

# LEICESTER'S N.Z. LTD

## SAFETY DATA SHEET

Product

**PIC-FUME CHLOROPICRIN**

Date: 22/08/2013

UN Number: 1580

Version:

### 1. Identification of the substance & the company

<b>Chemical name</b>	Chloropicrin
<b>CAS number</b>	76-06-2
<b>Chemical formula</b>	CCl <sub>3</sub> NO <sub>2</sub>
<b>Chemical family</b>	Chlorinated nitrified hydrocarbon
<b>Molecular weight</b>	164.38
<b>Type of product and use</b>	A broad-spectrum pesticide used as a fumigant
<b>Company identification</b>	Leicester's NZ Ltd
<b>Address and telephone</b>	6 Waitane Place, Onekawa, Napier. 06 843 5330 or 0800 658 158
<b>Emergency Telephone Number:</b>	<b>Leicester's N.Z. Ltd 0800 658 158</b> <b>NATIONAL POISONS CENTRE 0800 243 622</b>

### 2. Hazards identification

Product is classified as hazardous according to Schedules 1 to 6 of the *Hazardous Substances (Minimum Degrees of Hazard) Regulations 2001* of the HSNO Act, 1996.

**HSNO Classifications:** 6.1A (I), 6.1B (O,D), 6.5A, 6.5B, 6.9A, 8.2C, 8.3A, 9.1A, 9.2B, 9.3A  
**Signal word:** DANGER

#### Hazard Statements:

H300 Fatal if swallowed  
H310 Fatal in contact with skin  
H314 Causes severe skin burns and eye damage  
H317 May cause an allergic skin reaction  
H318 Causes serious eye damage  
H330 Fatal if inhaled  
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled  
H370 Causes damage to organs  
H400 Very toxic to aquatic life  
H422 Toxic to the soil environment  
H431 Very toxic to terrestrial vertebrates

#### Prevention Statements:

P102 Keep out of reach of children  
P260 Do not breathe gas  
P262 Do not get in eyes, on skin or on clothing  
P264 Wash hands thoroughly after handling  
P270 Do not eat, drink or smoke when using this product  
P271 Use only outdoors or in a well-ventilated area  
P272 Contaminated work clothing should not be allowed out of the workplace  
P273 Avoid release to environment  
P280 Wear protective gloves/protective clothing/eye protection  
P284 Wear respiratory protection.  
P285 In case of inadequate ventilation wear respiratory protection (full-face respirator or powered air-purifying respirator fitted with approved organic cartridges).

#### Response Statements:

P101 If medical advice is needed, have product container or label at hand.

P304 + P340 IF INHALED: Remove to fresh air and keep at rest until in a position comfortable for breathing.  
P310 Immediately call a POISON CENTRE or doctor.

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P341 If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing  
P342 + P311 If experiencing respiratory symptoms: Call a POISON CENTRE or doctor.

P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.  
H330 Rinse mouth.  
P310 Immediately call a POISON CENTRE or doctor.

P303 + P361 + P353 IF ON SKIN (or hair): Remove immediately all contaminated clothing. Rinse skin with water.  
P363 Wash contaminated clothing before re-use.  
P310 Immediately call a POISON CENTRE or doctor.  
P333 + P313 If skin irritation or rash occurs: Get medical advice.

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 CENTRE or doctor.

P307 + P311 If exposed: Call a POISON CENTRE or doctor.

P391 Collect spillage

### Storage Statements:

P403 + P233 Store in a well-ventilated place. Keep container tightly closed.  
P405 Store locked up

### Disposal Statements:

P501 Dispose of product and containers in accordance with local regulations.

