



ROCOL OPEN GEAR SPRAY

Chemwatch Material Safety Data Sheet
Issue Date: 16-Jun-2006
XCC317SCP

CHEMWATCH 21448
Version No:3
CD 2007/3 Page 1 of 7

Section 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME

ROCOL OPEN GEAR SPRAY

SYNONYMS

"bitumen spray"

PROPER SHIPPING NAME

AEROSOLS

PRODUCT USE

Open gear lubricant. Application is by spray atomisation from a hand held aerosol pack.

SUPPLIER

Company: ITW Polymers & Fluids
Address:
100 Hassall St
Wetherill Park NSW 2164
Australia
Telephone: (02) 9757 8800
Emergency Tel: (02) 9757 8800
Fax: (02) 9757 3855

Company: ITW Polymers & Fluids NZ
Address:
Unit 2 / 38 Trugood Drive
East Tamaki, Auckland, 2013
New Zealand
Telephone: (09) 272 1945
Emergency Tel: (09) 272 1945
Fax: (09) 273 6489

Section 2 - HAZARDS IDENTIFICATION

STATEMENT OF HAZARDOUS NATURE

HAZARDOUS SUBSTANCE. DANGEROUS GOODS. According to the Criteria of NOHSC, and the ADG Code.

POISONS SCHEDULE

None

RISK

Risk Codes	Risk Phrases
R12	Extremely flammable.
R38	Irritating to skin.
R44	Risk of explosion if heated under confinement.
R48/20	Harmful: danger of serious damage to health by prolonged exposure through inhalation.
R51/53	Toxic to aquatic organisms may cause long-term adverse effects in the aquatic environment.
R62	Possible risk of impaired fertility.
R67	Vapours may cause drowsiness and dizziness.

SAFETY

Safety Codes	Safety Phrases
S16	Keep away from sources of ignition. No smoking.
S23	Do not breathe gas/ fumes/ vapour/ spray.
S51	Use only in well ventilated areas.
S09	Keep container in a well ventilated place.
S53	Avoid exposure - obtain special instructions before use.
S401	To clean the floor and all objects contaminated by this material use water and detergent.
S07	Keep container tightly closed.
S35	This material and its container must be disposed of in a safe way.
S13	Keep away from food drink and animal feeding stuffs.
S27	Take off immediately all contaminated clothing.
S26	In case of contact with eyes rinse with plenty of water and contact Doctor or Poisons Information Centre.
S46	If swallowed IMMEDIATELY contact Doctor or Poisons Information Centre (show this container or label).

continued...

ROCOL OPEN GEAR SPRAY

Chemwatch Material Safety Data Sheet

Issue Date: 16-Jun-2006

XCC317SCP

CHEMWATCH 21448

Version No:3

CD 2007/3 Page 2 of 7

Section 2 - HAZARDS IDENTIFICATION

S57	Use appropriate container to avoid environment contamination.
S61	Avoid release to the environment. Refer to special instructions/ safety data sheets.
S60	This material and its container must be disposed of as hazardous waste.

Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS

NAME	CAS RN	%
n- hexane	110-54-3	30-60
hydrocarbons nonhazardous		10-30
molybdenum disulfide	1317-33-5	<1^
hydrocarbon propellant	68476-85-7.	30-60

NOTE: Manufacturer has supplied full ingredient information to allow CHEMWATCH assessment.

Section 4 - FIRST AID MEASURES

SWALLOWED

Not considered a normal route of entry.

If spontaneous vomiting appears imminent or occurs, hold patient's head down, lower than their hips to help avoid possible aspiration of vomitus.

· If swallowed do NOT induce vomiting.

· If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain open airway and prevent aspiration.

Avoid giving milk or oils.

Avoid giving alcohol.

EYE

If aerosols come in contact with the eyes:

· Immediately hold the eyelids apart and flush the eye continuously for at least 15 minutes with fresh running water.

· Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids.

SKIN

If solids or aerosol mists are deposited upon the skin:

· Flush skin and hair with running water (and soap if available).

· Remove any adhering solids with industrial skin cleansing cream.

INHALED

If aerosols, fumes or combustion products are inhaled:

· Remove to fresh air.

· Lay patient down. Keep warm and rested.

NOTES TO PHYSICIAN

Treat symptomatically.

Following acute or short term repeated exposures to n-hexane:

· Large quantities of n-hexane are expired by the lungs after vapour exposure (50-60%). Humans exposed to 100 ppm demonstrate an n-hexane biological half life of 2 hours.

· Initial attention should be directed towards evaluation and support of respiration. Cardiac dysrhythmias are a potential complication.

INGESTION:

· Ipecac syrup should be considered for ingestion of pure hexane exceeding 2-3ml/kg. Extreme caution must be taken to avoid aspiration since small amounts of n-hexane intratracheally, produce a severe chemical pneumonitis.

