



Decalcifier I

Safety Data Sheet

according to the Model Work Health and Safety Regulations

Date of issue: 28/11/2018

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Version: 1.0

SECTION 1: Identification : Product identifier and chemical identity

1.1. Product identifier

Trade name : Decalcifier I
Product code : 3800400, 3800401, 3800440, 3800441, 3800442, 3800400E, 3800401E, 3800440E, 3800441E

1.2. Other means of identification

No additional information available

1.3. Recommended use of the chemical and restrictions on use

Recommended use : Fixation and decalcification of tissue
Restrictions on use : Other uses

1.4. Supplier's details

Leica Microsystems Pty Ltd
Suite 2, Level 3, Building A, Talavera Road
Macquarie Park - 2113 Australia

1.5. Emergency phone number

| Organisation/Company | Emergency number |
|--|------------------|
| ChemTrec | 800-424-9300 |
| International Calls (call collect) | +1 703-527-3887 |
| Australia 24 Hr Poisons Information Centre | 13 11 26 |

SECTION 2: Hazards identification

2.1. Classification of the hazardous chemical

Classification according to the model Work Health and Safety Regulations (WHS Regulations)

Flammable liquids, Category 2 H225
Skin corrosion/irritation, Category 1A H314

2.2. Label elements

Signal word (GHS-AU) : Danger
Hazard statements (GHS-AU) : H225 - Highly flammable liquid and vapour
H314 - Causes severe skin burns and eye damage
Precautionary statements (GHS-AU) : P210 - Keep away from heat, sparks, open flames, hot surfaces. No smoking.
P233 - Keep container tightly closed
P240 - Ground/bond container and receiving equipment
P241 - Use explosion-proof equipment
P242 - Use only non-sparking tools
P243 - Take precautionary measures against static discharge
P260 - Do not breathe mist/vapours/spray.
P264 - Wash thoroughly after handling
P280 - Wear protective gloves/protective clothing/eye protection/face protection.
P301+P330+P331 - IF SWALLOWED: rinse mouth. Do NOT induce vomiting
P303+P361+P353 - IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
P304+P340 - IF INHALED: remove victim to fresh air and keep at rest in a position comfortable for breathing
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P310 - Immediately call a POISON CENTER or doctor/physician
P321 - Specific treatment (see supplemental first aid instruction on this label)
P363 - Wash contaminated clothing before reuse
P370+P378 - In case of fire: Use dry chemical, foam, or water spray for extinction.
P403+P235 - Store in a well-ventilated place. Keep cool
P405 - Store locked up
P501 - Dispose of contents/container in accordance with all local/regional/national/international regulations

2.3. Other hazards

No additional information available

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SECTION 3: Composition/information on ingredients

| Name | CAS-No. | Compound type | % | Classification according to the model Work Health and Safety Regulations (WHS Regulations) |
|--------------|---------|---------------|------|--|
| Formic Acid | 64-18-6 | | < 12 | Not classified |
| methanol | 67-56-1 | | < 2 | Flam. Liq. 2, H225 |
| Formaldehyde | 50-00-0 | | < 6 | Not classified |

SECTION 4: First aid measures

4.1. Description of first aid measures

| | |
|---------------------------------------|--|
| First-aid measures general | : Call a physician immediately. |
| First-aid measures after inhalation | : Remove person to fresh air and keep comfortable for breathing. |
| First-aid measures after skin contact | : Rinse skin with water/shower. Remove/Take off immediately all contaminated clothing. Call a physician immediately. |
| First-aid measures after eye contact | : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician immediately. |
| First-aid measures after ingestion | : Rinse mouth. Do not induce vomiting. Call a physician immediately. |

4.2. Symptoms caused by exposure

| | |
|-------------------------------------|---|
| Symptoms/effects after skin contact | : Burns. May cause an allergic skin reaction. |
| Symptoms/effects after eye contact | : Serious damage to eyes. |
| Symptoms/effects after ingestion | : Burns. |

