Technical Data



Performance you can trust

FLAWFINDER CLEANER SPRAY **NDT Crack Detection Spray**

FLAWFINDER Non-destructive inspection system is designed to provide a fast reliable method for visual detection of cracks or flaws which would not normally be visible to the naked eye. Ideal for the inspection of welded joints, castings, forgings etc...

FLAWFINDER CLEANER is an aerosol applied solvent, which can be sprayed from any angle, for the easy removal of FLAWFINDER DYE PENETRANT and FLAWFINDER DEVELOPER Sprays.

Features

- Rapid and effective cleaning agent.
- Non-chlorinated solvent.
- Multi-angle valve system.
- Leaves no residue.

Directions for Use

- 1. Shake aerosol well before use.
- 2. Apply from a distance of 15-30cm.
- 3. As with all products of this type it is recommended that compatibility with painted or coated surfaces, plastics and rubber be tested prior to use.

T +44 (0) 113 232 2600 F +44 (0) 113 232 2740 E customer-service@rocol.com www.rocol.com

ROCOL House, Swillington, Leeds LS26 8BS

Registered Company No. 559693 VAT No. 742 0531 67 Registered Office: Admiral House, St Leonard's Road, Windsor, Berkshire SL4 3BL ROCOL A division of TW Ltd











The information in this publication is based on our experience and reports from customers. There are many factors outside our control or knowledge which affect the use and performance of our products, for which reason it is given without responsibility

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Application Method

- 1. Clean the area to be tested with FLAWFINDER CLEANER SPRAY (No.1) and wipe thoroughly with a tissue or a lint-free cloth to ensure the surface is clean, dry and free of contaminants.
- 2. When the surface is completely dry apply FLAWFINDER DYE PENETRANT SPRAY (No.2) to cover the test area and allow a minimum contact time of 10 mins. Finer definitions may require longer contact time.
- 3. Once the contact time has elapsed, the excess penetrant should be removed from the surface with a tissue or lint-free cloth wetted with FLAWFINDER CLEANER (No.1). N.B. Do not spray the cleaner directly onto the surface as the Penetrant could be flushed out of flaws.
- 4. Apply a THIN film of FLAWFINDER DEVELOPER SPRAY (No.3) to the test area and leave for a minimum of 10 mins for the Developer to draw up the retained Penetrant from any flaws or cracks.
- 5. Suspect areas should then be examined under natural or electric light for signs of flaws and/or cracks.

Cracks will show up as lines whilst porosity will appear as pin holes.

If the results are inconclusive repeat the process taking greater care when removing the excess penetrant.

| Propellant | CO ₂ |
|-------------------------|---|
| Solvent | Blend of non-chlorinated hydrocarbons |
| Storage | Storage temperature should be kept below 50°C. Storage area should be out of direct sunlight |
| Pack Sizes – Part Codes | 300ml – 63125 |

Date: Jan-09

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FLAWFINDER CLEANER SPRAY

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Compilation date: 01/03/2013

Revision No: 8

Section 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product name: FLAWFINDER CLEANER SPRAY

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of substance / mixture: Solvent cleaner.

1.3. Details of the supplier of the safety data sheet

Company name: ROCOL

ROCOL House Swillington

Leeds

West Yorkshire LS26 8BS ENGLAND

Tel: +44 (0) 113 232 2700 **Fax:** +44 (0) 113 232 2740

Email: customer-service@rocol.com

1.4. Emergency telephone number

Emergency tel: +44 (0) 113 232 2600

Section 2: Hazards identification

2.1. Classification of the substance or mixture

Classification under CHIP: F+: R12; Xi: R36/38; N: R51/53; -: R67

Most important adverse effects: Extremely flammable. Irritating to eyes and skin. Toxic to aquatic organisms, may cause

long-term adverse effects in the aquatic environment. Vapours may cause drowsiness

and dizziness.

2.2. Label elements

Label elements under CHIP:

Hazard symbols: Extremely flammable.

Irritant.

Dangerous for the environment.







Risk phrases: R12: Extremely flammable.

R36/38: Irritating to eyes and skin.

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R51/53: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic

environment.

R67: Vapours may cause drowsiness and dizziness.

Safety phrases: S16: Keep away from sources of ignition - No smoking.

S23: Do not breathe spray.

S51: Use only in well-ventilated areas. S24/25: Avoid contact with skin and eyes.

