

SAFETY DATA SHEET

According to the Hazard Communication Standard, 29 CFR 1910.1200

SDS #: 083387 CIRKAN RO 220

Date of the previous version: 2015-04-17 Revision Date: 2015-10-13 Version 1.01

1. IDENTIFICATION

Product identifier

Product name CIRKAN RO 220

Other means of identification

Product Code(s) 083387

Number 13M Substance/mixture Mixture

Recommended use of the chemical and restrictions on use

Identified uses Circulating oil.

Uses advised againstDo not use for any purpose other than the one for which it is intended

Details of the supplier of the safety data sheet

Supplier Address TOTAL Specialties USA Inc

1201 Louisiana Street, Suite 1800

Houston, TX 77002 Phone: +1 800 323 3198

Contact Point Technical/ HSEQ

E-mail Address USRMLIN-info@total.com

Emergency telephone number

Company Phone Number +1 (908) 862-9300

Emergency telephone CHEMTREC: +1 800 424 9300 (24h)

2. HAZARDS IDENTIFICATION

Classification

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Label elements

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)



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Unknown Acute ToxicityNo information available

Hazards not otherwise classified (HNOC)

None known

Other information

Physical-Chemical Properties Contaminated surfaces will be extremely slippery.

Environmental properties Should not be released into the environment.

3. COMPOSITION/INFORMATION ON INGREDIENTS

This material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Additional information Product containing mineral oil with less than 3% DMSO extract as measured by IP 346

4. FIRST AID MEASURES

First aid measures for different exposure routes

General advice IN CASE OF SERIOUS OR PERSISTENT CONDITIONS, CALL A DOCTOR OR

EMERGENCY MEDICAL CARE.

Eye contact Rinse immediately with plenty of water and seek medical advice.

Skin contact Remove contaminated clothing and shoes. Wash off with soap and water. Wash

contaminated clothing before reuse.

Inhalation Inhalation of high concentrations of vapor or aerosols may cause irritation of the upper

respiratory tract.

Ingestion If swallowed, do not induce vomiting - seek medical advice.

Most important symptoms/effects, acute and delayed

Skin contact Not classified.

Eye contact Not classified. Avoid contact with eyes.

Inhalation Not classified. Inhalation of vapors in high concentration may cause irritation of respiratory

system.



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Ingestion Not classified. Ingestion may cause gastrointestinal irritation, nausea, vomiting and

diarrhea.

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

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician Treat symptomatically.

5. FIRE-FIGHTING MEASURES

<u>Suitable Extinguishing Media</u> Foam. Carbon dioxide (CO₂). ABC powder. Water spray.

Unsuitable Extinguishing Media Do not use a solid water stream as it may scatter and spread fire.

<u>Special Hazard</u> Incomplete combustion and thermolysis may produce gases of varying toxicity such as

carbon monoxide, carbon dioxide, various hydrocarbons, aldehydes and soot. These may

be highly dangerous if inhaled in confined spaces or at high concentration.

Explosion Data

Sensitivity to Mechanical Impact Sensitivity to Static Discharge None. None.

Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Evacuate non-essential personnel.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

General Information Do not touch or walk through spilled material. Contaminated surfaces will be extremely

slippery. Avoid contact with the skin and the eyes. Use personal protective equipment.

Evacuate personnel to safe areas. Ensure adequate ventilation.

Other information See Section 12 for additional information.

Environmental precautions

General Information Do not allow material to contaminate ground water system. Local authorities should be

advised if significant spillages cannot be contained. Try to prevent the material from entering drains or water courses. See Section 12 for additional Ecological Information.

Methods and materials for containment and cleaning up

Methods for cleaning up Dam up. Keep in suitable, closed containers for disposal. Soak up with inert absorbent

material. Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13). Use mechanical means such as pumps,

skimmers and absorbent materials.

7. HANDLING AND STORAGE



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Precautions for safe handling

Advice on safe handling When using, do not eat, drink or smoke. For personal protection see section 8. Use only in

well-ventilated areas. Do not breathe vapors or spray mist. Avoid contact with skin, eyes

and clothing.

Prevention of fire and explosion Take precautionary measures against static discharges: Ground/bond containers, tanks

and transfer/receiving equipment.