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

| | |
|-----------------------------------|--------------------------|
| Other medical advice or treatment | : Treat symptomatically. |
|-----------------------------------|--------------------------|

SECTION 5: Firefighting measures

5.1. Extinguishing media

| | |
|------------------------------|--|
| Suitable extinguishing media | : Water spray. Dry powder. Foam. Carbon dioxide. |
|------------------------------|--|

5.2. Special hazards arising from the substance or mixture

| | |
|-------------|--|
| Fire hazard | : No data available on direct fire hazard. |
|-------------|--|

5.3. Special protective equipment and precautions for fire-fighters

| | |
|--------------------------------|--|
| Protection during firefighting | : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing. |
|--------------------------------|--|

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

| | |
|----------------------|---|
| Emergency procedures | : Only qualified personnel equipped with suitable protective equipment may intervene. |
|----------------------|---|

6.1.2. For emergency responders

| | |
|----------------------|---|
| Protective equipment | : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection". |
|----------------------|---|

6.2. Environmental precautions

Avoid release to the environment. Notify authorities if product enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

| | |
|-------------------------|---|
| Methods for cleaning up | : Take up liquid spill into absorbent material. Notify authorities if product enters sewers or public waters. |
|-------------------------|---|

SECTION 7: Handling and storage, including how the chemical may be safely used

7.1. Precautions for safe handling

| | |
|-------------------------------|---|
| Precautions for safe handling | : Ensure good ventilation of the work station. Wear personal protective equipment. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Take all necessary technical measures to avoid or minimize the release of the product on the workplace. Provide local exhaust or general room ventilation. Avoid contact with skin and eyes. |
|-------------------------------|---|

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Hygiene measures : Wash contaminated clothing before reuse. Contaminated work clothing should not be allowed out of the workplace. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Comply with applicable regulations.

Storage conditions : Store in a well-ventilated place. Keep cool. Keep container tightly closed. Store locked up.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters - exposure standards

| Formic Acid (64-18-6) | | |
|-----------------------|------------------|----------------------|
| USA - ACGIH | ACGIH TWA (ppm) | 5 ppm |
| USA - ACGIH | ACGIH STEL (ppm) | 10 ppm |
| USA - ACGIH | Remark (ACGIH) | URT, eye, & skin irr |

| methanol (67-56-1) | | |
|--------------------|------------------|--|
| USA - ACGIH | ACGIH TWA (ppm) | 200 ppm (Methanol; USA; Time-weighted average exposure limit 8 h; TLV - Adopted Value) |
| USA - ACGIH | ACGIH STEL (ppm) | 250 ppm (Methanol; USA; Short time value; TLV - Adopted Value) |

Exposure limit values for the other components

8.2. Monitoring

No additional information available

8.3. Appropriate engineering controls

Appropriate engineering controls : In the United States, refer to OSHA 1910.1048 for requirements for handling of formaldehyde solutions.

8.4. Personal protective equipment

Hand protection : Protective gloves

Eye protection : Safety glasses

Skin and body protection : Wear suitable protective clothing

Respiratory protection : None needed with adequate ventilation. If the occupational exposure limit is exceeded, use an approved organic vapor respirator. Selection of respiratory protection depends on the contaminant type, form, and concentration. Select in accordance with OSHA 1910.134 or other applicable regulations and good industrial hygiene practice.

Environmental exposure controls : Avoid release to the environment.