[Ellenhorn and Barceloux: Medical Toxicology]

BIOLOGICAL EXPOSURE INDEX - BEI

BEIs represent the levels of determinants which are most likely to be observed in specimens collected in a healthy worker who has been exposed to chemicals to the same extent as a worker with inhalation exposure to the Exposure Standard (ES or TLV).

Determinant	Index	Sampling Time	Comments
1. 2, 5- hexanedione in urine	5 mg/gm creatinine	End of shift	NS
2. n- Hexane in end-exhaled air			SQ

NS: Non-specific determinant; Metabolite observed following exposure to other materials.

SQ: Semi-quantitative determinant; Interpretation may be ambiguous - should be used as a screening test or confirmatory test.

continued...

ROCOL OPEN GEAR SPRAY

Chemwatch Material Safety Data Sheet

Issue Date: 16-Jun-2006

XCC317SCP

CHEMWATCH 21448

Version No:3

CD 2007/3 Page 3 of 7

Section 5 - FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA

SMALL FIRE:

- Water spray, dry chemical or CO2

LARGE FIRE:

- Water spray or fog.

FIRE FIGHTING

- Alert Fire Brigade and tell them location and nature of hazard.
- May be violently or explosively reactive.
- Wear breathing apparatus plus protective gloves.
- Prevent, by any means available, spillage from entering drains or water course.
- If safe, switch off electrical equipment until vapour fire hazard removed.
- Use water delivered as a fine spray to control fire and cool adjacent area.
- DO NOT approach containers suspected to be hot.
- Cool fire exposed containers with water spray from a protected location.
- If safe to do so, remove containers from path of fire.
- Equipment should be thoroughly decontaminated after use.

FIRE/EXPLOSION HAZARD

- Liquid and vapour are flammable.
 - Moderate fire hazard when exposed to heat or flame.
 - Vapour forms an explosive mixture with air.
 - Moderate explosion hazard when exposed to heat or flame.
 - Vapour may travel a considerable distance to source of ignition.
 - Heating may cause expansion or decomposition leading to violent rupture of containers.
 - Aerosol cans may explode on exposure to naked flame.
 - Rupturing containers may rocket and scatter burning materials.
 - Hazards may not be restricted to pressure effects.
 - May emit acrid, poisonous or corrosive fumes.
 - On combustion, may emit toxic fumes of carbon monoxide (CO).
- WARNING: In use may form flammable/ explosive vapour-air mixtures.

WARNING:

- Can become highly flammable in use.
- Avoid evaporation.

Combustion products include: carbon dioxide (CO2), other pyrolysis products typical of burning organic material.

FIRE INCOMPATIBILITY

Avoid contamination with oxidising agents i.e. nitrates, oxidising acids, chlorine bleaches, pool chlorine etc. as ignition may result.

HAZCHEM: 2Y

Personal Protective Equipment

Gas tight chemical resistant suit.

Section 6 - ACCIDENTAL RELEASE MEASURES

EMERGENCY PROCEDURES

MINOR SPILLS

- Clean up all spills immediately.
- Avoid breathing vapours and contact with skin and eyes.
- Wear protective clothing, impervious gloves and safety glasses.
- Shut off all possible sources of ignition and increase ventilation.
- Wipe up.
- If safe, damaged cans should be placed in a container outdoors, away from all ignition sources, until pressure has dissipated.
- Undamaged cans should be gathered and stowed safely.
 - Clean up all spills immediately.
 - Avoid breathing vapours and contact with skin and eyes.
 - Control personal contact by using protective equipment.
 - Contain and absorb spill with sand, earth, inert material or vermiculite.
 - Wipe up.
 - Place in a suitable labelled container for waste disposal.

MAJOR SPILLS

- Clear area of personnel and move upwind.
- Alert Fire Brigade and tell them location and nature of hazard.
- May be violently or explosively reactive.
- Wear breathing apparatus plus protective gloves.
- Prevent, by any means available, spillage from entering drains or water courses
- No smoking, naked lights or ignition sources.
- Increase ventilation.

continued...

ROCOL OPEN GEAR SPRAY

Chemwatch Material Safety Data Sheet

Issue Date: 16-Jun-2006

XCC317SCP

CHEMWATCH 21448

Version No:3

CD 2007/3 Page 4 of 7

Section 6 - ACCIDENTAL RELEASE MEASURES

- Stop leak if safe to do so.
- Water spray or fog may be used to disperse / absorb vapour.
- Absorb or cover spill with sand, earth, inert materials or vermiculite.
- If safe, damaged cans should be placed in a container outdoors, away from ignition sources, until pressure has dissipated.
- Undamaged cans should be gathered and stowed safely.
- Collect residues and seal in labelled drums for disposal.

