



# Material Safety Data Sheet

## ROYCO 46, 46TF

### 1. Product and company identification

<b>Common name</b>	: ROYCO 46, 46TF	<b>Supplier/Manufacturer</b>
<b>MSDS#</b>	: AC1087	Anderol Canada Corp.
<b>MILSPEC#</b>	: Mil-L-46000;Mil-L-46150	700 Third Line
<b>Material use</b>	: Lubricant.	Oakville, ONT
<b>In case of emergency</b>	: CANUTEC (613) 996-6666 (Canada) CHEMTREC: 800-424-9300 (United States)	Canada L6J 5A3
<b>MSDS authored by:</b>	: Kemika XXI Inc. + 1-450-435-7475	Tel: (905) 827-9087
<b>Date of issue</b>	: 03/31/2006	Fax: (905) 827-2862

### 2. Hazards identification

**Physical state** : Liquid.

**Odor** : Slight.

**Color** : Beige.

**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 SEVERE EYE IRRITATION.  
CAUSES SKIN IRRITATION.  
MAY BE HARMFUL IF SWALLOWED.  
Do not ingest. Avoid contact with skin and clothing. Wash thoroughly after handling.

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

**Potential acute health effects**

**Eyes** : Severely irritating to eyes.

**Skin** : Irritating to skin.

**Inhalation** : No known significant effects or critical hazards.

**Ingestion** : May be harmful if swallowed.

**Potential chronic health effects** : Carcinogenic effects: Not applicable.  
Mutagenic effects: Not applicable.  
Teratogenic effects: Not applicable.

**Medical conditions aggravated by over-exposure** : Repeated skin exposure can produce local skin destruction or dermatitis. Repeated or prolonged contact with spray or mist may produce chronic eye irritation and severe skin irritation.

See toxicological information (section 11)

### 3. Composition/information on ingredients

#### United States

Name	CAS number	%
Phosphonic Acid, Bis(1-Methylethyl) Ester	1809-20-7	1 - 5

#### Canada

Name	CAS number	%
Phosphonic Acid, Bis(1-Methylethyl) Ester	1809-20-7	1 - 5

### Mexico

#### Classification

Name	UN number	IDLH	H	F	R	Special	CAS number	%
Phosphonic Acid, Bis (1-Methylethyl) Ester	Not regulated.	-	1	2	0		1809-20-7	1 - 5

### Brazil

Name	CAS number	%
Phosphonic Acid, Bis(1-Methylethyl) Ester	1809-20-7	1 - 5

See Sections 8, 11 and 14 for details.

## 4 . First aid measures

- Eye contact** : Check for and remove any contact lenses. In case of contact, immediately flush skin with plenty of water for at least 20 minutes while removing contaminated clothing and shoes. 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.
- Notes to physician** : Not available.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training.

## 5 . Fire-fighting measures

- Flammability of the product** : May be combustible at high temperature.
- Products of combustion** : The final products of combustion are carbon oxides and water. Nitrogen, sulfur and metal oxides may also be produced in some cases.
- Extinguishing media**
  - Suitable** : Use an extinguishing agent suitable for the surrounding fire.
  - Not suitable** : None known.
- Special exposure hazards** : No specific hazard.
- 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.

## 6 . Accidental release measures

- Personal precautions** : Immediately contact emergency personnel. Keep unnecessary personnel away. Use suitable protective equipment.
- Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.
- Methods for cleaning up** : If emergency personnel are unavailable, contain spilled material. For small spills, add absorbent (soil may be used in the absence of other suitable materials), scoop up material and place in a sealable, liquid-proof container for disposal. For large spills, dike spilled material or otherwise contain material to ensure runoff does not reach a waterway. Place spilled material in an appropriate container for disposal.

## 7. Handling and storage

- Handling** : Do not ingest. Avoid contact with eyes, skin and clothing. Wash thoroughly after handling.
- Storage** : Keep container tightly closed. Keep container in a cool, well-ventilated area.

## 8. Exposure controls/personal protection

Consult local authorities for acceptable exposure limits.

