SAFETY DATA SHEET
AF / CARL ZEISS CAMERA LENS CLEANING WIPE

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

PRODUCT NAME
AF / CARL ZEISS CAMERA LENS CLEANING WIPE

PRODUCT NO.
2SUBACLOK2

APPLICATION
Cleaning Product

SUPPLIER
AF INTERNATIONAL. A division of HK WENTWORTH LTD
KINGSBURY PARK, MIDLAND ROAD, SWADLINCOTE DERBYSHIRE DE11 0AN UNITED KINGDOM
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+44 (0) 1283 550177
info@hkw.co.uk

EMERGENCY TELEPHONE
+44(0)1283 222 111 between 8.30 am - 5.00pm Mon - Fri

2 HAZARDS IDENTIFICATION

Flammable.

CLASSIFICATION
R10.

3 COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Name</th>
<th>EC No.</th>
<th>CAS-No.</th>
<th>Content</th>
<th>Classification</th>
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</thead>
<tbody>
<tr>
<td>ETHANOL</td>
<td>200-578-6</td>
<td>64-17-5</td>
<td>30-60%</td>
<td>F;R11</td>
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<tr>
<td>PROPN-2-OL</td>
<td>200-661-7</td>
<td>67-63-0</td>
<td>5-10%</td>
<td>F;R11 Xi;R36 R87</td>
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</table>

The Full Text for all R-Phrases are Displayed in Section 16

COMPOSITION COMMENTS
Ingredients not listed are classified as non-hazardous or at a concentration below reportable levels

4 FIRST-AID MEASURES

NOTES TO THE PHYSICIAN
Treat symptomatically

INHALATION
Move the exposed person to fresh air at once. Get medical attention if any discomfort continues.

INGESTION
DO NOT INDUCE VOMITING! Rinse mouth thoroughly. Get medical attention.

SKIN CONTACT
Promptly wash contaminated skin with soap or mild detergent and water. Promptly remove clothing if soaked through and wash as above. Get medical attention if irritation persists after washing.

EYE CONTACT
Make sure to remove any contact lenses from the eyes before rinsing. Promptly wash eyes with plenty of water while lifting the eye lids. Continue to rinse for at least 15 minutes. Get medical attention if any discomfort continues.

5 FIRE-FIGHTING MEASURES

EXTINGUISHING MEDIA
Use: Alcohol resistant foam. Powder. Dry chemicals, sand, dolomite etc.
AF / CARL ZEISS CAMERA LENS CLEANING WIPE

SPECIAL FIRE FIGHTING PROCEDURES
Move container from fire area if it can be done without risk. Use water to keep fire exposed containers cool and disperse vapours.

6 ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS
Wear protective clothing as described in Section 8 of this safety data sheet.

ENVIRONMENTAL PRECAUTIONS
Not relevant considering the small amounts used.

SPILL CLEAN UP METHODS
Extinguish all ignition sources. Avoid sparks, flames, heat and smoking. Ventilate. Wear necessary protective equipment. Absorb in vermiculite, dry sand or earth and place into containers.

7 HANDLING AND STORAGE

USAGE PRECAUTIONS
Keep away from heat, sparks and open flame. Avoid spilling, skin and eye contact.

STORAGE PRECAUTIONS
Flammable/combustible - Keep away from oxidisers, heat and flames. Store in tightly closed original container in a dry, cool and well-ventilated place. Keep in original container.

8 EXPOSURE CONTROLS/PERSOAL PROTECTION

<table>
<thead>
<tr>
<th>Name</th>
<th>Std</th>
<th>TWA - 8 hrs</th>
<th>STEL - 15 min</th>
<th>Notes</th>
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<tbody>
<tr>
<td>ETHANOL</td>
<td>WEL</td>
<td>1000 ppm</td>
<td>1880 mg/m3</td>
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<tr>
<td>PROPAN-2-OL</td>
<td>WEL</td>
<td>400 ppm</td>
<td>999 mg/m3</td>
<td>500 ppm 1250 mg/m3</td>
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</table>

WEL = Workplace Exposure Limit.

INGREDIENT COMMENTS
WEL = Workplace Exposure Limits

PROTECTIVE EQUIPMENT

ENGINEERING MEASURES
All handling to take place in well-ventilated area.

RESPIRATORY EQUIPMENT
No specific recommendation made, but respiratory protection must be used if the general level exceeds the Recommended Workplace Exposure Limit. Use respiratory equipment with gas filter, type A2.

HAND PROTECTION
Use protective gloves. The most suitable glove must be chosen in consultation with the gloves supplier, who can inform about the breakthrough time of the glove material. Butyl rubber gloves are recommended.

EYE PROTECTION
Wear approved, tight fitting safety glasses where splashing is probable.

OTHER PROTECTION
Wear appropriate clothing to prevent any possibility of liquid contact and repeated or prolonged vapour contact.

