

SAFETY DATA SHEET

Nuflor[®]

Section 1: Identification of the Substance and Supplier

Product name	Nuflor Liquid containing 26 - 36% florfenicol
Recommended use	Broad spectrum antibacterial formulation for cattle and swine
Company details	MSD Animal Health, 33 Whakatiki Street, Upper Hutt Phone: 0800 800 543 Fax: 0800 808 100 Website: www.msd-animal-health.co.nz Hours: 8 am – 5 pm, Mon – Fri
Emergency telephone	0800 764 766 (0800 POISON) 24 hours human health 0800 243 622 (0800 CHEMCALL) 24 hours
Date of preparation	September 2011

Section 2: Hazards Identification

Hazard classifications	6.3A, 6.4A, 6.8A, 6.9B, 9.1A
Priority identifiers	DANGER Ecotoxic
Secondary identifier	6.3A May cause skin irritation 6.4A May cause eye irritation 6.8A May damage fertility or the unborn child from repeated oral exposure 6.9B May cause organ damage from repeated oral exposure at high doses 9.1A Very toxic to aquatic organisms with long-lasting effects
Risk & Safety Phrases	R62 Possible risk of impaired fertility R63 Possible risk of harm to the unborn child R36/38 Irritating to eyes and skin R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment

Section 3: Composition/Information on Ingredients

Chemical name	CAS number	Concentration
Florfenicol	73231-34-2	30%
N-Methyl-2-Pyrrolidone	872-50-4	20-30%
Propylene Glycol	57-55-6	10-20%

Section 4: First Aid Measures

Necessary first aid measures	SKIN CONTACT In case of skin contact, while wearing protective gloves, carefully remove any contaminated clothing, including shoes, and wash skin thoroughly with soap and water. If irritation or symptoms occur or persist, consult a doctor. EYE CONTACT In case of eye contact, immediately rinse eyes thoroughly with plenty of water. If wearing contact lenses, remove only after initial rinse, and
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continue rinsing eyes for at least 15 minutes. If irritation occurs or persists, consult a doctor.

INGESTION Rinse mouth and drink a glass of water. Do not induce vomiting unless under the direction of a qualified medical professional or Poison Control Centre. If symptoms persist, consult a doctor.

INHALATION Remove to fresh air. If any trouble breathing, get immediate medical attention. Administer artificial respiration if breathing has ceased. If irritation or symptoms occur or persist, consult a doctor.

Required instructions For advice contact the National Poisons Centre 0800 POISON (0800 764 766) or a doctor.

Notes for medical personnel Inhalation: remove to fresh air & provide oxygen if breathing is difficult

Section 5: Fire Fighting Measures

Type of hazard	Not classified as flammable
Fire hazard properties	Not applicable
Regulatory requirements	Not applicable
Extinguishing media and methods	Carbon dioxide (CO ₂), extinguishing powder or water spray
Hazchem code	3Z
Recommended protective clothing	Wear full protective clothing and self-contained breathing apparatus (SCBA).

Section 6: Accidental Release Measures

Emergency procedures	Wear chemical resistant gloves and overalls, facemask or goggles. Prevent further spillage. Adsorb spilled product and place in sealable container for disposal. Wash down affected area with water plus detergent. Absorb and collect washings and place in the same sealable container for disposal. Seek advice from the local authority regarding disposal. Avoid contamination of any water source or soil with product or empty container.
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Section 7: Handling and Storage

Precautions for safe handling	Avoid contact with skin, eyes, and mucosa. Keep containers adequately sealed during material transfer, transport, or when not in use. See Section 8 (Exposure Controls) for additional guidance.
Regulatory requirements	Signage required where quantities greater than 100L are present. Emergency response plan required where quantities greater than 100L are present.
Handling practices	Avoid contact with skin. Keep containers adequately sealed during material transfer, transport, or when not in use.
Approved handlers	Not required
Conditions for safe storage	Store in original container in a cool, dry, ventilated place away from direct heat or direct sunlight. Keep container sealed when not in use. Keep out of reach of children.
Store site requirements	Store at 4°C to 25°C.
Packaging	PG III

