SAFETY DATA SHEET

ROCOL FLAW FINDER VW SPRAY NO.2

GHS Product Identifier
ROCOL FLAW FINDER VW SPRAY NO.2

Company Name
ITW POLYMERS AND FLUIDS (ABN 63 004 235 063)

Address
100 Hassall Street Wetherill Park
NSW AUSTRALIA

Telephone/Fax Number
Tel: +61 2 9757 8800
Fax: +61 2 9757 3855

Emergency phone number
1800 385 556 / 0438 465 960

Emergency Contact Name
(02) 9652-1713 A/HRS

Recommended use of the chemical and restrictions on use
Relevant identified uses:
Application is by spray atomisation from a hand held aerosol pack
Use according to manufacturer's directions.
Crack detection in metal.

Additional Information
Other means of identification: Not Available

Website: www.itwpf.com.au

EMERGENCY RESPONSE:
Alternative Number 2: +612 9186 1132

Once connected and if the message is not in your preferred language then please dial 01

2. HAZARD IDENTIFICATION

GHS classification of the substance/mixture
[1] Aerosols Category 1, Gas under Pressure (Compressed gas)

Signal Word (s)
DANGER

Hazard Statement (s)
AUH044 Risk of explosion if heated under confinement.
H222 Extremely flammable aerosol.
H280 Contains gas under pressure; may explode if heated.

Pictogram (s)
Flame, Gas cylinder
Precautionary statement – Prevention
P210 Keep away from heat/sparks/open flames/hot surfaces. – No smoking.
P211 Do not spray on an open flame or other ignition source.
P251 Pressurized container: Do not pierce or burn, even after use.

Precautionary statement – Response
Not Applicable

Precautionary statement – Storage
P400 Keep out of the reach of children.
P401 Store in a well-ventilated place.
P403 Protect from sunlight.
P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50ºC/122ºF.

Precautionary statement – Disposal
Not Applicable

Other Information
Classification of the substance or mixture:
HAZARDOUS CHEMICAL. DANGEROUS GOODS. According to the WHS Regulations and the ADG Code.


3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Name</th>
<th>CAS</th>
<th>Proportion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mineral oil (solvent refined)</td>
<td>Not avail.</td>
<td>10-30 %weight</td>
</tr>
<tr>
<td>Hydrocarbon solvent</td>
<td>Not available</td>
<td>10-30 %weight</td>
</tr>
<tr>
<td>surfactant</td>
<td>Not available</td>
<td>&lt;10 %weight</td>
</tr>
<tr>
<td>Dye</td>
<td>Not available</td>
<td>&lt;10 %weight</td>
</tr>
<tr>
<td>Hydrocarbon propellant</td>
<td>68476-85-7.</td>
<td>30-60 %weight</td>
</tr>
</tbody>
</table>

Other Information
Substances:
See section below for composition of Mixtures

4. FIRST-AID MEASURES

Inhalation
If aerosols, fumes or combustion products are inhaled:
Remove to fresh air.
Lay patient down. Keep warm and rested.
Prostheses such as false teeth, which may block airway, should be removed, where possible, prior to initiating first aid procedures.
If breathing is shallow or has stopped, ensure clear airway and apply resuscitation, preferably with a demand valve resuscitator, bag-valve mask device, or pocket mask as trained. Perform CPR if necessary.
Transport to hospital, or doctor.

Ingestion
Not considered a normal route of entry.
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.
aspiration.
Observe the patient carefully.
Never give liquid to a person showing signs of being sleepy or with reduced awareness; i.e. becoming unconscious.
Give water to rinse out mouth, then provide liquid slowly and as much as casualty can comfortably drink.
Seek medical advice.

**Skin**
If skin contact occurs:
Immediately remove all contaminated clothing, including footwear.
Flush skin and hair with running water (and soap if available).
Seek medical attention in event of irritation.

**Eye contact**
If aerosols come in contact with the eyes:
Immediately hold the eyelids apart and flush the eye 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.
Seek medical attention without delay; if pain persists or recurs seek medical attention.
Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.