S35: This material and its container must be disposed of in a safe way.

Precautionary phrases: Pressurized container: protect from sunlight and do not expose to temperatures

exceeding 50°C. Do not pierce or burn, even after use.

Do not spray on a naked flame or any incandescent material. Keep away from sources

of ignition - No smoking. Keep out of the reach of children.

2.3. Other hazards

PBT: This substance is not identified as a PBT substance.

Section 3: Composition/information on ingredients

3.2. Mixtures

Hazardous ingredients:

PROPAN-2-OL

| EINECS | CAS | CHIP Classification | CLP Classification | Percent |
|-----------|---------|-------------------------|--|---------|
| 200-661-7 | 67-63-0 | F: R11; Xi: R36; -: R67 | Flam. Liq. 2: H225; Eye Irrit. 2: H319; STOT SE 3: H336 | 30-50% |

ISOPARAFFINIC HYDROCARBON

| 292-458-5 | 90622-56-3 | F: R11; Xn: R65; Xi: R38; -: R67; N: | - | 30-50% |
|-----------|------------|--------------------------------------|---|--------|
| | | R51/53 | | |

CARBON DIOXIDE AEROSOL PROPELLANT

| 204-696-9 | 124-38-9 | <u>-</u> • | _ | 1-10% |
|-----------|----------|------------|---|--------|
| 207 000 0 | 124 00 0 | | | 1 10/0 |

Section 4: First aid measures

4.1. Description of first aid measures

Skin contact: Wash immediately with plenty of soap and water.

Eye contact: Bathe the eye with running water for 15 minutes. Consult a doctor.Ingestion: Wash out mouth with water. Do not induce vomiting. Consult a doctor.Inhalation: Remove casualty from exposure ensuring one's own safety whilst doing so.

4.2. Most important symptoms and effects, both acute and delayed

Skin contact: There may be irritation and redness at the site of contact.

Eye contact: There may be irritation and redness. The eyes may water profusely.

Ingestion: There may be soreness and redness of the mouth and throat. May cause dizziness.

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Inhalation: There may be irritation of the throat with a feeling of tightness in the chest. Drowsiness or mental confusion may occur.

4.3. Indication of any immediate medical attention and special treatment needed

Section 5: Fire-fighting measures

5.1. Extinguishing media

Extinguishing media: Alcohol resistant foam. Carbon dioxide. Dry chemical powder. Do not use water. Use

water spray to cool containers.

5.2. Special hazards arising from the substance or mixture

Exposure hazards: Highly flammable. Forms explosive air-vapour mixture. In combustion emits toxic fumes

of carbon dioxide / carbon monoxide.

5.3. Advice for fire-fighters

Advice for fire-fighters: Wear self-contained breathing apparatus.

Section 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions: Refer to section 8 of SDS for personal protection details. Eliminate all sources of

ignition.

6.2. Environmental precautions

Environmental precautions: Do not discharge into drains or rivers.

6.3. Methods and material for containment and cleaning up

Clean-up procedures: Do not use equipment in clean-up procedure which may produce sparks. Mix with sand

or vermiculite. Transfer to a closable, labelled salvage container for disposal by an

appropriate method.

6.4. Reference to other sections

Section 7: Handling and storage

7.1. Precautions for safe handling

Handling requirements: Ensure there is sufficient ventilation of the area. Do not handle in a confined space.

Smoking is forbidden.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions: Store in cool, well ventilated area. Keep away from sources of ignition. Keep away from

direct sunlight. Ensure lighting and electrical equipment are not a source of ignition.

Suitable packaging: Must only be kept in original packaging.

7.3. Specific end use(s)

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Section 8: Exposure controls/personal protection

8.1. Control parameters

Hazardous ingredients:

PROPAN-2-OL

Workplace exposure limits:

Respirable dust

| State | 8 hour TWA | 15 min. STEL | 8 hour TWA | 15 min. STEL |
|-------|------------|--------------|------------|--------------|
| UK | 999 mg/m3 | 1250 mg/m3 | - | - |

ISOPARAFFINIC HYDROCARBON

| UK | 1200 mg/m3 | - | - | - |
|----|------------|---|---|---|
|----|------------|---|---|---|

CARBON DIOXIDE AEROSOL PROPELLANT

| UK | 5000ppm 9150mg/m3 | 15000ppm 27400mg/m3 | - | - |
|----|-------------------|---------------------|---|---|
|----|-------------------|---------------------|---|---|

8.2. Exposure controls

Engineering measures: Ensure there is sufficient ventilation of the area. Ensure lighting and electrical

equipment are not a source of ignition.