### 3. Composition/information on ingredients

Hazardous component(s)	Chloropicrin >99 % CAS No 76-06-2
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### 4. First-aid measures (\*)

Eye contact	Holding the eyelids apart, flush eyes promptly with copious flowing water for at least 20 minutes. Get medical attention immediately.
Skin contact	Wash skin thoroughly with mild soap and plenty of water for at least 15 minutes. Get medical attention immediately. All leather items should be discarded. Other contaminated clothing must either be discarded or thoroughly ventilated and washed before re-use.
Inhalation	In case of inhalation, remove person to fresh air. Keep person quiet and warm. Apply artificial respiration if necessary and get medical attention immediately.
Ingestion	If swallowed, wash mouth thoroughly with plenty of water. Get medical attention immediately.

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NOTE: Never give an unconscious person anything to drink.  
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Note to the physician	Powerful lachrymator; commonly referred to as tear gas. No specific antidote.
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### 5. Fire-fighting measures

Flash point	None
Flammable/Explosion limits	
- Lower (% vol)	-
- Upper (% vol)	-
Auto-ignition temperature	-
Extinguishing media	Carbon dioxide, dry chemicals, foam, water spray (fog).
Fire fighting procedure	Wear self-contained breathing apparatus in positive pressure mode and appropriate protective clothing. If possible stop material flow immediately. Do not extinguish burning gas unless flow can be shut off immediately. Use water spray to keep cylinder cool. If there is no risk, move cylinder away from fire.
Unusual fire and explosion hazards	Not explosive but heat and ultraviolet light may product phosgene and other toxic compounds. Cylinder may rupture if heated by fire.

### 6. Accidental release measures

Personal precautions	Evacuate area and keep personnel upwind. Wear self-contained breathing apparatus in positive pressure mode. Cover spill with water, soil, cotton absorbent material or plastic tarp to reduce fumes. Ventilate area if possible. Collect spill in a labelled polyethylene or steel container that can be sealed.
After spillage/leakage	Consult supplier for advice. Chloropicrin will biodegrade in soil and can be removed from a water solution by adding sodium bisulfite. Mix only in a well-ventilated area.

### 7. Handling and storage

Handling	Move and transport containers with care. Do not use hooks, rope sling, etc. to unload. Use hand or fork trucks to firmly cradle cylinders. Do not bump or drag containers. Use only dry nitrogen gas (180 psig maximum) to pressurize cylinders and tanks. Polyethylene or Teflon tubing may be used to transfer chloropicrin at low pressures.
Storage	Store containers upright, in a secure manner, either outdoors under ambient conditions, or indoors in a well ventilated area, away from seeds, foods/feed-stuffs and human and animal habitation. Use appropriate storage signage. When not in use keep valves closed and secure take-off fitting cap and valve bonnet. Chloropicrin can be stored in stainless steel or mild steel tanks.

NOTE: Passing fumes through activated carbon effectively removes chloropicrin.

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### 8. Exposure controls / personal protection

Exposure limits: -WES –TWA	Chloropicrin	0.1 ppm (0.67 mg/m <sup>3</sup> )
Ventilation requirement	Ventilation must be sufficient to maintain atmospheric concentration below TWA.	
Personal protection equipment: - Respiratory protection	A full-face respirator or powered air-purifying respirator fitted with approved organic vapour cartridges is required if vapours are above the permissible exposure limit. Self-contained breathing apparatus or supplied-air respirator with a full face-piece are required in oxygen deficient areas or where concentration exceed 5 ppm.	
- Gloves	Use nitrile or polyethylene gloves.	
- Eye protection	Glasses with side shields when full face respiratory protection is not required.	
- Clothing	Wear loose fitting chemical resistant clothing. In confined area wear a vapor tight suit.	
-Hygiene measures	When using this material, do not eat, drink or smoke. Safety shower and eye bath should be provided.	