Personal Protective Equipment advice is contained in Section 8 of the MSDS.

Section 7 - HANDLING AND STORAGE

PROCEDURE FOR HANDLING

- Avoid all personal contact, including inhalation.
 - Wear protective clothing when risk of exposure occurs.
 - Use in a well-ventilated area.
 - Prevent concentration in hollows and sumps.
 - DO NOT enter confined spaces until atmosphere has been checked.
 - Avoid smoking, naked lights or ignition sources.
 - Avoid contact with incompatible materials.
 - When handling, DO NOT eat, drink or smoke.
 - DO NOT incinerate or puncture aerosol cans.
 - DO NOT spray directly on humans, exposed food or food utensils.
 - Avoid physical damage to containers.
 - Always wash hands with soap and water after handling.
 - Work clothes should be laundered separately.
 - Use good occupational work practice.
 - Observe manufacturer's storing and handling recommendations.
 - Atmosphere should be regularly checked against established exposure standards to ensure safe working conditions are maintained.
- DO NOT allow clothing wet with material to stay in contact with skin.

SUITABLE CONTAINER

- Aerosol dispenser.
- Check that containers are clearly labelled.

STORAGE INCOMPATIBILITY

Avoid reaction with oxidising agents.

STORAGE REQUIREMENTS

Store in an upright position.

Outside or detached storage is preferred.

Store below 38 deg. C.

Keep dry to avoid corrosion of cans. Corrosion may result in container perforation and internal pressure may eject contents of can.

- Store in original containers in approved flammable liquid storage area.
- DO NOT store in pits, depressions, basements or areas where vapours may be trapped.
- No smoking, naked lights, heat or ignition sources.
- Keep containers securely sealed. Contents under pressure.
- Store away from incompatible materials.
- Store in a cool, dry, well ventilated area.
- Avoid storage at temperatures higher than 40 deg C.
- Store in an upright position.
- Protect containers against physical damage.
- Check regularly for spills and leaks.
- Observe manufacturer's storing and handling recommendations.

Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE CONTROLS

Source	Material	TWA ppm	TWA mg/m ³
Australia Exposure Standards	n- hexane (Hexane (n-Hexane))	20	72
Australia Exposure Standards	hydrocarbon propellant (LPG (liquified petroleum gas))	1, 000	1, 800

PERSONAL PROTECTION

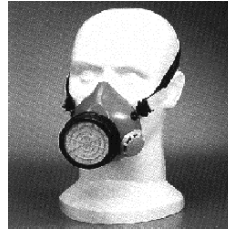
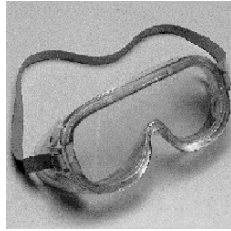
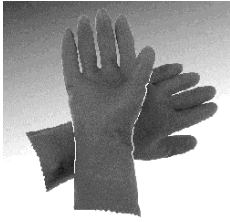
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ROCOL OPEN GEAR SPRAY

Chemwatch Material Safety Data Sheet
Issue Date: 16-Jun-2006
XCC317SCP

CHEMWATCH 21448
Version No:3
CD 2007/3 Page 5 of 7

Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION



RESPIRATOR

Type AX Filter of sufficient capacity

EYE

No special equipment for minor exposure i.e. when handling small quantities.

OTHERWISE: For potentially moderate or heavy exposures:

- Safety glasses with side shields.
- NOTE: Contact lenses pose a special hazard; soft lenses may absorb irritants and ALL lenses concentrate them.

HANDS/FEET

No special equipment needed when handling small quantities.

OTHERWISE:

For potentially moderate exposures:

Wear general protective gloves, eg. light weight rubber gloves.

For potentially heavy exposures:

Wear chemical protective gloves, eg. PVC. and safety footwear.

OTHER

No special equipment needed when handling small quantities.

OTHERWISE:

- Overalls.
- Skin cleansing cream.
- Eyewash unit.
- Do not spray on hot surfaces.

ENGINEERING CONTROLS

General exhaust is adequate under normal conditions. If risk of overexposure exists, wear SAA approved respirator. Correct fit is essential to obtain adequate protection.

Provide adequate ventilation in warehouse or closed storage areas.

Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE

Dark bitumastic material with solvent odour; does not mix with water. Supplied as an aerosol pack. Contents under PRESSURE. Contains highly flammable hydrocarbon propellant.

PHYSICAL PROPERTIES

Liquid.

Gas.

Does not mix with water.

