

Material Safety Data Sheet  
**Metagen Infiltrate Challenge** • page 1

## 1. IDENTIFICATION

**Revision Date** 05 February 2019

**Product name** Infiltrate Challenge

**Uses** Agricultural soil conditioner.

**Contact Information**

**Manufacturer:** Metagen Pty Ltd  
108 Chadwick Rd Gatton, QLD  
4343 Australia

**Emergency Phone No:** 0448082841  
0447 446 816

## 2. HAZARD IDENTIFICATION

Hazardous according to criteria of NOHSC/ASCC.

HARMFUL

**Ris1** R22 Harmful if swallowed.  
R41 Risk of serious eye damage.

**Saf** S25 Avoid contact with eyes.  
S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.  
S37/39 Wear suitable gloves and eye/face protection.

**ERM** HSR002503  
**Approval Code**  
**HSNO Hazard** 6.1D 6.3B 8.3A 9.1D **Classification**

This Material Safety Data Sheet may not provide exhaustive guidance for all HSNO Controls assigned to this substance. The ERMA Web Site should be consulted for a full list of triggered controls and cited regulations.

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

**Ingredients:** A blend of semi-synthetic bio-degradable surfactants with fermentation bio-organic acids and other decomposition co-metabolites in water based organic solvent (solvent < 10%).

Plant extracts, vegetable oils and vegetable alcohols, partially and fully decomposed vegetable matter with naturally hydrolyzed proteins.

#### 4. FIRST AID MEASURES

Description of necessary measures according to routes of exposure.

<b>Swallowed</b>	If swallowed, do NOT induce vomiting. Transport to nearest medical facility for treatment. If vomiting occurs naturally, keep head below hips to prevent aspiration.
<b>Eye</b>	Immediately flush eyes with plenty of water for 15 minutes, holding eyelids open. Transport to the nearest medical facility for treatment.
<b>Skin</b>	Remove contaminated clothing. Wash affected area with soap and plenty of water. If irritation persists, transport to the nearest medical facility for treatment.
<b>Inhaled</b>	Remove victim from exposure to fresh air. If rapid recovery does not occur, seek medical attention.
<b>Advice to Doctor</b>	Treat symptomatically based on individual reactions of patient and judgement of doctor.
<b>Aggravated medical conditions caused by exposure</b>	Persons with pre-existing eye conditions/disorders may be more susceptible to the effects from this product. Risk of serious damage to eyes.

#### 5. FIRE FIGHTING MEASURES

<b>Extinguishing Media</b>	In case of fire, appropriate extinguishing media include alcohol-resistant foam, water spray or fog, dry chemical powder, carbon dioxide, sand and earth. Do NOT use water in a jet. Use water spray to cool down fire exposed containers.
<b>Hazards from Combustion Products</b>	Combustible Liquid. Stable up to 50°C in temperature. Oxidizes on contact with air. Incompatible with oxidizing agents, acids, copper, copper alloys, aluminium, flammables, corrosives, aluminium and sources of ignition. Carbon monoxide may be evolved if incomplete combustion occurs.
<b>Special Protective Precautions and Equipment for Fire Fighters</b>	Fire fighters should wear a positive-pressure self-contained breathing apparatus (SCBA) and protective fire fighting clothing (includes fire fighting helmet, coat, trousers, boots and gloves). Clear fire area of all nonemergency personnel. Stay upwind. Keep out of low areas where gases or fumes can accumulate. Eliminate ignition sources.
<b>Flammability Conditions</b>	Product is a combustible liquid.
<b>Hazchem Code</b>	N/A

## 6. ACCIDENTAL RELEASE MEASURES

<b>Emergency Procedures</b>	Personnel involved in the cleanup should wear full protective clothing. Eliminate all sources of ignition. Stop leak if safe to do so. Increase ventilation. Avoid walking through spilled product as it may be slippery. Do NOT let product reach drains or waterways. If the product does enter a waterway advise the Environmental Protection Authority or your local Waste Management. Use clean, non-sparking tools and equipment.
<b>Methods and Materials for Containment and Clean Up</b>	Soak up spilled product using absorbent non-combustible material such as sand or soil. Avoid using sawdust or cellulose. When saturated, collect material and transfer to a suitable, labelled, dry, sealable chemical-waste container and dispose of promptly. For large spills (> 1 drum), transfer by mechanical means such as vacuum truck to a salvage tank for recovery or safe disposal. Do not flush away residues with water. Retain as contaminated waste. Allow residues to evaporate or soak up with absorbent material and hold for safe disposal.