### 9. Physical and chemical properties

Appearance	Clear colourless, oily liquid; may be dyed red
Odour	Strong, sharp, irritating
Melting point/range	-64°C
Boiling point/range	112°C
Vapour pressure	3.2 kPa at 20°C
Relative vapour density (air 1)	5.7
Solubility: - Solubility in water	0.16 g/100ml at 25°C

### 10. Stability and reactivity

Stability	Stable in sealed containers and under normal conditions.
Materials to avoid	Strong oxidizers, iron, zinc, aluminum and magnesium metals and their alloys, natural rubber and certain types of plastics.
Conditions to avoid	Avoid contamination by water. Mixing with water or water solutions causes formation of corrosive products.
Hazardous decomposition - products	Hydrogen chloride, nitrogen oxides
Hazardous polymerization	Will not occur.

### 11. Toxicological information

DANGER: May be fatal in inhaled or ingested or in contact with skin. Severe damage (corrosive) if liquid contact with eyes or skin. Respiratory and contact sensitizer. Airborne exposure may cause immediate tearing and irritation of eyes, respiratory tract and other contaminated skin.

Toxicity:	
- Mouse inhalation LC50	0.066 mg/m <sup>3</sup> /4 hour
- Rat oral LD50	37.5 mg/kg
- Rat dermal LD50	100 mg/kg

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Effects of overexposure:

- Ocular

Severe irritant with corrosive effects. Exposure to low concentrations (<0.3 ppm) can cause reversible eye irritation.

Contact with liquid or high concentrations of gas with the eyes may cause severe but usually reversible injury involving temporary blindness.

- Dermal

Liquid splashed on skin may cause skin burns. Can cause redness and may cause an allergic skin reaction.

May be absorbed through the skin in sufficient amount to cause systemic toxicity.

- Inhalation

Symptoms of poisoning include sore throat, laboured breathing, dizziness, nausea and vomiting.

Over exposure to vapor (<0.3 ppm) such as in an enclosed area can result in nausea or vomiting. Exposure for up to a minute can produce respiratory damage including pulmonary edema and possibly death.

- Ingestion

May cause severe gastrointestinal damage and symptoms may include nausea, vomiting, abdominal pain, collapse and death.

Chronic toxicity

Chronic exposure to low concentrations will cause damage to organs and systems. Not classified as mutagen, carcinogen or for reproductive/developmental toxicity.

### 12. Ecological information

Information on ecological effects

Highly ecotoxic to aquatic life and terrestrial vertebrates and toxic in soil environment.

Octanol/Water partition

Log Kow – 10

--coefficient

Aquatic toxicity

- 96 Hour-LC50 – Fish

0.0165 mg/l (Rainbow Trout)

- 48 Hour-EC50 - Crustacea

0.063 mg/l (Daphnia pulex)

- 72 Hour-EC50

-- Freshwater algae

0.00016 mg/l (Selenastrum sp)

### 13. Disposal considerations (\*)

Waste disposal

The recommended method is incineration. If a suitable designated combustion chamber is not available, return MARKED containers to supplier.

Observe all National and local environmental regulations when disposing of this material.

Contact authorities to ensure proper compliance.

Disposal of packaging (\*)

Return marked empty containers to supplier.

### 14. Transportation information (\*)

UN No.

1580

NZ5433:2012

Proper shipping name: Chloropicrin

Class: 6.1

Hazchem code: 2XE

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### 15. Regulatory information (\*)

New Zealand

Approved substance under the HSNO Act 1996.

HSR001641 : Chloropicrin

Hazardous classifications: 6.1A (I), 6.1B (O,D), 6.5A, 6.5B, 6.9A, 8.2C, 8.3A, 9.1A, 9.2B, 9.3A

Refer to [www.epa.govt.nz](http://www.epa.govt.nz) for information on Controls for this substance.

APPROVED HANDLER and TRACKING Controls apply. Users require Controlled Substance License (CSL).

Approved under the ACVM Act 1997: P005321

Refer to [www.foodsafety.govt.nz](http://www.foodsafety.govt.nz) for registration conditions,

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### 16. Other information (\*)

Safety Data Sheet issued: 22 August 2013

Reason for issue: Review of SDS format, product and regulatory information.

Replaces: Safety Data Sheet dated XXXXXXXXXX

Next review: Before August 2018.

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