

Infosafe No™ 3CHKZ      Issue Date : March 2020      RE-ISSUED by AMBERSCI

Product Name **DECALCIFIER (10% Formic acid)**

Classified as hazardous

## 1. Identification

<b>Chemical Product and Company Identification</b>	Local Supplier: Milton Adams NZ Ltd, 21 Andromeda Crescent, East Tamaki, 2013, Auckland, New Zealand
<b>GHS Product Identifier</b>	DECALCIFIER (10% Formic acid)
<b>Product Code</b>	DECALFA
<b>Company Name</b>	AMBER SCIENTIFIC PTY LTD
<b>Address</b>	24 - 28 Stratton Drive Traralgon Victoria 3844 Australia
<b>Telephone/Fax Number</b>	Tel: (03) 5176 2855
<b>Emergency phone number</b>	CHEMCALL (24 hours): 1800 127 406 (Australia) / +64-4-917-98888 (International)
<b>Recommended use of the chemical and restrictions on use</b>	Laboratory reagent
<b>Other Information</b>	Amber Scientific Pty Ltd does not warrant that this product is suitable for any use or purpose. The user must ascertain the suitability of the product before use or application intended purpose. Preliminary testing of the product before use or application is recommended. Any reliance or purported reliance upon Amber Scientific Pty Ltd with respect to any skill or judgement or advice in relation to the suitability of this product of any purpose is disclaimed. Except to the extent prohibited at law, any condition implied by any statute as to the merchantable quality of this product or fitness for any purpose is hereby excluded. This product is not sold by description. Where the provisions of Part V, Division 2 of the Trade Practices Act apply, the liability of Amber Scientific Pty Ltd is limited to the replacement of supply of equivalent goods or payment of the cost of replacing the goods or acquiring equivalent goods.

## 2. Hazard Identification

<b>GHS classification of the substance/mixture</b>	Corrosive to Metals: Category 1 Skin Corrosion/Irritation: Category 1B
<b>Signal Word (s)</b>	DANGER
<b>Hazard Statement (s)</b>	H290 May be corrosive to metals. H314 Causes severe skin burns and eye damage.
<b>Pictogram (s)</b>	Corrosion,



<b>Precautionary statement – Prevention</b>	P234 Keep only in original container. P260 Do not breathe fume/gas/mist/vapours/spray. P264 Washthoroughly after handling. P280 Wear protective gloves/protective clothing/eye protection/face protection.
<b>Precautionary statement – Response</b>	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. P363 Wash contaminated clothing before reuse. P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. P310 Immediately call a POISON CENTER or doctor/physician.

Infosafe No™ 3CHKZ	Issue Date : March 2020	RE-ISSUED by AMBERSCI
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**Precautionary statement – Storage**

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P390 Absorb spillage to prevent material damage.

**Precautionary statement – Disposal**

P405 Store locked up.  
P406 Store in corrosive resistant/... container with a resistant inner liner.  
P501 Dispose of contents/container according to local, state and federal regulations.

### 3. Composition/information on ingredients

Ingredients	Name	CAS	Proportion
	Formic Acid	64-18-6	10 %
	Water to make a total of 7732-18-5		
	100%		

### 4. First-aid measures

<b>Inhalation</b>	If inhaled, remove from contaminated area to fresh air immediately, avoid becoming a casualty. Make patient comfortable, keep warm and at rest until fully recovered. If breathing is difficult (or develops a bluish skin discolouration), supply oxygen by a qualified person. Apply artificial respiration with a respiratory medical device if not breathing. Do not use mouth to mouth resuscitation. Immediately medical attention is required.
<b>Ingestion</b>	Rinse mouth thoroughly with water immediately, repeat until all traces of product have been removed. DO NOT INDUCE VOMITING. Seek immediate medical advice.
<b>Skin</b>	Remove contaminated clothing and wash affected skin with soap and water. If rapid recovery does not occur, obtain medical attention
<b>Eye contact</b>	Immediately irrigate with copious quantity of water for at least 15 minutes. Eyelids to be held open. In all cases of eye contamination it is a sensible precaution to seek medical advice.
<b>First Aid Facilities</b>	Maintain eyewash fountain and safety shower in work area.
<b>Advice to Doctor</b>	Treat symptomatically based on judgement of doctor and individual reactions of the patient.
<b>Other Information</b>	If poisoning occurs, contact a Doctor or Poisons Information Centre. Phone 13 1126 from anywhere in Australia.

### 5. Fire-fighting measures

<b>Hazards from Combustion Products</b>	The product will support combustion of oxidisable materials. Vapour may travel to source of ignition and flash back. On burning, will emit toxic fumes, including oxides of carbon. The packaging material may burn to emit noxious fumes
<b>Specific Methods</b>	Small fire: Use dry chemical, CO2 or water spray. Large fire: Use water spray, fog or foam - Do NOT use water jets. If safe to do so, move undamaged containers from the fire area. Cool containers with flooding quantities of water until well after the fire is out. Avoid getting water inside the containers.
<b>Specific hazards arising from the chemical</b>	May burn but do not ignite readily. Containers may explode when heated. Runoff may pollute waterways. Fire will produce irritating, poisonous and/or corrosive gases.
<b>Hazchem Code</b>	•2X
<b>Precautions in connection with Fire</b>	Wear SCBA and chemical splash suit. Fully encapsulating, gas-tight suits should be worn for maximum protection. Structural firefighter's uniform is NOT effective for these materials.

