

# SAFETY DATA SHEET

Safety data sheet for chemical products according to EC-directive 2001/58/EC  
Issued: November 20, 1995 – Revised April 6, 2006 Page 5/1

## Muscalure technical

### 1. Chemical product and company identification.

Trade name : Muscalure technical  
Formulation and use : Liquid technical synthesis product to use as an Attractant in house fly controlling agents.  
Supplier : Brandenburg UK Ltd.  
29 Navigation Drive, Hurst Business Park,  
Brierley Hill, West Midlands.  
DY5 1UT. UK.  
Telephone +44 (0)1384 472900  
Fax +44 (0)1384 472911  
Emergencies : In case of emergency contact the nearest toxicological information institute. Physicians only.

### 2. Composition - information on ingredients

Component	EC no.	CAS no.	Symbols	R-phrases*	Content
					%
(Z)-tricos-9-ene (muscalure)	248-505-7	27519-02-4	Xi	43	85

\*R-phrases are explained in § 16 hereof.

### 3. Hazard identification

Hazards to human health : May cause sensitization by skin contact.  
Safety and environmental hazards: With expert use hazards to safety and environment are considered unlikely to occur.

### 4. First aid measures

Emergencies : In general urgent medical attention will not be necessary.  
Inhalation : Remove subject from exposure area to fresh air  
Seek medical advice if feeling unwell.  
Eye contact : Flush eyes with water. Get medical attention if in any doubt.  
Skin contact : Wash affected skin with plenty of water and soap.  
Ingestion : Get medical attention if feeling unwell.  
Information for physician : Product contains tricosenes. Treatment is symptomatic and supportive; no specific antidote known.

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- 5. Fire fighting measures**
- Suited extinguishing media : Powder, foam, water spray, CO<sub>2</sub>.
  - Unsuited extinguishing media : Water jet.
  - Special protective equipment for fire fighters : Self-contained respiratory apparatus and protective clothing.
  - Exposure risks : Standard fire exposure risks.
- 6. Accidental release measures**
- Personal precautions : Wear suitable protective clothing and gloves.
  - Environmental precautions : According to present knowledge product has no harmful effects to the environment. However, do not allow entry in streams, sewers or natural environment.
  - Methods for cleaning up : Spills must be wiped up with absorbent and put into closed containers for later disposal. Waste disposal according to local authority regulations.
- 7. Handling and storage**
- Handling precautions : Standard directives in respect of hygiene and health are to be observed.  
Avoid unnecessary contact with the product.  
Suitable clothing and gloves are recommended.  
Remove contaminated clothing. Wash hands after use and before breaks.
  - Storage : Product must be stored in unopened, original containers, in a dry, cool and dark place, safe from access by children.  
Keep away from food, drink and animal feeding stuffs.
  - Shelf life : One year from date of production if correctly stored.
  - Classification : NC, non flammable

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### 8. Exposure control - personal protection

Statutory limit	:	MAC value: no data available at present.
Ventilation	:	Ventilation is recommended.
Respiratory protection	:	With expert use respiratory protection is not regarded necessary.
Hand protection	:	Wear suitable protective gloves.
Eye protection	:	With expert use safety glasses or goggles are not regarded necessary.
Skin and body protection	:	Wear suitable protective clothing.
Others	:	Do not eat, drink or smoke.

### 9. Physical and chemical properties

Appearance	:	clear liquid
Colour	:	colourless to pale amber
Odour	:	mild chemical
Molecular mass tricosenes	:	322.62
Density	:	0.803 kg/L at 25°C (EEC A.3, OECD 109)
Relative vapour density	:	not determined
Vapour pressure	:	4.7 mPa at 27°C
Melting point	:	-4°C (EEC A.1, OECD 102)
Boiling point	:	376°C at 0.1 mbar (10 Pa) (EEC A.2, OECD 103)
Flash point	:	161,5°C (EEC A.9, ISO 2719)
Auto-ignition	:	250°C (EEC A.15)
Explosion limits	:	non-explosive (EEC A.14)
Partition coefficient	:	$P_{ow} > 1.51 \times 10^8$ ( $\log P_{ow} > 8.2$ ) (EEC A.8, OECD 107)
pH	:	not applicable
Oxidizing properties	:	non-oxidizing
Viscosity	:	15 mPa.s at 20°C (OECD 114)
Solubility in water	:	insoluble
Solubility in others	:	soluble in hydrocarbons