## 7. HANDLING AND STORAGE

<b>Precautions for Safe Handling</b>	Ensure an eye bath and safety shower are available and ready for use. Observe good personal hygiene practices and recommended procedures. Wash thoroughly after handling. Take precautionary measures against static discharges by bonding and grounding equipment. Avoid contact with eyes, skin and clothing. Do not inhale product vapours.
<b>Conditions for Safe Storage (Including Any Incompatibles)</b>	Store in a cool, dry, well-ventilated area. Keep containers tightly closed when not in use. Inspect regularly for deficiencies such as damage or leaks. Protect against physical damage. Store away from incompatible materials including oxidizing agents, acids, copper, copper alloys, aluminium, combustible materials and sources of ignition. Protect from direct sunlight, moisture and static discharges. Store below 50°C in temperature. Nitrogen blanket recommended for large tanks (capacity >100m <sup>3</sup> ). Bulk storage tanks should be diked (bunded). This product is classified as a "C2" Combustible Liquid for the purpose of storage and handling, in accordance with the requirements of AS1940.
<b>Container Type</b>	Packaging must comply with requirements of Hazardous Substances (Packaging) Regulations 2001. Store in original packaging as approved by manufacturer. Suitable: Stainless steel, epoxy resins, polyester. Unsuitable: Aluminium, copper, copper alloys.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

<b>National Exposure Standards</b>	No exposure standard has been established for this product by the Australian Safety and Compensation Council (ASCC).
<b>Biological Limit Values</b>	No information available on biological limit values for this product.
<b>Engineering Controls</b>	A system of local and/or general exhaust is recommended to keep employee exposures as low as possible. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area.
<b>Personal Protection</b>	RESPIRATOR: Wear an approved respirator suitable for particulate and organic vapours if engineering controls are inadequate (AS1715/1716). EYES: Chemical splash goggles and face shield (AS1336/1337). HANDS: Wear nitrile

rubber gloves (AS2161). CLOTHING: Chemical-resistant coveralls and safety footwear (AS3765/2210).

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance</b>	Brown slightly viscous liquid
<b>Formula</b>	unspecified
<b>Odour</b>	mild odour
<b>Vapour Pressure</b>	<0.1hPa (37.8'C) mm Hg (1 atmosphere)
<b>Vapour Density</b>	18.0
<b>Boiling Point</b>	>232.2 deg C
<b>Melting Point</b>	not applicable
<b>Solubility in Water</b>	Soluble
<b>Specific Gravity Flash Point</b>	Closed cup 160
<b>pH</b>	6
<b>Lower Explosion Limit</b>	not applicable
<b>Upper Explosion Limit</b>	not applicable
<b>Ignition Temperature</b>	not applicable
<b>Specific Heat Value</b>	not applicable
<b>Particle Size</b>	not applicable
<b>Volatile Organic Compounds (VOC) Content</b>	not applicable
<b>Evaporation Rate</b>	not applicable
<b>Viscosity</b>	27mm <sup>2</sup> /s (40C)
<b>Percent Volatile</b>	not applicable
<b>Octanol/Water partition coefficient</b>	<b>3</b>
<b>Saturated Vapour Concentration</b>	not applicable
<b>Additional Characteristics</b>	
<b>Propagation/Burning Rate of Solid Materials</b>	Not applicable.
<b>Flame Properties of Materials That May</b>	

**Initiate or Contribute to Fire Intensity** not applicable

**Potential for Dust** Product is a liquid

**Explosion  
Reactions that**

**Release Flammable  
gases** not applicable

**Fast of Intensely  
Burning Characteristics** not applicable

## 10. STABILITY AND REACTIVITY

**Chemical Stability** Avoid excessive heat, direct sunlight, moisture, freezing, static charges and temperatures above 50°C.

**Conditions to Avoid** Incompatible with oxidizing agents, acids, copper, copper alloys, aluminium, flammables, corrosives, aluminium and sources of ignition.

**Incompatible  
Materials** Carbon monoxide may be evolved if incomplete combustion occurs.

**Hazardous  
Decomposition  
Products**

**Hazardous  
Reactions**

## 11. TOXICOLOGICAL INFORMATION

### Toxicity Data

Oral LD50 Rat : >300 - <=2000mg/Kg Dermal LD50 Rat: >2000 - <=5000mg/Kg Inhalation : Expected to be of low Toxicity if Inhaled. Repeated Dose : Low sytemic toxicity on repeated exposure. Mutagenicity : No evidence of mutagenic activity. Carcinogenicity: Not carcinogenic in animal studies. Reproductive : Does not impair fertility. Developmental : Not a developmental toxicant.