HYGIENE MEASURES
DO NOT SMOKE IN WORK AREA! Wash at the end of each work shift and before eating, smoking and using the toilet. Wash promptly with soap & water if skin becomes contaminated. When using do not eat, drink or smoke.

9 PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE    Liquid
COLOUR         Colourless
AF / CARL ZEISS CAMERA LENS CLEANING WIPE

**SOLUBILITY**
Miscible with water.

**BOILING POINT (°C)**
>77

**VISCOSITY**
3.06 cSt @ 20 °C

**RELATIVE DENSITY**
0.930 @ 20 °C

**FLASH POINT (°C)**
24 CC (Closed cup).

**RELATIVE DENSITY**
0.930 @ 20 °C

**BOILING POINT (°C)**
>77

**VISCOSITY**
3.06 cSt @ 20 °C

**FLAMMABILITY LIMIT - LOWER(%)**
3.50

**FLAMMABILITY LIMIT - UPPER(%)**
15

**10 STABILITY AND REACTIVITY**

**STABILITY**
Stable under normal temperature conditions.

**CONDITIONS TO AVOID**
Avoid heat, flames and other sources of ignition.

**MATERIALS TO AVOID**
Strong oxidising substances.

**HAZARDOUS DECOMPOSITION PRODUCTS**
During fire, toxic gases (CO, CO2) are formed.

**11 TOXICOLOGICAL INFORMATION**

**INHALATION**
May cause irritation to the respiratory system.

**INGESTION**
May cause stomach pain or vomiting.

**SKIN CONTACT**
Prolonged contact may cause dryness of the skin. Acts as a defatting agent on skin. May cause cracking of skin, and eczema.

**EYE CONTACT**
Irritating to eyes.

**ROUTE OF ENTRY**
Skin absorption. Ingestion. Skin and/or eye contact.

**TARGET ORGANS**
Central nervous system. Eyes. Respiratory system, lungs. Skin.

**MEDICAL SYMPTOMS**

**12 ECOLOGICAL INFORMATION**

**ECOTOXICITY**
Not regarded as dangerous for the environment.

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**13 DISPOSAL CONSIDERATIONS**

**ETHANOL**
Toxic Dose 1 - LD 50
6200-17800 mg/kg (oral rat)

**PROPAN-2-OL**
Toxic Dose 1 - LD 50
5045 mg/kg (oral rat)

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DISPOSAL METHODS
Dispose of waste and residues in accordance with local authority requirements. Absorb in vermiculite or dry sand, dispose in licensed hazardous waste.

14 TRANSPORT INFORMATION

UK ROAD CLASS 4.1
PROPER SHIPPING NAME SOLIDS CONTAINING FLAMMABLE LIQUID, N.O.S. (PROPAN-2-OL, )
ROAD TRANSPORT NOTES Exempt from regulations through Special Provision 216
SEA TRANSPORT NOTES Exempt from regulations through Special Provision 216
AIR TRANSPORT NOTES Exempt from regulation through Special Provision A46
UDF Phrase 1 Class 4.1:
UN NO. ROAD 3175 UK ROAD PACK GR. II
ADR CLASS NO. 4.1 ADR Class Flammable solids, self-reactive substances and solid desensitized explosives.
ADR PACK GROUP II HAZARD No. (ADR) 40
ADR LABEL NO. 4.1 HAZCHEM CODE 1Z
CEFIC TEC(R) NO. 41GF1-II+III RID CLASS NO. 4.1
RID PACK GROUP II UN NO. SEA 3175
IMDG CLASS 4.1 IMDG PAGE NO. 3244
IMDG PACK GR. II EMS F-A, S-I
MFAG See Guide MARINE POLLUTANT No.
UN NO. AIR 3175 AIR CLASS 4.1
AIR PACK GR. II

15 REGULATORY INFORMATION

RISK PHRASES
R10 Flammable.

SAFETY PHRASES
S51 Use only in well-ventilated areas.

UK REGULATORY REFERENCES
Chemicals (Hazard Information & Packaging) Regulations.
The Control of Substances Hazardous to Health Regulations 1988.

EU DIRECTIVES
System of specific information relating to Dangerous Preparations. 2001/58/EC.
Dangerous Substance Directive 67/548/EEC.
Dangerous Preparations Directive 1999/45/EC.
AF / CARL ZEISS CAMERA LENS CLEANING WIPE

APPROVED CODE OF PRACTICE
Classification and Labelling of Substances and Preparations Dangerous for Supply. Safety Data Sheets for Substances and Preparations.

GUIDANCE NOTES
Workplace Exposure Limits EH40.

18 OTHER INFORMATION

REVISION COMMENTS
Revised in accordance with CHIP3 and EU Directives 1999/45/EC and 2001/58/EC

ISSUED BY
Helen O'Reilly

<table>
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<tr>
<th>REVISION DATE</th>
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RISK PHRASES IN FULL
R11 Highly flammable.
R36 Irritating to eyes.
R67 Vapours may cause drowsiness and dizziness.

DISCLAIMER
This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.