SECTION 9: Physical and chemical properties

| | |
|--|---------------------|
| Physical state | : Liquid |
| Colour | : Colourless |
| Odour | : Pungent |
| Odour threshold | : No data available |
| pH | : 1.3 - 1.9 |
| Relative evaporation rate (butylacetate=1) | : No data available |
| Melting point | : Not applicable |
| Boiling point | : No data available |
| Flash point | : No data available |
| Auto-ignition temperature | : No data available |
| Flammability (solid, gas) | : No data available |
| Vapour pressure | : No data available |
| Relative density | : No data available |
| Density | : 1.1 |

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| | |
|-------------------------|---------------------|
| Solubility | : No data available |
| Log Pow | : No data available |
| Viscosity | : No data available |
| Explosive properties | : No data available |
| Explosive limits | : No data available |
| Minimum ignition energy | : No data available |
| Fat solubility | : No data available |

SECTION 10: Stability and reactivity

| | |
|------------------------------------|--|
| Chemical stability | : Stable under normal conditions. |
| Possibility of hazardous reactions | : No dangerous reactions known under normal conditions of use. |
| Conditions to avoid | : Avoid contact with hot surfaces. Heat. |
| Hazardous decomposition products | : Under normal conditions of storage and use, hazardous decomposition products should not be produced. |

SECTION 11: Toxicological information

| | |
|-----------------------------|------------------|
| Acute toxicity (oral) | : Not classified |
| Acute toxicity (dermal) | : Not classified |
| Acute toxicity (inhalation) | : Not classified |

| methanol (67-56-1) | |
|----------------------------|--|
| LD50 oral rat | > 5000 mg/kg (Rat; BASF test; Literature study; 1187-2769 mg/kg bodyweight; Rat; Weight of evidence) |
| LD50 dermal rabbit | 15800 mg/kg (Rabbit; Literature study) |
| LC50 inhalation rat (mg/l) | 85 mg/l/4h (Rat; Literature study) |
| LC50 inhalation rat (ppm) | 64000 ppm/4h (Rat; Literature study) |

| | |
|-----------------------------------|---|
| Skin corrosion/irritation | : Causes severe skin burns and eye damage. pH: 1.3 - 1.9 |
| Serious eye damage/irritation | : pH: 1.3 - 1.9 |
| Respiratory or skin sensitisation | : Not classified |
| Germ cell mutagenicity | : Not classified |
| Carcinogenicity | : Not classified |
| Reproductive toxicity | : Not classified |
| STOT-single exposure | : Not classified |
| STOT-repeated exposure | : Not classified |
| Aspiration hazard | : Not classified |

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|---------------|-----|
| Density | 1.1 |

SECTION 12: Ecological information

According to the National Code of Practice for the Preparation of Material Safety Data Sheets, Environmental classification information is not mandatory. Information relevant for GHS classification is available on request

12.1. Ecotoxicity

| | |
|--------------------------|---|
| Ecology - general | : Before neutralisation, the product may represent a danger to aquatic organisms. |
| Acute aquatic toxicity | : Not classified |
| Chronic aquatic toxicity | : Not classified |

12.2. Persistence and degradability

| Formaldehyde (50-00-0) | |
|---------------------------------|---|
| Persistence and degradability | Readily biodegradable in water. No (test)data on mobility of the components available. Photodegradation in the air. |
| Biochemical oxygen demand (BOD) | 0.64 g O ₂ /g substance |

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| Formaldehyde (50-00-0) | |
|-------------------------------|-------------------------------------|
| Chemical oxygen demand (COD) | 1.06 g O ₂ /g substance |
| ThOD | 1.068 g O ₂ /g substance |
| BOD (% of ThOD) | 0.6 |

| methanol (67-56-1) | |
|---------------------------------|---|
| Persistence and degradability | Readily biodegradable in water. Biodegradable in the soil. Highly mobile in soil. |
| Biochemical oxygen demand (BOD) | 0.6 - 1.12 g O ₂ /g substance |
| Chemical oxygen demand (COD) | 1.42 g O ₂ /g substance |
| ThOD | 1.5 g O ₂ /g substance |
| BOD (% of ThOD) | 0.8 (Literature study) |