- Engineering measures** : No special ventilation requirements. Good general ventilation should be sufficient to control airborne levels. 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 NIOSH-approved self-contained breathing apparatus or equivalent and full protective gear. 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.

## 9. Physical and chemical properties

- Physical state** : Liquid.
- Color** : Beige.
- Odor** : Slight.
- Specific gravity** : 0.92 (Water = 1)
- Flash point** : Open cup: >145°C (293°F)(Cleveland.).

## 10. Stability and reactivity

- Stability and reactivity** : The product is stable.
- Conditions of instability** : None known.
- Incompatibility with various substances** : Reactive with oxidizing materials.
- Hazardous polymerization** : Will not occur.
- Conditions of reactivity** : None known.

## 11. Toxicological information

### Toxicity data

Product/ingredient name	Test	Result	Route	Species
Phosphonic Acid, Bis(1-Methylethyl) Ester	LD50	1700 mg/kg	Oral	Rat
	LD50	1590 mg/kg	Oral	Mouse
	LD50	5700 mg/kg	Dermal	Rabbit

**Acute Effects**

- Eyes** : Severely irritating to eyes.
- Skin** : Irritating to skin.
- Inhalation** : No known significant effects or critical hazards.
- Ingestion** : May be harmful if swallowed.
- Potential chronic health effects** : Carcinogenic effects: Not applicable.  
Mutagenic effects: Not applicable.  
Teratogenic effects: Not applicable.

**12 . Ecological information**

- Environmental precautions** : No known significant effects or critical hazards.
- Octanol/water partition coefficient** : The product is more soluble in octanol.
- Bioconcentration factor** : Not available.
- Products of degradation** : The final products of biodegradation are carbon oxides and water. Nitrogen and sulfur oxides and metal salts may also be produced in some cases.
- Toxicity of the products of biodegradation** : The products of degradation are less toxic than the product itself.

**13 . Disposal considerations**

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

**14 . Transport information**

**NAERG** : Not applicable.

**Regulatory information**

**UN/ IMDG/IATA DOT/TDG** : Not regulated by any transport mode.

**15 . Regulatory information****United States**

- HCS Classification** : Irritating material
- U.S. Federal regulations** : TSCA 8(b) inventory: All components listed.  
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** : Pennsylvania RTK: Naphthalenesulfonic Acid, Dinonyl-, Barium Salt: (environmental hazard, generic environmental hazard); 2,6-Ditert-butyl-p-cresol: (generic environmental hazard); N,N-bis(2-Ethylhexyl)-ar-methyl-1H-Benzotriazole-1-methanamine; Di(2-Ethylhexyl) Amine: (generic environmental hazard)  
 Massachusetts RTK: 2,6-Ditert-butyl-p-cresol; Di(2-Ethylhexyl) Amine  
 New Jersey: Naphthalenesulfonic Acid, Dinonyl-, Barium Salt; 2,6-Ditert-butyl-p-cresol; N,N-bis(2-Ethylhexyl)-ar-methyl-1H-Benzotriazole-1-methanamine; Di(2-Ethylhexyl) Amine  
 California prop. 65: No products were found.

**Canada**  
**WHMIS (Canada)** : Class 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.

**Mexico**

**Classification** : **HAZARD RATINGS**  
 4- Extreme  
 3- Serious  
 2- Moderate  
 1- Slight  
 0- Minimal

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

**16 . Other information**

**Label requirements (U.S.A.)** : CAUSES SEVERE EYE IRRITATION.  
 CAUSES SKIN IRRITATION.  
 MAY BE HARMFUL IF SWALLOWED.

**Hazardous Material Information System (U.S.A.)** : **HMIS RATING**  

Health	1
Fire hazard	1
Physical Hazard	0
Personal protection	C

**HAZARD RATINGS**  
 4- Extreme  
 3- Serious  
 2- Moderate  
 1- Slight  
 0- Minimal  
 See section 8 for more detailed information on personal protection.

**National Fire Protection Association (U.S.A.)** : **Flammability**  
**Health** **Reactivity**  
**Special**

**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** : 03/31/2006

**Date of previous issue** : 07/31/2005

**Version** : 4

#### **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.

Authored by **KEMIKA**

Powered by 