**Indication of immediate medical attention and special treatment needed if necessary**
For acute or short term repeated exposures to petroleum distillates or related hydrocarbons:
Primary threat to life, from pure petroleum distillate ingestion and/or inhalation, is respiratory failure.
Patients should be quickly evaluated for signs of respiratory distress (e.g. cyanosis, tachypnoea, intercostal retraction, obtundation) and given oxygen.
Patients with inadequate tidal volumes or poor arterial blood gases (pO2 50 mm Hg) should be intubated.
Arrhythmias complicate some hydrocarbon ingestion and/or inhalation and electrocardiographic evidence of myocardial injury has been reported; intravenous lines and cardiac monitors should be established in obviously symptomatic patients. The lungs excrete inhaled solvents, so that hyperventilation improves clearance.
A chest x-ray should be taken immediately after stabilisation of breathing and circulation to document aspiration and detect the presence of pneumothorax.
Epinephrine (adrenalin) is not recommended for treatment of bronchospasm because of potential myocardial sensitisation to catecholamines. Inhaled cardioselective bronchodilators (e.g. Alupent, Salbutamol) are the preferred agents, with aminophylline a second choice.
Lavage is indicated in patients who require decontamination; ensure use of cuffed endotracheal tube in adult patients. [Ellenhorn and Barceloux: Medical Toxicology]

**5. FIRE-FIGHTING MEASURES**

**Specific Methods**
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.

**Specific Hazards Arising From The Chemical**
Fire Incompatibility:
Avoid contamination with oxidising agents i.e. nitrates, oxidising acids, chlorine bleaches, pool chlorine etc. as ignition may result.

Fire/Explosion Hazard:
Liquid and vapour are highly flammable.
Severe fire hazard when exposed to heat or flame.
Vapour forms an explosive mixture with air.
Severe explosion hazard, in the form of vapour, when exposed to flame or spark.
Combustion products include: carbon dioxide (CO2), other pyrolysis products typical of burning organic material

**Hazchem Code**
2YE

**Decomposition Temperature**
Not Available

**Extinguishing Media - Small Fires**
Water spray, dry chemical or CO2
6. ACCIDENTAL RELEASE MEASURES

Clean-up Methods - Small Spillages
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.

Clean-up Methods - Large Spillages
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.

Other Information
Personal Protective Equipment advice is contained in Section 8 of the SDS.

7. HANDLING AND STORAGE

Precautions for Safe Handling
Safe 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.

Other information:
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.

Conditions for Safe Storage, Including Any Incompatibilities
Suitable container:
Aerosol dispenser.
Check that containers are clearly labelled.

Storage Incompatibility:
Avoid reaction with oxidising agents

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational Exposure Limit Values
Control parameters:
OCCUPATIONAL EXPOSURE LIMITS (OEL):
INGREDIENT DATA:
Source: Australia Exposure Standards
Ingredient: mineral oil
Material name: Oil mist, refined mineral
TWA: 5 mg/m³
STEL: Not Available
Peak: Not Available
Notes: Not Available

Source: Australia Exposure Standards
Ingredient: hydrocarbon propellant
Material name: LPG (liquified petroleum gas)
TWA: 1800 mg/m³ / 1000 ppm
STEL: Not Available
Peak: Not Available
Notes: Not Available

EMERGENCY LIMITS:
Ingredient: hydrocarbon propellant
Material name: Liquified petroleum gas; (L.P.G.)
TEEL-1: 3,000 ppm
TEEL-2: 3200 ppm
TEEL-3: 19000 ppm

Ingredient: mineral oil
Original IDLH: Not Available
Revised IDLH: Not Available

Ingredient: hydrocarbon solvent
Original IDLH: Not Available
Revised IDLH: Not Available

Ingredient: surfactant
Original IDLH: Not Available
Revised IDLH: Not Available

Ingredient: dye
Original IDLH: Not Available
Revised IDLH: Not Available

Ingredient: hydrocarbon propellant
Original IDLH: 19,000 [LEL] ppm
Revised IDLH: 2,000 [LEL] ppm

Appropriate Engineering Controls
Engineering controls are used to remove a hazard or place a barrier between the worker and the hazard. Well-designed engineering controls can be highly effective in protecting workers and will typically be independent of worker interactions to provide this high level of protection.

The basic types of engineering controls are:
Process controls which involve changing the way a job activity or process is done to reduce the risk.
Enclosure and/or isolation of emission source which keeps a selected hazard "physically" away from the worker and ventilation that strategically "adds" and "removes" air in the work environment.