Section 8: Exposure Control/Personal Protection

Workplace exposure standards	N-Methyl-2-pyrrolidone TWA 25ppm (103 mg/m ³) STEL 75ppm (309mg/m ³) Propylene glycol (vapour & particulates) TWA 150ppm (474mg/m ³)
Application in the workplace	Ensure adequate ventilation. Keep container sealed when not in use.
Exposure standards outside the workplace	No TEL is set for this substance at this time EEL Not applicable
Personal protection	Wear chemical resistant gloves, facemask or goggles.

Section 9: Physical and Chemical Properties

Appearance	Clear, light yellow to straw coloured, somewhat viscous solution
Boiling Point	100°C
Melting/Softening point	Not applicable
Vapour Pressure	Not determined
Specific Gravity	1.0
Solubility (H ₂ O)	Soluble
Percent Volatiles	Not determined
Evaporation Rate	Not determined

Section 10: Stability and Reactivity

Stability of the substance	Stable under normal conditions.
Conditions to avoid	Open flames and high temperatures.
Material to avoid	Avoid strong acids, bases and oxidisers
Hazardous decomposition products	Carbon oxides (COx)

Section 11: Toxicological Information

Acute effects for individual ingredients only

TEL	No TEL is set for this substance at this time.
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Chronic effects for individual ingredients only

Florfenicol: Toxicity studies with repeated doses were conducted in mice (13 weeks, rats (7, 14, 28 days and 13, 52 weeks) and dogs (14, 28 days and 13, 52 weeks). Toxic effects reported for rats were changes in haematologic parameters and atrophy of testes. For dogs, an increase in liver weights was observed. The dog was the most sensitive species and the NOEL was 1 mg/kg bw/day. [EMEA]

N-Methyl-2-Pyrrolidone: Moderately irritating to human skin with prolonged or repeated exposure [IUCLID 2000]

N-Methyl-2-Pyrrolidone: Irritating to eyes [IUCLID 2000]

N-Methyl-2-Pyrrolidone: Male reproductive toxicity has been manifested as reductions in the male fertility index in a multigeneration study in rats. Female reproductive toxicity has been manifested as reductions in the female fecundity index in a multigeneration study in rats. Developmental toxicity has been manifested as resorptions, malformations, reduced litter size, reduced postnatal survival and reduced pup body weight in experimental animals [U.S EPA]

Section 12: Environmental Information

Effects for individual ingredients only

AQUATIC	Florfenicol: 48hr LC50 0.0955 mg/L (<i>Penaeus vannamei</i> - Whiteleg shrimp) [ECOTOX] Florfenicol: 96hr EC50 1.5 mg/L (<i>Selenastrum capricornutum</i>)
EEL	No EEL is set for this substance at this time

Section 13: Disposal Considerations

Disposal information	Disposal Dispose of unused contents in a suitable landfill. Avoid contamination of any water source or the environment with product or empty container. Container Disposal Dispose of empty container by burying in a suitable landfill or recycle.
Reference	Current version of NZS 8409 Management of Agrichemicals

Section 14: Transport Information

Relevant information	UN3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Florfenicol) MARINE POLLUTANT Class 9 PG III Limited quantities: 5L Maximum quantity for own agricultural use: 1000L
Other requirements	Refer to Haznote.

Section 15: Regulatory Information

Regulatory status	HSNO Approval Code: HSR002210 For a full controls see www.epa.govt.nz ACVM registration number: A7819. For conditions of registration see www.foodsafety.govt.nz RESTRICTED VETERINARY MEDICINE
HSNO and ACVM controls	Signage: 100 Litres Emergency Plan: 100 Litres

Section 16: Other Information

Additional information	Nuflor is a registered trademark.
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