### 10. Stability and reactivity

Stability	:	Stable under normal conditions.
Compatibility	:	No data available at present.
Hazardous decomposition products	:	None presently known.
Hazardous polymerization	:	Will not occur.

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- 11. Toxicological information**
- Toxicological family : Tricosenes.
- Acute toxicity to mammals : Toxicological study results of muscalure:  
LD(oral, rat)<sub>50</sub> > 5 g/kg  
LD(dermal, rat)<sub>50</sub> > 2 g/kg  
LC(4h inhalation, rat)<sub>50</sub> > 5.7 g/m<sup>3</sup>  
May cause sensitization by skin contact.
- Chronic toxicity : No study results available.
- 12. Ecological information**
- Environmental properties : According to present knowledge the product has no harmful effects to the environment.
- Environmental toxicity : Water flea (*Daphnia magna*): The LC<sub>50</sub> is much higher than the solubility of the product in water.  
Rainbow trout (*Salmo gairdneri*): The LC<sub>50</sub> is much higher than the solubility of the product in water.  
Bobwhite quail (*Colinus virginianus*): No effects were observed 14 days after a single dose of 2000 mg/kg.  
(NOEC = 2000 mg/kg)  
The acute dietary toxicity expressed as LC<sub>50</sub> observed over a period of 8 days exceeded 5000 mg/kg food.  
(NOEC = 5000 mg/kg food)
- 13. Disposal consideration**
- Waste from residues : In compliance with local/national authority regulations for waste disposal.
- Contaminated packaging : In compliance with local/national authority regulations for waste disposal.
- 14. Transport information**
- International regulations : Not classified for any mode of transportation.
- Description : Not applicable.
- Labelling : Land – RID/ADR : not applicable.  
Inland waterways – ADNR : not applicable.  
Sea – IMDG : not applicable.  
Air – ICAO-II, IATA-DGR : not applicable.
- UN number : Not applicable.
- UN packing group : Not applicable.
- Transport emergency group card : Not applicable.

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### 15. Regulatory information

Regulations for labelling

- Symbol : Xi Irritant  
Hazard indications (R-phrases) : R43 May cause sensitization by skin contact.  
Safety precautions (S-phrases) : S36/37 Wear suitable protective clothing and gloves.  
Additional information : Contains Muscalure (Tricosenes).

### 16. Other information

- Explanation R-phrases § 2 : R43 May cause sensitization by skin contact.  
Information sources : Denka library.  
-N- Class database of the European Chemicals Bureau  
The Pesticide Manual (ISBN: 1 901396 11 8).

Alterations in relation to

- previous edition of 25.04.2004 : § 2: Added Xi-symbol and R43.  
§ 3: Added 'May cause sensitization by skin contact'.  
§ 6: Added 'Wear suitable protective clothing and gloves.'  
§ 9: Physical and chemical properties adjusted to latest test results.  
§ 11: Added 'May cause sensitization by skin contact'.  
§ 15: Added Xi-symbol and R43.  
Contains Muscalure (Tricosenes)  
§ 16: Added 'Explanation R-phrases § 2: R43'.

No liability is accepted for any injury, loss, damage or cost arising directly or indirectly from the use of the product or from the use of information contained within this safety data sheet since the customer's treatment of the product is necessarily beyond our control. The supplied data are based on current knowledge and experience. This safety data sheet is intended to describe our product in terms of safety requirements. The customer should determine by appropriate trials that the product is suitable for his intended use.