Respiratory Protection
Type AX Filter of sufficient capacity. (AS/NZS 1716 & 1715, EN 143:2000 & 149:2001, ANSI Z88 or national equivalent)

Eye Protection
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.

Hand Protection
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.

Thermal Hazards
Not Available

Body Protection
No special equipment needed when handling small quantities. OTHERWISE:
Overalls.
Skin cleansing cream.
Eywesh unit.
The clothing worn by process operators insulated from earth may develop static charges far higher (up to 100 times) than the minimum ignition energies for various flammable gas-air mixtures. This holds true for a wide range of clothing materials including cotton.
Avoid dangerous levels of charge by ensuring a low resistivity of the surface material worn outermost.
BRETHERICK: Handbook of Reactive Chemical Hazards.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form
Aerosol - Liquid

Appearance
Supplied as an aerosol pack. Contents under PRESSURE. Contains highly flammable hydrocarbon propellant.
Red/pink liquid with a hydrocarbon odour; does not mix with water.

Odour
Not Available

Decomposition Temperature
Not Available

Solubility in Water
Immiscible

pH
Not Applicable (as supplied)
Not Applicable (as a solution (1%))

Vapour Pressure
Not Available

Vapour Density (Air=1)
Not Available

Evaporation Rate
Not Available

Physical State
Liquid

Odour Threshold
Not Available

Viscosity
Not Available

Volatile Component
Not Available

Partition Coefficient: n-octanol/water
Not Available

Surface tension
Not Available

Flash Point
-81°C propellant

Flammability
HIGHLY FLAMMABLE.

Auto-Ignition Temperature
Not Available
10. STABILITY AND REACTIVITY

Reactivity
See section 7

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

Conditions to Avoid
See section 7

Incompatible materials
See section 7

Hazardous Decomposition Products
See section 5

Possibility of hazardous reactions
See section 7

11. TOXICOLOGICAL INFORMATION

Toxicology Information
Rocol Flaw Finder VW Spray No.2
TOXICITY: Not Available
IRRITATION: Not Available

Mineral oil
TOXICITY: Not Available
IRRITATION: Not Available

Hydrocarbon propellant
TOXICITY:
Inhalation (mouse) LC50: >15.6-<17.9 mm/l/2hr>[1]
Inhalation (mouse) LC50: >15.6-<17.9 mm/l/2hr[1]
Inhalation (mouse) LC50: 410000 ppm/2hr[1]
Inhalation (rat) LC50: >800000 ppm15 min[1]
Inhalation (rat) LC50: 1354.944 mg/L15 min[1]
Inhalation (rat) LC50: 1355 mg/l15 min[1]
Inhalation (rat) LC50: 1442.738 mg/L15 min[1]
Inhalation (rat) LC50: 1442.738 mg/L15 min[1]
Inhalation (rat) LC50: 570000 ppm15 min[1]

IRRITATION: Not Available

Legend: 1. Value obtained from Europe ECHA Registered Substances - Acute toxicity 2. Value obtained from manufacturer’s SDS.
Unless otherwise specified data extracted from RTECS - Register of Toxic Effect of chemical Substances

MINERAL OIL:
Toxicity and Irritation data for petroleum-based mineral oils are related to chemical components and vary as does the composition and source of the original crude.
A small but definite risk of occupational skin cancer occurs in workers exposed to persistent skin contamination by oils over a period of years. This risk has been attributed to the presence of certain polycyclic aromatic hydrocarbons (PAH) (typified by benz[a]pyrene).
Petroleum oils which are solvent refined/extracted or severely hydrotreated, contain very low concentrations of both.

HYDROCARBON PROPELLANT:
No significant acute toxicological data identified in literature search.
Inhalation of the gas

Acute Toxicity: Data Not Available to make classification

Ingestion
Accidental ingestion of the material may be damaging to the health of the individual.
Not normally a hazard due to physical form of product.
Ingestion may result in nausea, pain, vomiting. Vomit entering the lungs by aspiration may cause potentially lethal chemical pneumonitis.

Inhalation
Inhalation of high concentrations of gas/vapour causes lung irritation with coughing and nausea, central nervous depression with headache and dizziness, slowing of reflexes, fatigue and inco-ordination.
If exposure to highly concentrated solvent atmosphere is prolonged this may lead to narcosis, unconsciousness, even coma and possible death.
WARNING: Intentional misuse by concentrating/inhaling contents may be lethal.