Hygiene measures Ensure the application of strict rules of hygiene by the personnel exposed to the risk of

contact with the product. Regular cleaning of equipment, work area and clothing is recommended. Wash hands before breaks and immediately after handling the product. Do

not use abrasives, solvents or fuels. Do not dry hands with rags that have been

contaminated with product. Do not put product contaminated rags into workwear pockets. When using, do not eat, drink or smoke. Use personal protective equipment as required. Wash hands before breaks and at the end of workday. Wash hands with water as a

precaution. Avoid breathing vapors, mist or gas.

Conditions for safe storage, including any incompatibilities

Technical measures/Storage

conditions

Keep away from food, drink and animal feedingstuffs. Keep in a bunded area. Keep container tightly closed. Keep preferably in the original container. Otherwise reproduce all indication of the regulation label on the new container. Do not remove the hazard labels of the containers (even if they are empty). Design the installations in order to avoid accidental emissions of product (due to seal breakage, for example) onto hot casings or electrical

contacts. Protect from frost, heat and sunlight. Protect from moisture.

Materials to Avoid Strong oxidizing agents. Strong acids. Strong bases.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure limits Mineral oil mist:

USA: OSHA (PEL) TWA 5 mg/m³, NIOSH (REL) TWA 5 mg/m³, STEL 10 mg/m³, ACGIH

(TLV) TWA 5 mg/m3 (highly refined).

Exposure controls

Engineering Measures Apply technical measures to comply with the occupational exposure limits. When working in

confined spaces (tanks, containers, etc.), ensure that there is a supply of air suitable for

breathing and wear the recommended equipment.

Individual protection measures, such as personal protective equipment



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General Information If the product is used in mixtures, it is recommended that you contact the appropriate

protective equipment suppliers. These recommendations apply to the product as supplied.

Eye/Face Protection If splashes are likely to occur, wear:. Safety glasses with side-shields.

Wear protective gloves/clothing. Long sleeved clothing. Protective shoes or boots. Skin and body protection

Hand Protection Protective gloves. Nitrile rubber. Neoprene gloves. Please observe the instructions

regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is

used, such as the danger of cuts, abrasion, and the contact time.

Respiratory protection If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved

respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be

provided in accordance with current local regulations.

Hygiene measures Ensure the application of strict rules of hygiene by the personnel exposed to the risk of

> contact with the product. Regular cleaning of equipment, work area and clothing is recommended. Wash hands before breaks and immediately after handling the product. Do

not use abrasives, solvents or fuels. Do not dry hands with rags that have been

contaminated with product. Do not put product contaminated rags into workwear pockets. When using, do not eat, drink or smoke. Use personal protective equipment as required. Wash hands before breaks and at the end of workday. Wash hands with water as a

precaution. Avoid breathing vapors, mist or gas.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical and chemical properties

Color amber Physical State @20°C liauid

Odor

Petroleum distillates **Odor Threshold** No information available

Property Values Remarks Method

Not applicable

Melting point/range No information available

Boiling point/boiling range Not applicable

246 °C Cleveland Open Cup (COC) Flash point 475 °F Cleveland Open Cup (COC).

Evaporation rate No information available

Flammability Limits in Air No information available No information available upper Lower No information available



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@ 15 °C

@ 15 °C

@ 40 °C

@ 15 °C

Not applicable

Not applicable

Vapor Pressure Vapor density

Water solubility

Density

Relative density 0.889

889 kg/m³

Solubility in other solvents logPow

Autoignition temperature

Decomposition temperature Viscosity, kinematic

Explosive properties Oxidizing Properties Possibility of hazardous reactions

Other information

Specific Gravity Freezing Point

220 mm2/s Not explosive Not applicable Not applicable

0.889

No information available

ISO 3104

Pour point -12 °C ASTM D 97

10. STABILITY AND REACTIVITY

Reactivity No information available.

Chemical stability Stable under recommended storage conditions.

Possibility of hazardous reactions None under normal processing.

Conditions to Avoid Heat, flames and sparks. Take precautionary measures against static discharges. Heat

(temperatures above flash point), sparks, ignition points, flames, static electricity. Strong

oxidizing agents.

Strong oxidizing agents. Strong acids. Strong bases. **Incompatible Materials**

Hazardous Decomposition Products Incomplete combustion and thermolysis may produce gases of varying toxicity such as

carbon monoxide, carbon dioxide, various hydrocarbons, aldehydes and soot.

