium 12-hydroxystearate

California prop. 65: No products were found.

WHMIS (Canada)

: D-2B: Material causing other toxic effects (TOXIC).

CEPA DSL: All components listed.

This product has been classified in accordance with the hazard criteria of the Canadian CPR, the United States OSHA, the Mexican NOM -018-STPS-2000 and the Brazilian NBR 14725:2001. This MSDS contains all the information required by the CPR, OSHA, the American National Standard Institute (ANSI) Z400.1, NOM -018-STPS-2000 and NBR 14725:2001.

Hazardous Ingredients Classification of the Degree of Risk (Mexico) Ingredient Name
1-Decene, tetramer, mixed with 1-Decene trimer, hydrogenated

Calcium dinonylnaphthalene sulfonate Distillates (petroleum), hydrotreated heavy

naphthenic

Health	Flammability	Reactivity Other
1	1	0
1	0	0
2	1	0

International Lists

: All components are listed on major international inventories or exempted from being listed in Australia (AICS), Europe (EINECS/ELINCS), Korea (TCCL), Japan (METI/MOL), Philippines (RA6969).

Section 16. Other Information

Label Requirements

: MAY CAUSE ALLERGIC SKIN REACTION.
HARMFUL TO AQUATIC ORGANISMS.
MAY BE HARMFUL TO ENVIRONMENT IF RELEASED IN LARGE AMOUNTS.

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

Health	1
Fire Hazard	1
Reactivity	0
Personal Protection	В

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



References

: -Manufacturer's Material Safety Data Sheet. -Material safety data sheet issued by: la Commission de la Santé et de la Sécurité du Travail du Québec. -Canada Gazette Part II, Vol. 122, No. 2 Registration SOR/88-64 31 December, 1987 Hazardous Products Act "Ingredient Disclosure List". -Provisional Domestic Substances List, Canadian Environmental Protection Act, Volume 1-Registry Number Index, April 1990; Environment Canada. - Official Mexican Standards NOM-018-STPS-2000 and NOM-004-SCT2-1994. -"Regulations respecting the handling, offering for transport and transporting of dangerous goods." Extract from the Canada Gazette Part II, dated February 6, 1985. Registration SOR/85-77 18 January, 1985. - 29CFR Part1910.1200 OSHA MSDS Requirements. - 49CFR Table List of Hazardous Materials, UN#, Proper Shipping Names, PG.

Other Special Considerations Responsible Name

: Mr. Max Naggar : 03/09/2004

Not available.

Date of Issue
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: 2.1

Version

Notice to Reader

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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.