Skin
The material may cause skin irritation after prolonged or repeated exposure and may produce on contact skin redness, swelling, the production of vesicles, scaling and thickening of the skin.
The material may accentuate any pre-existing dermatitis condition.

Eye
The material may be irritating to the eye, with prolonged contact causing inflammation. Repeated or prolonged exposure to irritants may produce conjunctivitis.

Skin corrosion/irritation
Data Not Available to make classification

Serious eye damage/irritation
Data Not Available to make classification

Mutagenicity
Data Not Available to make classification

Respiratory sensitisation
Data Not Available to make classification
**Skin Sensitisation**  
Data Not Available to make classification

**Carcinogenicity**  
Data Not Available to make classification

**Reproductive Toxicity**  
Data Not Available to make classification

**STOT-single exposure**  
Data Not Available to make classification

**STOT-repeated exposure**  
Data Not Available to make classification

**Aspiration Hazard**  
Data Not Available to make classification

**Chronic Effects**  
Substance accumulation, in the human body, may occur and may cause some concern following repeated or long-term occupational exposure.

Constant or exposure over long periods to mixed hydrocarbons may produce stupor with dizziness, weakness and visual disturbance, weight loss and anaemia, and reduced liver and kidney function. Skin exposure may result in drying and cracking and redness of the skin.
12. ECOLOGICAL INFORMATION

Ecotoxicity
NOT AVAILABLE

Ingredient: hydrocarbon propellant
Endpoint: LC50
Test Duration (hr): 96
Effect: Not Available
Value: 24.11mg/L
Species: Fish
BCF: Not Available

Ingredient: hydrocarbon propellant
Endpoint: EC50
Test Duration (hr): 96
Effect: Not Available
Value: 7.71mg/L
Species: Algae or other aquatic plants
BCF: Not Available

Ingredient: hydrocarbon propellant
Endpoint: EC50
Test Duration (hr): 96
Effect: Not Available
Value: 8.57mg/L
Species: Algae or other aquatic plants
BCF: Not Available

Ingredient: hydrocarbon propellant
Endpoint: LC50
Test Duration (hr): 96
Effect: Not Available
Value: 24.11mg/L
Species: Fish
BCF: Not Available

Ingredient: hydrocarbon propellant
Endpoint: EC50
Test Duration (hr): 96
Effect: Not Available
Value: 7.71mg/L
Species: Algae or other aquatic plants
BCF: Not Available

Ingredient: hydrocarbon propellant
Endpoint: EC50
Test Duration (hr): 96
Effect: Not Available
Value: 8.57mg/L
Species: Algae or other aquatic plants
BCF: Not Available

For Hydrocarbons: log Kow 1. BCF~10.
For Aromatics: log Kow 2-3.
BCF 20-200.
Drinking Water Standards: hydrocarbon total: 10 ug/l (UK max.).
DO NOT discharge into sewer or waterways.
Persistence and degradability
Persistence: Water/Soil: No Data available for all ingredients
Persistence: Air: No Data available for all ingredients

Mobility
Mobility in soil:
No Data available for all ingredients

Bioaccumulative Potential
No Data available for all ingredients

13. DISPOSAL CONSIDERATIONS

Waste Disposal
Product / Packaging disposal:
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.

14. TRANSPORT INFORMATION

U.N. Number
1950

UN proper shipping name
AEROSOLS

Transport hazard class(es)
2.1

Hazchem Code
2YE

IERG Number
49

Other Information
Labels Required:
Marine Pollutant: NO
HAZCHEM: Not Applicable

Land transport (ADG):
UN number: 1950
Packing group: Not Applicable
UN proper shipping name: AEROSOLS
Environmental hazard: No relevant data
Transport hazard class(es):
Class: 2.1
Subrisk: Not Applicable
Special precautions for user:
Special provisions: 63 190 277 327 344
Limited quantity: 1000ml