Respiratory protection: Respiratory protection not required.

Hand protection: Nitrile gloves. Neoprene gloves.Eye protection: Safety glasses with side-shields.

Skin protection: Protective clothing.

Section 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

State: Aerosol

Colour: Colourless

Odour: Characteristic odour

Evaporation rate: Fast

Oxidising: Non-oxidising (by EC criteria)

Solubility in water: Miscible

Viscosity: Non-viscous

Flash point°C: < -20 Relative density: 0.74

9.2. Other information

Other information: Not applicable.

Section 10: Stability and reactivity

10.1. Reactivity

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10.2. Chemical stability

Chemical stability: Stable under normal conditions. Stable at room temperature.

10.3. Possibility of hazardous reactions

10.4. Conditions to avoid

Conditions to avoid: Direct sunlight. Heat. Sources of ignition.

10.5. Incompatible materials

Materials to avoid: Strong oxidising agents. Strong reducing agents.

10.6. Hazardous decomposition products

Haz. decomp. products: In combustion emits toxic fumes of carbon dioxide / carbon monoxide.

Section 11: Toxicological information

11.1. Information on toxicological effects

Relevant effects for mixture:

| Effect | Route | Basis |
|------------|---------|-----------------------|
| Irritation | OPT DRM | Hazardous: calculated |

Symptoms / routes of exposure

Skin contact: There may be irritation and redness at the site of contact.

Eye contact: There may be irritation and redness. The eyes may water profusely.

Ingestion: There may be soreness and redness of the mouth and throat. May cause dizziness.

Inhalation: There may be irritation of the throat with a feeling of tightness in the chest. Drowsiness

or mental confusion may occur.

Section 12: Ecological information

12.1. Toxicity

Ecotoxicity values: Not applicable.

12.2. Persistence and degradability

Persistence and degradability: Only slightly biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative potential: No data available.

12.4. Mobility in soil

Mobility: Highly volatile.

12.5. Results of PBT and vPvB assessment

PBT identification: This substance is not identified as a PBT substance.

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12.6. Other adverse effects

Other adverse effects: Toxic to aquatic organisms.

Section 13: Disposal considerations

13.1. Waste treatment methods

Disposal operations: Specially engineered landfill (e.g. placement into lined discrete cells which are capped

and isolated from one another and the environment, etc.).

Recovery operations: Use principally as a fuel or other means to generate energy.

Waste code number: kk

Disposal of packaging: Dispose of in a regulated landfill site or other method for hazardous or toxic wastes.

NB: The user's attention is drawn to the possible existence of regional or national

regulations regarding disposal.

Section 14: Transport information

14.1. UN number

UN number: UN1950

14.2. UN proper shipping name

Shipping name: AEROSOLS, Flammable

14.3. Transport hazard class(es)

Transport class: 2

14.4. Packing group

14.5. Environmental hazards

Environmentally hazardous: Yes Marine pollutant: No

14.6. Special precautions for user

Section 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

15.2. Chemical Safety Assessment

Chemical safety assessment: A chemical safety assessment has not been carried out for the substance or the mixture

by the supplier.

Section 16: Other information

Other information

Other information: This safety data sheet is prepared in accordance with Commission Regulation (EU) No

453/2010.

Safety data sheet prepared in accordance with Commission Directive 2008/47/EC of 8 April 2008 amending, for the purposes of adapting to technical progress, Council

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Directive 75/324/EEC relating to aerosol dispensers

Compiled in accordance with REACH.

Phrases used in s.2 and 3: H225: Highly flammable liquid and vapour.

H319: Causes serious eye irritation.

H336: May cause drowsiness or dizziness.

None

R11: Highly flammable.

R12: Extremely flammable.

R36/38: Irritating to eyes and skin.

R36: Irritating to eyes. R38: Irritating to skin.

R51/53: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic

environment.

R65: Harmful: may cause lung damage if swallowed.

R67: Vapours may cause drowsiness and dizziness.

Legal disclaimer: The above information is believed to be correct but does not purport to be all inclusive

and shall be used only as a guide. This company shall not be held liable for any

damage resulting from handling or from contact with the above product.