



## Safety Data Sheet

Product name :

CIRKAN RO 100

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SDS n° :30431-33

Version :2.01

Version of : 2008-11-09

This sheet supersedes the one dated : 2003-10-20

### PRODUCT LABELS

LABELLING (standard or EU): None  
Not concerned

R-phrases : None

S-phrases : None

TRANSPORT LABELLING: Not applicable.

### 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY UNDERTAKING

Name of the product : CIRKAN RO 100

Code No. : 13K

Product application : Lubricant for gears

Supplier : TOTAL LUBRIFIANTS  
562 avenue du Parc de l'Ile  
92029 Nanterre CEDEX  
Tel: +33 (0)1 41 35 40 00  
Fax: +33 (0)1 41 35 84 71

See local details at end of sheet :

### 2. HAZARDS IDENTIFICATION

Health effects : This product does not present a danger of intoxication.

Environmental impact : Do not discharge this product into the environment.

Physico-chemical hazards : No specific risk of fire or explosion under normal conditions of use

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

#### PREPARATION

Chemical nature : Petroleum-derived severely refined mineral-base product  
Content in PAH according to IP 346 method < 3%

Substances presenting a health hazard	EC No.	CAS No.	Content	Symbol(s)	R-phrases
Alkyl phenol			<0,3 %	Xi ,N	R-38, 51/53

See section 16 for explanations of R-phrases :

### 4. FIRST AID MEASURES

IN CASE OF SERIOUS OR PERSISTENT CONDITIONS, CALL A DOCTOR OR EMERGENCY MEDICAL CARE.

Inhalation : Inhalation of heavy concentrations of vapour, fumes or spray, may cause mild irritation of the throat.  
Remove victim to fresh air and allow to rest.

Ingestion : Give nothing to drink  
Do not induce vomiting to avoid the risk of aspiration into the respiratory tract.  
Possible risk of vomiting and diarrhoea.

Skin contact : Immediately remove all soiled or stained clothing.  
Wash the affected area immediately and repeatedly with soap and water.

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Eye contact : Keep eyes open and rinse immediately and repeatedly with water for at least 15 minutes.

Aspiration : If the product is believed to have entered the lungs (in case of vomiting, for example), take the person to hospital for immediate care.

### 5. FIRE FIGHTING MEASURES

See heading 9

Extinguishing media :  
- suitable:  
Foam, carbon dioxide (CO<sub>2</sub>), powder.  
- not recommended:  
Do not use water jets (stick jets) for extinguishing fire, as this may help the spread of flames.

Specific hazards :  
Incomplete combustion and thermolysis may produce gases of varying toxicity such as carbon monoxide, carbon dioxide, various hydrocarbons, sulphur oxides, aldehydes etc., and soot. These are highly dangerous if inhaled.  
Vapours can build explosive mixtures with air.  
Vapours are heavier than air and may spread on the ground to sources of ignition.

Protective measures for firefighters :  
Insulated breathing apparatus must be worn in confined premises with heavy concentrations of fumes and gases.

Other :  
All combustion residues and contaminated water from fire-fighting should be disposed of according to local regulations.

### 6. ACCIDENTAL RELEASE MEASURES

See sections 8 and 13.

Personal protection :  
Ensure good ventilation.  
Remove sources of ignition. Do not smoke.

After spillage / leakage :  
- On land:  
Surfaces on which the product has been spilled may become slippery. Do not allow the product to enter sewers or rivers or contaminate the soil. Recover with mechanical means such as pumps and skimmers. Contain and collect the spilled product with sand or any other inert absorbant material.  
- On water:  
Floating absorbant material, then mechanical recovery. If the product is spilt into rivers or sewers, notify the authorities of the possible presence of surface effluent.

### 7. HANDLING AND STORAGE

HANDLING :

Prevention of user exposure :  
Ventilate extensively if the formation of vapours, fumes, mists or aerosol is a risk. Make all the necessary arrangements in order to reduce exposure risk, notably to products in use or to wastes.  
Keep away from combustible substances; keep away from food and beverages.

Prevention of fire and explosion :  
Empty containers may contain flammable or explosive vapours.  
There is a fire hazard associated with rags, paper or any other material used to remove spills which become soaked with product.  
Avoid accumulation of these: they are to be disposed off safely after use.  
Handle away from any source of ignition and heat.

Precautions :  
Avoid static electricity build up with connection to earth.  
Set up machinery and equipment so as to avoid the risk of accidental spills or splashes onto hot machine parts and electrical contacts (on joint failure, for example).

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### STORAGE :

**Technical measures :** Make the necessary arrangements to prevent water and soil pollution.

**Storage precautions :** Store at room temperature, protected against contact with water and moisture, and away from any source of ignition.  
Keep containers closed when not in use  
- To be avoided:  
Do not store exposed to the elements.

**Incompatible products :** A dangerous reaction may occur with strong oxidizing agents.

**Packaging materials :** - Recommended:  
Use only hydrocarbon-resistant containers, joints, pipes, etc.  
Keep in original container if possible.  
Otherwise, transfer all indications on the regulatory label to the new container.

### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Technical measures :** Use the product in a properly ventilated atmosphere.  
When working on enclosed place (tanks, reservoirs...), make sure that atmosphere is not suffocating and/or wear recommended equipment.

**Respiratory protection :** In case of vapours or sprays formation:  
Combined gas cartridge (organic gases and dust, filter A/P2).

**Hand protection :** Impermeable hydrocarbon-proof gloves.  
recommended material: nitrile , neoprene.  
The break through times of the same type of glove of different manufacturers can be very different - even if the layer thickness is similar. Therefore the break through times have to be found out from the manufacturer of the protective gloves themselves.  
The demands on the gloves are determined by the conditions in practice (e.g. multiple use, mechanical load, temperature, strength and duration of exposition).  
Before choosing suitable gloves, it is recommended that the user tests the gloves.