### 6. Accidental release measures

<b>Spills &amp; Disposal</b>	Eliminate all ignition sources. Do NOT touch or walk through spilled product. Do NOT touch damaged containers or spilled material unless wearing appropriate protective clothing. Stop leak if safe to do so. Prevent entry into waterways, drains, confined areas.
<b>Personal Precautions</b>	Evacuate the area of all non-essential personnel. Avoid inhalation, contact with skin, eyes and clothing.

Infosafe No™ 3CHKZ      Issue Date : March 2020      RE-ISSUED by AMBERSCI

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**Personal Protection**      Wear protective clothing specified for normal operations (see Section 8)

**Clean-up Methods - Small Spillages**      Absorb with dry earth, sand or other non-combustible material. Neutralise with lime or soda ash. Use clean nonsparking tools to collect and seal in properly labelled drums for disposal in an area approved by local authority bylaws. Wash area down with excess water to remove residual material.

## 7. Handling and storage

**Precautions for Safe Handling**      Handle and open containers with care. When opening containers, avoid inhalation of headspace gases. Use in a well-ventilated area. Prevent formation of aerosols.

**Conditions for safe storage, including any incompatibilities**      Store away from sources of heat or ignition. Store away from oxidizing agents. Store away from combustible materials. Keep containers securely sealed and protected against physical damage.

**Corrosiveness**      Metal containers.

**Storage Regulations**      Refer Australian Standard AS 3780 - 1994 'The Storage and Handling of Corrosive Substances'.

## 8. Exposure controls/personal protection

Occupational exposure limit values	Name	STEL		TWA		Footnote
		mg/m3	ppm	mg/m3	ppm	
	Formic Acid	19	10	9.4	5	

**Other Exposure Information**      Safe Work Australia has established the above exposure limits for Formic acid. These Workplace Exposure Standards are guides to be used in the control of occupational health hazards. All atmospheric contamination should be kept to as low a level as is workable. These workplace exposure standards should not be used as fine dividing lines between safe and dangerous concentrations of chemicals. They are not a measure of relative toxicity. The STEL is an exposure value that should not be exceeded for more than 15 minutes and should not be repeated for more than 4 times per day. There should be at least 60 minutes between successive exposures at the STEL. The exposure value at the TWA is the average airborne concentration of a particular substance when calculated over a normal 8 hour working day for a 5 day working week.

**Appropriate engineering controls**      Maintain the concentrations values below the TWA. This may be achieved by process modification, use of local exhaust ventilation, capturing substances at the source, or other methods.

**Respiratory Protection**      Where ventilation is not adequate, respiratory protection may be required. Avoid breathing dust, vapours or mists. Respiratory protection should comply with AS 1716 - Respiratory Protective Devices and be selected in accordance with AS 1715 - Selection, Use and Maintenance of Respiratory Protective Devices. Filter capacity and respirator type depends on exposure levels. In event of emergency or planned entry into unknown concentrations a positive pressure, full-facepiece SCBA should be used. If respiratory protection is required, institute a complete respiratory protection program including selection, fit testing, training, maintenance and inspection.

**Eye Protection**      The use of a face shield, chemical goggles or safety glasses with side shield protection as appropriate. Must comply with Australian Standards AS 1337 and be selected and used in accordance with AS 1336.

**Hand Protection**      Wear gloves of impervious material conforming to AS/NZS 2161: Occupational protective gloves - Selection, use and maintenance. Final choice of appropriate glove type will vary according to individual circumstances. This can include methods of handling, and engineering controls as determined by appropriate risk assessments. Avoid skin contact when removing gloves from hands, do not touch the gloves outer surface. Dispose of gloves as hazardous waste.

**Personal Protective Equipment**      Personal protective equipment should not solely be relied upon to control risk and should only be used when all other reasonably practicable control measures do not eliminate or sufficiently minimise risk. Guidance in selecting personal protective equipment can be obtained from Australian, Australian/New Zealand

Infosafe No™ 3CHKZ	Issue Date : March 2020	RE-ISSUED by AMBERSCI
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**Hygiene Measures** or other approved standards.  
Do not eat, drink or smoke in work areas. Wash hands thoroughly after handling this material. Maintain good housekeeping.

