



# MATERIAL SAFETY DATA SHEET

## 1. Product and Company Identification

**Product Name** DEO REO 40  
**CAS #** Mixture  
**Product Use** Odour counteractant  
**Manufacturer** CFR Division of Tacony Corporation  
3101 Wichita Court  
Fort Worth, TX 76140-1710 US  
Phone: 1-800-880-2913 ext.150

LEGEND HMIS	
Severe	4
Serious	3
Moderate	2
Slight	1
Minimal	0

Health	* 1
Flammability	0
Physical Hazard	0
Personal Protection	B

## 2. Hazards Identification

**Emergency Overview** CAUTION  
MAY CAUSE EYE AND SKIN IRRITATION. Contains a potential mutagen.

**Potential short term health effects**

**Routes of exposure** Eye, Skin contact, Inhalation, Ingestion.

**Eyes** May cause irritation.

**Skin** May cause irritation.

**Inhalation** May cause respiratory tract irritation.

**Ingestion** May cause stomach distress, nausea or vomiting.

**Target organs** Eyes. Skin.

**Chronic effects** Prolonged or repeated exposure can cause drying, defatting and dermatitis.

**Signs and symptoms** Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting.

## 3. Composition/Information on Ingredients

Ingredient(s)	CAS #	Percent
Ethanol	64-17-5	0.1 - 1

## 4. First Aid Measures

**First aid procedures**

**Eye contact** Flush with cool water. Remove contact lenses, if applicable, and continue flushing. Obtain medical attention if irritation persists.

**Skin contact** Flush with cool water. Wash with soap and water. Obtain medical attention if irritation persists.

**Inhalation** If symptoms develop move victim to fresh air. If symptoms persist, obtain medical attention.

**Ingestion** Do not induce vomiting. Never give anything by mouth if victim is unconscious, or is convulsing. Obtain medical attention.

**Notes to physician** Symptoms may be delayed.

**General advice** If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance. Avoid contact with eyes and skin. Keep out of reach of children.

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## 5. Fire-fighting Measures

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<b>Flammable properties</b>	Not flammable by WHMIS criteria.
<b>Extinguishing media</b>	
<b>Suitable extinguishing media</b>	Water spray. Dry chemical. Carbon dioxide.
<b>Unsuitable extinguishing media</b>	Not available
<b>Protection of firefighters</b>	
<b>Specific hazards arising from the chemical</b>	Not available
<b>Protective equipment for firefighters</b>	Firefighters should wear full protective clothing including self contained breathing apparatus.
<b>Hazardous combustion products</b>	May include and are not limited to: Oxides of carbon. Ammonia. Hydrogen chloride.
<b>Explosion data</b>	
<b>Sensitivity to mechanical impact</b>	Not available
<b>Sensitivity to static discharge</b>	Not available

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## 6. Accidental Release Measures

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<b>Personal precautions</b>	Keep unnecessary personnel away. Do not touch or walk through spilled material. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Keep people away from and upwind of spill/leak.
<b>Methods for containment</b>	Stop leak if you can do so without risk. Prevent entry into waterways, sewers, basements or confined areas.
<b>Methods for cleaning up</b>	Before attempting clean up, refer to hazard data given above. Small spills may be absorbed with non-reactive absorbent and placed in suitable, covered, labelled containers. Prevent large spills from entering sewers or waterways. Contact emergency services and supplier for advice. Never return spills in original containers for re-use.

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## 7. Handling and Storage

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<b>Handling</b>	Use good industrial hygiene practices in handling this material.
<b>Storage</b>	Keep out of reach of children. Store in a closed container away from incompatible materials.

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## 8. Exposure Controls / Personal Protection

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<b>Exposure limit values</b>	<b>Exposure limit values</b>
<b>Ingredient(s)</b>	
Ethanol	<b>ACGIH-TLV</b> TWA: 1000 ppm
<b>Engineering controls</b>	General ventilation normally adequate.
<b>Personal protective equipment</b>	
<b>Eye/Face protection</b>	Wear safety glasses with side shields.
<b>Hand protection</b>	Rubber gloves. Confirm with a reputable supplier first.
<b>Skin and body protection</b>	As required by employer code.
<b>Respiratory protection</b>	Where exposure guideline levels may be exceeded, use an approved NIOSH respirator.
<b>General hygiene considerations</b>	Handle in accordance with good industrial hygiene and safety practice. When using do not eat or drink. Wash hands before breaks and immediately after handling the product.