**Eye protection :** Goggles, in case of risk of splashing.

**Skin and body (other than the hands) protection :** Depending on the requirements, face mask, boots, product resistant clothing, safety shoes (drum handling).  
Don't wear rings, watches or anything similar which can retain the product and may give rise to skin conditions.

**Hygienic work practices :** Avoid prolonged and repeated contact with the skin, especially with used or waste product  
If the product comes into contact with the skin, wash the affected area immediately and copiously with soap and water.  
Do not use abrasives, solvents or fuels.  
Immediately remove all soiled or stained clothing.  
Do not dry hands with rags that have been contaminated with product.  
Do not put product contaminated rags into workwear pockets.  
Do not eat, drink or smoke whilst handling the product.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

**Appearance :** Liquid

**Colour :** Yellow.

**Odour :** Characteristic

**Density/specific gravity :** 890 Kg/m<sup>3</sup>  
Temperature (°C) 15

**Flash point :** > 250 °C (ASTM D 93)

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Température d'auto-inflammation : > 250 °C (ASTM E 659)  
Comments on autoignition temperature : This temperature may be significantly lower under particular conditions (slow oxidation on finely divided materials...)  
Comments on explosivity : The lower flammable limit of oil mist is reached at concentrations in the range of 45 g/m<sup>3</sup>.  
Pour point: < -18 °C (ASTM D 97)  
Solubility :  
- in water : Insoluble and immiscible.  
- in organic solvents : Soluble in many common solvents.  
Partition coefficient (log Pow) : Log Pow > 6  
Temperature (°C) (20°C)  
Viscosity : 100 mm<sup>2</sup>/s  
Temperature (°C) 40

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### 10. STABILITY AND REACTIVITY

Stability : The product is stable at normal storage, handling and use temperatures.  
Conditions to avoid : Heat (temperatures above flash point), sparks, ignition points, flames, static electricity  
Materials to avoid : Avoid contact with strong oxidizers  
Hazardous decomp. products : Incomplete combustion and thermolysis produces potentially toxic gases such as carbon monoxide, carbon dioxide, various hydrocarbons, aldehydes and soot.

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### 11. TOXICOLOGICAL INFORMATION

Acute toxicity / Local effect :  
Inhalation, comments: Not classified according to the criteria of classification in force.  
Inhalation of high concentrations of vapour or aerosols may cause irritation of the upper respiratory tract.  
Skin contact, comments: Not classified according to the criteria of classification in force.  
Ingestion, comments: In case of ingestion of small quantities, no important effect observed. in case of ingestion of larger amounts: abdominal pain, diarrhea, ...

#### CHRONIC TOXICITY OR LONG-TERM TOXICITY :

Skin contact : Characteristic skin affections (oil blisters) may develop following prolonged and repeated exposure through contact with stained clothing

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### 12. ECOLOGICAL INFORMATION

Comments about ecotoxicity : Experimental data on the finished product are not available.  
It is considered to present a little danger for aquatic life.  
no information available for used product  
Mobility :  
- Air:  
there is a slow loss by evaporation.  
- Soil:  
Given its physical and chemical characteristics, the product generally shows little mobility in the ground.  
- Water:  
The product is insoluble; it spreads on the surface of the water



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Persistence and degradability :

No experimental information about the finished product.  
However the "mineral oil" fraction of the new product is intrinsically biodegradable.  
Some components of the product may not be biodegradable.

### 13. DISPOSAL CONSIDERATIONS

Waste disposal :

Dispose of in a safe manner, in accordance with local regulations.  
If need be, collection by an authorised waste contractor and regeneration or incineration at an approved installation.

Waste class :

The waste classification is dependant on the composition of the product at the time of disposal.  
The waste classification mentioned here represents only a recommendation. The waste producer is responsible for the correct specification of the waste. The specification of the waste classification should be in arrangement with the authorised waste disposal company.  
13 02 05

Disposal of contaminated packaging :

Proceed in compliance with the prevailing regulations.

### 14. TRANSPORT INFORMATION

Not concerned by the transport regulations below.

Road (ADR) / Rail (RID) :

Class :

Not restricted for transport.

Transport by barge (ADNR) :

Marine (IMO-IMDG) :

Air (ICAO/IATA) :

### 15. REGULATORY INFORMATION

None

Not applicable

Risk phrases :

None

Safety phrases :

None

EU directives :

Hazardous preparations directive 1999/45/EC modified (Directive 2001/60/EC).  
This product fulfills the requirements of the European directives :  
76/769/EEC  
2000/53/EC  
2002/95/EC  
2002/96/EC  
2003/11/EC

Social Security code :

Table of occupational illnesses and diseases No. 36 - Art. L 461-6, Art. D.461-1, annexe A, n° 601

Labor code :

- Art. R 241-50, decree of 07.11.1977 (special medical surveillance).

### 16. OTHER INFORMATION

Explanations of R-phrases in section 2 :

R-38 Irritating to skin.  
R-51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Revision date:

2008-11-09



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\* Information revised since the previous version of the SDS :

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This safety data sheet serves to complete but not to replace the technical product sheets. The information contained herein is given in good faith and is accurate to the best of knowledge at the date indicated above. It is understood by the user that any use of the product for purposes other than those for which it was designed entails potential risk. The information given herein in no way dispenses the user from knowing and applying all provisions regulating his activity. The user bears sole liability for the precautions required when using the product. The regulatory texts indicated herein are intended to aid the user to fulfil his obligations. This list is not to be considered complete and exhaustive. It is the user's responsibility to ensure that he is subject to no other obligations than those mentioned.