12.3. Bioaccumulative potential

| Formaldehyde (50-00-0) | |
|-------------------------------|-----------------------------------|
| Log Pow | See section 12.1 on ecotoxicology |
| Bioaccumulative potential | Bioaccumulation: not applicable. |

| methanol (67-56-1) | |
|---------------------------|--|
| BCF fish 1 | See section 12.1 on ecotoxicology |
| Log Pow | See section 12.1 on ecotoxicology |
| Log Koc | See section 12.1 on ecotoxicology |
| Bioaccumulative potential | Low potential for bioaccumulation (BCF < 500). |

12.4. Mobility in soil

| Formaldehyde (50-00-0) | |
|-------------------------------|-----------------------------------|
| Log Pow | See section 12.1 on ecotoxicology |

| methanol (67-56-1) | |
|---------------------------|-----------------------------------|
| Surface tension | 0.023 N/m (20 °C) |
| Log Pow | See section 12.1 on ecotoxicology |
| Log Koc | See section 12.1 on ecotoxicology |

12.5. Other adverse effects

Ozone : Not classified
Other adverse effects : No additional information available

SECTION 13: Disposal considerations

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

SECTION 14: Transport information

14.1. UN number

UN-No. (IMDG) : 1760
UN-No. (IATA) : 1760

14.2. Proper Shipping Name - Addition

Proper Shipping Name (IMDG) : CORROSIVE LIQUID, N.O.S.
Proper Shipping Name (IATA) : Corrosive liquid, n.o.s.

14.3. Transport hazard class(es)

IMDG

Transport hazard class(es) (IMDG) : 8
Danger labels (IMDG) : 8



IATA

Transport hazard class(es) (IATA) : 8
Hazard labels (IATA) : 8

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14.4. Packing group

Packing group (IMDG) : II

Packing group (IATA) : II

14.5. Environmental hazards

Marine pollutant : No

14.6. Special precautions for user

Specific storage requirement : No data available

Shock sensitivity : No data available

14.7. Additional information

Other information : No supplementary information available

Transport by road and rail

Not applicable

Transport by sea

UN-No. (IMDG) : 1760
Special provisions (IMDG) : 274
Limited quantities (IMDG) : 1 L
Excepted quantities (IMDG) : E2
Packing instructions (IMDG) : P001
IBC packing instructions (IMDG) : IBC02
Tank instructions (IMDG) : T11
Tank special provisions (IMDG) : TP2, TP27
EmS-No. (Fire) : F-A - FIRE SCHEDULE Alfa - GENERAL FIRE SCHEDULE
EmS-No. (Spillage) : S-B - SPILLAGE SCHEDULE Bravo - CORROSIVE SUBSTANCES
Stowage category (IMDG) : B
Properties and observations (IMDG) : Causes burns to skin, eyes and mucous membranes.

Air transport

UN-No. (IATA) : 1760
PCA Excepted quantities (IATA) : E2
PCA Limited quantities (IATA) : Y840
PCA limited quantity max net quantity (IATA) : 0.5L
PCA packing instructions (IATA) : 851
PCA max net quantity (IATA) : 1L
CAO packing instructions (IATA) : 855
CAO max net quantity (IATA) : 30L
Special provisions (IATA) : A3
ERG code (IATA) : 8L

14.8. Hazchem or Emergency Action Code

Hazchemcode : Not applicable

SECTION 15: Regulatory information

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

No additional information available

15.2. International agreements

No additional information available

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SECTION 16: Any other relevant information

Revision date : 28/11/2018

Classification:

| | |
|---------------|------|
| Flam. Liq. 2 | H225 |
| Skin Corr. 1A | H314 |

Full text of H-statements:

| | |
|---------------|---|
| Flam. Liq. 2 | Flammable liquids, Category 2 |
| Skin Corr. 1A | Skin corrosion/irritation, Category 1A |
| H225 | Highly flammable liquid and vapour |
| H314 | Causes severe skin burns and eye damage |

SDS Australia Leica

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product