## 9. Physical and chemical properties

**Form** Liquid  
**Appearance** Colourless liquid.  
**Odour** Strong acrid.  
**Solubility in Water** Miscible in all proportions.  
**pH** ~2.2

## 10. Stability and reactivity

**Reactivity** Reacts with alkalis and amines. Exothermic reaction.  
**Chemical Stability** Stable under normal use conditons.  
**Conditions to Avoid** Avoid exposure to heat, direct sunlight, open flames or other sources of ignition.  
**Incompatible Materials** Oxidisers, metals.  
**Hazardous Polymerization** Will not occur.

## 11. Toxicological Information

**Acute Toxicity - Oral** Formic acid: LD50 730 mg/kg body weight.  
**Acute Toxicity - Inhalation** Formic acid: LC50 7.4 mg/L body weight.  
**Ingestion** Cause severe burns to the mouth, throat and stomach.  
**Inhalation** Inhalation of vapours can cause severe irritation of nose, throat, and upper respiratory tract. Inhalation of higher concentrations may cause central nervous system effects and respiratory/lung damage.  
**Skin** Causes severe burns. Symptoms may include redness, burning, and swelling of skin, burns, and other skin damage.  
**Eye** Causes severe burns and eye damage. Risk of blindness.  
**Respiratory sensitisation** Not classified based on available information.  
**Skin Sensitisation** Not classified based on available information.  
**Germ cell mutagenicity** Not classified based on available information.  
**Carcinogenicity** Not listed in the IARC Monographs.  
**Reproductive Toxicity** No evidence of reproductive effects.  
**STOT-single exposure** Not classified based on available information.  
**STOT-repeated exposure** Not classified based on available information.  
**Aspiration Hazard** Not classified based on available information.  
**Chronic Effects** Prolonged or repeated exposure to low concentrations may cause skin irritation and burns. Prolonged or repeated exposure may cause liver and kidney damage.

## 12. Ecological information

**Ecological Information** No ecology data available for this product.  
**Ecotoxicity** Harmful effect due to pH shift.

Infosafe No™ 3CHKZ	Issue Date : March 2020	RE-ISSUED by AMBERSCI
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**Environmental Protection** Do not discharge to the environment.

### 13. Disposal considerations

**Disposal Considerations** Whatever cannot be saved for recovery or recycling should be disposed of according to relevant local, state and federal government regulations.

### 14. Transport information

**Transport Information** Dangerous goods of Class 8 (Corrosive) are incompatible in a placard load with any of the following:  
Class 1, Class 4.3, Class 5, Class 6, if the Class 6 dangerous goods are cyanides and the Class 8 dangerous goods are acids, Class 7; and are incompatible with food and food packaging in any quantity.

**U.N. Number** 3412

**UN proper shipping name** FORMIC ACID

**Transport hazard class(es)** 8

**Hazchem Code** •2X

**Packing Group** II

**IERG Number** 36

### 15. Regulatory information

**Regulatory Information** All of the significant ingredients in this formulation are compliant with NICNAS regulations. Not listed under WHS Regulation 2011, Schedule 10 - Prohibited carcinogens, restricted carcinogens and restricted hazardous chemicals.

**Poisons Schedule** Not Scheduled

**HSNO Approval Number** HSNO GROUP STANDARD:  
HSR002596 Laboratory Chemical and Reagent Kits

### 16. Other Information

**Literature References** Commonwealth Department of Health and Aged Care, 'Standard for the Uniform Scheduling of Drugs and Poisons No. 18', Commonwealth of Australia, Canberra 2002.  
Lewis, Richard J. Sr. 'Hawley's Condensed Chemical Dictionary 13th. Ed.', Rev., John Wiley & Sons, Inc., NY, 1997.  
National Road Transport Commission, 'Australian Dangerous Goods Code 6th. Ed.', AGPS, Canberra, 1998.  
South Australia Government, 'Approved Code of Practice for the Labelling of Workplace Substances', 1995.  
Standards Australia, 'SAA/SNZ HB76:1997 Dangerous Goods - Initial Emergency Response Guide', Standards Australia/Standards New Zealand, 1997.  
Worksafe Australia, 'Approved Criteria for Classifying Hazardous Substances [NOHSC:1008(1999)]', AusInfo, Canberra 1999.  
Worksafe Australia, 'List of Designated Hazardous Substances [NOHSC:10005(1999)]', AusInfo, Canberra 1999.  
Worksafe Australia, 'National Code of Practice for the Labelling of Workplace Substances [NOHSC:2012(1994)]', AGPS, Canberra 1994.  
Worksafe Australia, 'National Exposure Standards for Atmospheric Contaminants in the Occupational Environment [NOHSC:1003(1995)]', AusInfo, Canberra 1995.

**Contact Person/Point** Amber Scientific Pty Ltd does not warrant that this product is suitable for any use or purpose. The user must ascertain the suitability of the product before use or application intended purpose. Preliminary testing of the product before use or application is recommended. Any reliance or purported reliance upon Amber Scientific Pty Ltd with respect to any skill or judgement or advice in relation to the suitability of this product of any purpose is disclaimed. Except to the extent prohibited at law, any condition implied by any statute as to the merchantable quality of this product or fitness for any purpose is

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...End Of MSDS...

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