11. TOXICOLOGICAL INFORMATION

Acute toxicity

Product Information Product does not present an acute toxicity hazard based on known or supplied information.

Information on likely routes of exposure

Principle Routes of Exposure Inhalation, Ingestion, Eye contact, Skin contact.

Numerical measures of toxicity



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ATEmix (oral) 5027 mg/kg ATEmix (dermal) 5027 mg/kg

Inhalation

ATEmix (inhalation-dust/mist) 5.1 mg/l ATEmix (inhalation-vapor) 20.2 mg/l

Information on toxicological effects

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

Skin contact Not classified.

Eye contact Not classified. Avoid contact with eyes.

Inhalation Not classified. Inhalation of vapors in high concentration may cause irritation of respiratory

system.

Ingestion Not classified. Ingestion may cause gastrointestinal irritation, nausea, vomiting and

diarrhea.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Sensitization Not classified as a sensitizer.

Carcinogenicity Contains no ingredient listed as a carcinogen.

Mutagenicity Contains no ingredient listed as a mutagen.

Reproductive toxicity No information available.

Other adverse effects Characteristic skin lesions (pimples) may develop following prolonged and repeated

exposures (contact with contaminated clothing).

Aspiration Hazard Not classified.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Acute aquatic toxicity - Product Information

No experimental data available

Acute aquatic toxicity - Component Information

No information available

Chronic aquatic toxicity - Product Information

No experimental data available



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Chronic aquatic toxicity - Component Information

No information available

Effects on terrestrial organisms No experimental data available .

Persistence and degradability

General Information No information available.

Bioaccumulative potential

Product Information No information available.

logPow No information available

Component Information No information available.

Mobility

Soil Given its physical and chemical characteristics, the product generally shows low soil

mobility

Air Loss by evaporation is limited

Water The product is insoluble and floats on water

Other adverse effects

General Information No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment

Waste Disposal Methods Dispose of in accordance with local regulations.

Contaminated packaging Dispose of in accordance with local regulations.

This product contains one or more substances that are listed with the State of California as a hazardous waste.

14. TRANSPORT INFORMATION



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DOT Not regulated

TDG Not regulated

MEX Not regulated

ICAO/IATA Not regulated

IMDG/IMO Not regulated

ADR/RID Not regulated

ADN Not regulated

15. REGULATORY INFORMATION

following inventories:

U.S.A. (TSCA)

U.S. Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazard Categories

Acute Health Hazard no
Chronic Health Hazard no
Fire Hazard no
Sudden Release of Pressure Hazard no
Reactive Hazard no

Clean Water Act

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)

This product does not contain any substances regulated as hazardous air pollutants (HAPS) under Section 112 of the Clean Air Act Amendments of 1990.

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.



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U.S. State Regulations

California Proposition 65

This product contains the following Proposition 65 chemicals:***

Chemical Name	Weight %	California Prop. 65
Toluene - 108-88-3	<0.1	Developmental
		Female Reproductive

U.S. State Right-to-Know Regulations

Chemical Name	Massachusetts	New Jersey	Pennsylvania	Illinois
Paraffin oils (petroleum),catalytic dewaxed heavy 64742-70-7	X			
Distillates (petroleum), hydrotreated light paraffinic 64742-55-8	X			

16. OTHER INFORMATION

NFPA Health Hazard 1 Flammability 1 Instability 0 Physical and chemical

hazards -

HMIS Health Hazard 1 Flammability 1 Physical Hazard 0 Personal protection X

NFPA (National Fire Protection Association) HMIS (Hazardous Material Information System)

Hazards are split into categories each with a 0 to 4 rating, 0 meaning no hazard and 4 meaning high hazard

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Revision Note *** Indicates updated section

Abbreviations, acronyms

Legend Section 8

ACGIH - American Conference of Governmental Industrial Hygienists

OSHA - Occupational Safety and Health Administration NIOSH - National Institute for Occupational Safety and Health

TLV - Threshold Limit Values
PEL - Permissible Exposure Limits

IDHL - Immediately Dangerous to Life or Health concentrations

TWA - Time Weight Average

STEL - Short Term Exposure Limits

S* - Skin notation

TSCA - Toxic Substance Control Act



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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.

End of the safety data sheet