Air transport (ICAO-IATA / DGR):
UN number: 1950
Packing group: Not Applicable
UN proper shipping name: Aerosols, flammable; Aerosols, flammable (engine starting fluid)
Environmental hazard: No relevant data
Transport hazard class(es):
ICAO/IATA Class: 2.1
ICAO / IATA Subrisk: Not Applicable
ERG Code: 10L
Special precautions for user:
Special provisions: A145A167A802; A1A145A167A802
Cargo Only Packing Instructions: 203
Cargo Only Maximum Qty / Pack: 150 kg
Passenger and Cargo Packing Instructions: 203; Forbidden
Passenger and Cargo Maximum Qty / Pack: 75 kg; Forbidden
Passenger and Cargo Limited Quantity Packing Instructions: Y203; Forbidden
Passenger and Cargo Limited Maximum Qty / Pack: 30 kg G; Forbidden

Sea transport (IMDG-Code / GGVSee):
UN number: 1950
Packing group: Not Applicable
UN proper shipping name: AEROSOLS
Environmental hazard: Not Applicable
Transport hazard class(es):
IMDG Class: 2.1
IMDG Subrisk: Not Applicable
Special precautions for user:
EMS Number: F-D, S-U
Special provisions: 63 190 277 327 344 959
Limited Quantities: 1000ml

Transport in bulk according to Annex II of MARPOL and the IBC code:
Ingredient: Rocol Flaw Finder VW Spray No.2

15. REGULATORY INFORMATION

Regulatory information
Safety, health and environmental regulations / legislation specific for the substance or mixture:
MINERAL OIL (NOT AVAIL.) IS FOUND ON THE FOLLOWING REGULATORY LISTS:
Australia Exposure Standards
Australia Hazardous Substances Information System - Consolidated Lists
International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs

HYDROCARBON PROPPELLANT (68476-85-7.) IS FOUND ON THE FOLLOWING REGULATORY LISTS:
Australia Exposure Standards
Australia Hazardous Substances Information System - Consolidated Lists
Australia Inventory of Chemical Substances (AICS)
International Air Transport Association (IATA) Dangerous Goods Regulations - Prohibited List Passenger and Cargo Aircraft

National Inventory: Australia - AICS
Status: N (mineral oil)
National Inventory: Canada - DSL
Status: N (mineral oil)
National Inventory: Canada - NDSL
Status: N (hydrocarbon propellant; mineral oil)
National Inventory: China - IECSC
Status: N (mineral oil)
National Inventory: Europe - EINEC / ELINCS / NLP
Status: N (mineral oil)
National Inventory: Japan - ENCS
Status: N (mineral oil)
National Inventory: Korea - KECI
Status: N (mineral oil)
National Inventory: New Zealand - NZIoC
Status: N (mineral oil)
National Inventory: Philippines - PICCS
Status: N (mineral oil)
National Inventory: USA - TSCA
Status: N (mineral oil)
Legend:
Y = All ingredients are on the inventory
N = Not determined or one or more ingredients are not on the inventory and are not exempt from listing (see specific ingredients in brackets)

Poisons Schedule
N/A

16. OTHER INFORMATION

Other Information
Version No: 5.1.1.1
Safety Data Sheet according to WHS and ADG requirements

Ingredients with multiple cas numbers:
Name: hydrocarbon propellant

The SDS is a Hazard Communication tool and should be used to assist in the Risk Assessment. Many factors determine whether the reported Hazards are Risks in the workplace or other settings. Risks may be determined by reference to Exposures Scenarios. Scale of use, frequency of use and current or available engineering controls must be considered.

This SDS has been transcribed into Infosafe GHS format from an original, issued by the manufacturer on the date shown. Any disclaimer by the manufacturer may not be included in the transcription.

END OF SDS

© Copyright Chemical Safety International Pty Ltd
Copyright in the source code of the HTML, PDF, XML, XFO and any other electronic files rendered by an Infosafe system for Infosafe SDS displayed is the intellectual property of Chemical Safety International Pty Ltd.
Copyright in the layout, presentation and appearance of each Infosafe SDS displayed is the intellectual property of Chemical Safety International Pty Ltd.
The compilation of SDS’s displayed is the intellectual property of Chemical Safety International Pty Ltd.
Copying of any SDS displayed is permitted for personal use only and otherwise is not permitted. In particular the SDS’s displayed cannot be copied for the purpose of sale or licence or for inclusion as part of a collection of SDS without the express written consent of Chemical Safety International Pty Ltd.