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## 9. Physical and Chemical Properties

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<b>Appearance</b>	Liquid
<b>Colour</b>	Clear colourless
<b>Form</b>	Liquid
<b>Odour</b>	Fresh
<b>Odour threshold</b>	Not available
<b>Physical state</b>	Liquid

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<b>pH</b>	Not available
<b>Freezing point</b>	Not available
<b>Boiling point</b>	> 100 °C (> 212.00 °F)
<b>Pour point</b>	Not available
<b>Flash point</b>	> 93.3 °C (> 199.94 °F)
<b>Evaporation Rate</b>	Not available
<b>Flammability limits in air, lower, % by volume</b>	Not available
<b>Flammability Limits in Air, Upper, % by Volume</b>	Not available
<b>Vapour pressure</b>	Not available
<b>Vapour density</b>	Not available
<b>Specific gravity</b>	0.98
<b>Octanol/water coefficient</b>	Not available
<b>Solubility (H2O)</b>	Soluble
<b>Auto-ignition temperature</b>	Not available
<b>VOC (Weight %)</b>	Not available
<b>Viscosity</b>	Water thin
<b>Percent volatile</b>	Not available

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## 10. Stability and Reactivity

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<b>Chemical stability</b>	Stable under recommended storage conditions.
<b>Conditions to avoid</b>	Do not mix with other chemicals.
<b>Incompatible materials</b>	Oxidizers.
<b>Hazardous decomposition products</b>	May include and are not limited to: Oxides of carbon. Ammonia. Hydrogen chloride.
<b>Possibility of hazardous reactions</b>	Hazardous polymerisation does not occur.

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## 11. Toxicological Information

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### Component analysis - LC50

Ingredient(s)	LC50
Ethanol	31623 ppm rat

### Component analysis - Oral LD50

Ingredient(s)	LD50
Ethanol	3450 mg/kg mouse; 7060 mg/kg rat

### Effects of acute exposure

<b>Eye</b>	May cause irritation.
<b>Skin</b>	May cause irritation.
<b>Inhalation</b>	May cause respiratory tract irritation.
<b>Ingestion</b>	May cause stomach distress, nausea or vomiting.
<b>Sensitisation</b>	Non-hazardous by WHMIS criteria.
<b>Chronic effects</b>	Non-hazardous by WHMIS criteria.
<b>Carcinogenicity</b>	See below.
<b>ACGIH - Threshold Limit Values - Carcinogens</b>	
Ethanol	64-17-5      A4 - Not Classifiable as a Human Carcinogen
<b>IARC - Group 1 (Carcinogenic to Humans)</b>	
Ethanol	64-17-5      Monograph 96 [2007] (in alcoholic beverages)
<b>Mutagenicity</b>	Mutagenic effects were observed in somatic and reproductive cells of live animals (rats and mice) exposed to high oral doses of ethanol.
<b>Reproductive effects</b>	Non-hazardous by WHMIS criteria.
<b>Teratogenicity</b>	Animal studies demonstrate that ingestion of ethanol can cause embryotoxicity, teratogenicity and fetotoxicity in the presence of maternal toxicity.

## 12. Ecological Information

<b>Ecotoxicity</b>	Components of this product have been identified as having potential environmental concerns.	
<b>Ecotoxicity - Freshwater Fish Species Data</b>		
Ethanol	64-17-5	96 Hr LC50 Oncorhynchus mykiss: 12.0-16.0 ml/L [static]; 96 Hr LC50 Pimephales promelas:>100 mg/L [static]; 96 Hr LC50 Pimephales promelas:13400-15100 mg/L [flow-through]
<b>Ecotoxicity - Microtox Data</b>		
Ethanol	64-17-5	5 min EC50 Photobacterium phosphoreum: 35470 mg/L; 30 min EC50 Photobacterium phosphoreum: 34634 mg/L
<b>Ecotoxicity - Water Flea Data</b>		
Ethanol	64-17-5	48 Hr LC50 Daphnia magna: 9268 mg/L; 24 Hr EC50 Daphnia magna:10800 mg/L
<b>Environmental effects</b>	Not available	
<b>Aquatic toxicity</b>	Not available	
<b>Persistence and degradability</b>	Not available	
<b>Bioaccumulation/accumulation</b>	Not available	
<b>Partition coefficient</b>	Not available	
<b>Mobility in environmental media</b>	Not available	
<b>Chemical fate information</b>	Not available	
<b>Other adverse effects</b>	Not available	

## 13. Disposal Considerations

<b>Waste codes</b>	Not available
<b>Disposal instructions</b>	Dispose in accordance with all applicable regulations.
<b>Waste from residues / unused products</b>	Not available
<b>Contaminated packaging</b>	Not available

## 14. Transport Information

<b>Transportation of Dangerous Goods (TDG - Canada)</b>	Not regulated as dangerous goods.
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## 15. Regulatory Information

<b>Canadian federal regulations</b>	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.
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### Canada - WHMIS - Ingredient Disclosure List

Ethanol	64-17-5	0.1 %
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<b>WHMIS classification</b>	Class D - Division 2A
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<b>WHMIS status</b>	Controlled
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**WHMIS labeling**



### Inventory Status

Country(s) or region	Inventory Name	On Inventory (Yes/No)*
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No

A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

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## 16. Other Information

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**Disclaimer**

Information contained herein was obtained from sources considered technically accurate and reliable. While every effort has been made to ensure full disclosure of product hazards, in some cases data is not available and is so stated. Since conditions of actual product use are beyond control of the supplier, it is assumed that users of this material have been fully trained according to the requirements of all applicable legislation and regulatory instruments. No warranty, expressed or implied, is made and supplier will not be liable for any losses, injuries or consequential damages which may result from the use of or reliance on any information contained in this document.

**Issue date**

01-Jul-2009

**Effective Date**

01-Jul-2009

**Expiry Date**

01-Jul-2012

**Prepared by**

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