Molecular Weight: Not applicable.
Melting Range (°C): Not available.
Solubility in water (g/L): Immiscible
pH (1% solution): Not applicable
Volatile Component (%vol): Not available.
Relative Vapour Density (air=1): >1
Lower Explosive Limit (%): Not available
Autoignition Temp (°C): Not available.
State: Liquid

Boiling Range (°C): Not available.
Specific Gravity (water=1): Not available.
pH (as supplied): Not applicable
Vapour Pressure (kPa): Not available.
Evaporation Rate: Not available
Flash Point (°C): - 81 propellant
Upper Explosive Limit (%): Not available
Decomposition Temp (°C): Not available
Viscosity: Not available

Section 10 - CHEMICAL STABILITY AND REACTIVITY INFORMATION

CONDITIONS CONTRIBUTING TO INSTABILITY

- Elevated temperatures.
- Presence of open flame.
- Product is considered stable.
- Hazardous polymerisation will not occur.

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ROCOL OPEN GEAR SPRAY

Chemwatch Material Safety Data Sheet
Issue Date: 16-Jun-2006
XCC317SCP

CHEMWATCH 21448
Version No:3
CD 2007/3 Page 6 of 7

Section 11 - TOXICOLOGICAL INFORMATION

POTENTIAL HEALTH EFFECTS

ACUTE HEALTH EFFECTS

Irritating to skin.

Vapours may cause dizziness or suffocation.

Vapours may cause drowsiness and dizziness.

Inhalation, skin contact and/or ingestion may produce health damage*.

May produce discomfort of the eyes and respiratory tract*.

* (limited evidence).

CHRONIC HEALTH EFFECTS

Possible risk of impaired fertility.

Harmful: danger of serious damage to health by prolonged exposure through inhalation.

TOXICITY AND IRRITATION

Not available. Refer to individual constituents.

Section 12 - ECOLOGICAL INFORMATION

Marine Pollutant:Not Determined

Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

This material and its container must be disposed of as hazardous waste.

Avoid release to the environment.

Refer to special instructions/safety data sheets.

Section 13 - DISPOSAL CONSIDERATIONS

- Consult State Land Waste Management Authority for disposal.
- Discharge contents of damaged aerosol cans at an approved site.
- Allow small quantities to evaporate.
- DO NOT incinerate or puncture aerosol cans.
- Bury residues and emptied aerosol cans at an approved site.

Section 14 - TRANSPORTATION INFORMATION

Labels Required: FLAMMABLE GAS

HAZCHEM: 2Y

UNDG:

Dangerous Goods Class: 2.1

UN Number: 1950

Shipping Name:AEROSOLS

Subrisk:

Packing Group:

None

None

Air Transport IATA:

ICAO/IATA Class: 2.1

UN/ID Number: 1950

Special provisions: None

Shipping Name: AEROSOLS, FLAMMABLE

ICAO/IATA Subrisk:

Packing Group:

None

None

Maritime Transport IMDG:

IMDG Class: 2.1

UN Number: 1950

EMS Number: F- D, S- U

Marine Pollutant: Not Determined

Shipping Name: AEROSOLS

IMDG Subrisk:

Packing Group:

Special provisions:

SP63

None

63 190 277 327 959

Section 15 - REGULATORY INFORMATION

POISONS SCHEDULE: None

REGULATIONS

Rocol Open Gear Spray (CAS: None):

No regulations applicable

n-hexane (CAS: 110-54-3) is found on the following regulatory lists;

continued...

ROCOL OPEN GEAR SPRAY

Chemwatch Material Safety Data Sheet

Issue Date: 16-Jun-2006

XCC317SCP

CHEMWATCH 21448

Version No:3

CD 2007/3 Page 7 of 7

Section 15 - REGULATORY INFORMATION

Australia Exposure Standards
Australia High Volume Industrial Chemical List (HVICL)
Australia Inventory of Chemical Substances (AICS)
Australia National Pollutant Inventory
IMO MARPOL 73/78 (Annex II) - List of Other Liquid Substances
International Council of Chemical Associations (ICCA) - High Production Volume List
OECD Representative List of High Production Volume (HPV) Chemicals

hydrocarbon propellant (CAS: 68476-85-7) is found on the following regulatory lists;

Australia Exposure Standards
Australia High Volume Industrial Chemical List (HVICL)
Australia Inventory of Chemical Substances (AICS)
OECD Representative List of High Production Volume (HPV) Chemicals

hydrocarbon propellant (CAS: 68476-86-8) is found on the following regulatory lists;

Australia Inventory of Chemical Substances (AICS)
OECD Representative List of High Production Volume (HPV) Chemicals

Section 16 - OTHER INFORMATION

INGREDIENTS WITH MULTIPLE CAS NUMBERS

Ingredient Name

hydrocarbon propellant

CAS

68476- 85- 7, 68476- 86- 8

Classification of the preparation and its individual components has drawn on official and authoritative sources as well as independent review by the Chemwatch Classification committee using available literature references.

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