### Health Effects - Acute

#### Swallowed

Harmful if swallowed.

#### Eyes

causes serious eye damage. May cause a burning sensation, redness, swelling and/or blurred vision.

**Skin** May be harmful in contact with skin. Causes mild skin irritation. Symptoms include a burning sensation, redness, swelling and blisters. Repeated exposure may cause dryness and cracking. Defatting dermatitis signs and symptoms may include a burning sensation and/or a dried cracked appearance.

**Inhaled** Slightly irritating to the respiratory system. Respiratory irritation signs and symptoms may include a temporary burning sensation of the nose and throat, coughing and/or difficulty breathing

## 12. ECOLOGICAL INFORMATION

<b>Ecotoxicity</b>	Toxic to aquatic organisms. Toxicity to Fish Harmful $10 < LC/EC/IC50 < =100mg/L$ Aquatic Invertebrates Toxic $1 < LC/EC/IC50 < = 10mg/L$ Toxicity to Algae Harmful $10 < LC/EC/IC50 < =100mg/L$ Micro-organisms Expected to have low toxicity $LC/EC/IC50 > 100mg/L$
<b>Persistence and Degradability</b>	Readily biodegradable meeting the 10 day window criterion.
<b>Mobility</b>	Dissolves in water. If product enters soil, it will be highly mobile and may contaminate groundwater.
<b>Environmental Fate (Exposure)</b>	Do not allow product to enter drains, waterways or sewers. Toxic to aquatic organisms.
<b>Bioaccumulative Potential</b>	Bioaccumulation is unlikely to occur due to metabolism and excretion.

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<b>Disposal</b>	Dispose of in accordance with all local, state and federal regulations. All empty packaging should be disposed of in accordance with Local, State and Federal Regulations or recycled/reconditioned at an approved facility.
<b>Special Precautions for Land Fill or Incineration</b>	Contact a specialist disposal company or the local waste regulator for advice. Drain container thoroughly. After draining, vent in a safe place away from sparks and fire. Residues may cause an explosion hazard. Do not puncture, cut or weld uncleaned drums. Send to drum recoverer or metal reclaimer.

## 14. TRANSPORT INFORMATION

### Land Transport (Australia)

<b>Regulation Name</b>	ADG
<b>UN Number</b>	Not applicable.
<b>Shipping Name</b>	Infiltrate
<b>Dangerous Goods Class</b>	C.2 Combustible Liquid
<b>Subsidiary Risk</b>	Not applicable.
<b>Pack Group</b>	Not applicable.
<b>Precaution for User</b>	HARMFUL
<b>Hazchem Code</b>	N/A
<b>EPG</b>	Not applicable.
<b>Special Provision</b>	Not applicable.

### Air Transport

<b>Regulation Name</b>	IATA
<b>UN Number</b>	
<b>Shipping Name</b>	Infiltrate
<b>Dangerous Goods Class</b>	
<b>Subsidiary Risk</b>	Not Applicable
<b>Pack Group</b>	
<b>Precaution for User Harmful</b>	Harmful
<b>Hazchem Code</b>	No data available.
<b>EPG</b>	No data available.
<b>Special Provision</b>	Not applicable



## 15. REGULATORY INFORMATION

Classified as hazardous according to the criteria in the Hazardous Substances (Minimum Degrees of Hazard) Regulations 2001. National Inventories; Australia AICS - Listed Canada DSL - Listed USA TSCA - Listed Korea KECI - Listed Philippines PICCS - Listed Japan ENCS - Listed

<b>Poisons Schedule</b>	N/A
<b>EPG</b>	N/A
<b>AICS Name</b>	
<b>NZ Toxic Substance</b>	N
<b>HSNO</b>	6.1D 6.3B 8.3A 9.1D
<b>Hazard Classification</b>	
<b>ERMA Approval Code</b>	HSR002503

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## 16. OTHER INFORMATION

This SDS summarises the health and safety hazard information of the product to the best of our knowledge and how to safely handle and use the product in the workplace. Users should read this SDS and always consider the information in the context of how the product will be handled and used in the workplace including in conjunction with other products.

Information contained in this document or information as otherwise supplied to users is believed to be accurate, but it is for the users to satisfy themselves of the suitability of the product. Metagen Pty Ltd gives no warranty as to the fitness of the product for any particular purpose and any implied warranty or condition (statutory or otherwise) is excluded except to the extent that exclusion is prevented by law. Metagen Pty Ltd accepts no liability for loss or damage resulting from reliance on this information. If further information is needed for risk assessment, contact Metagen Pty Ltd.

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