

化 学 品 安 全 技 术 说 明 书

填表时间 2019-12-28

打印时间 2025-10-12

MSDS标题

ZEARALENONE MSDS报告

产品标题

赤霉烯酮;玉米赤霉烯酮

CAS号

17924-92-4

化学品及企业标识

PRODUCT NAME

ZEARALENONE

NFPA

Flammability	1
Toxicity	1
Body Contact	2
Reactivity	0
Chronic	2

SCALE: Min/Nil=0 Low=1 Moderate=2 High=3 Extreme=4

PRODUCT USE

l- Form is isolated from the mycelia of the fungus *Gibberella zea* (*Fusarium graminearum*). One of the resorcylic acid lactones (RALS). Has been observed as a natural contaminant of cereals, in particular maize, in many countries in Africa and Europe and in the USA. Produced commercially as an intermediate in the preparation of zeranol (alpha- zearanol) by submerged fermentation. Zeranol is used as a growth promoter in beef cattle, feedlot

lambs and suckling beef calves.

SYNONYMS

C18-H22-O5, "benzoxyacyclotetradec-11-en-1-one, 14, 16-dihydroxy-3-methyl-7-oxo-, trans-", "benzoxyacyclotetradec-11-en-1-one, 14, 16-dihydroxy-3-methyl-7-oxo-, trans-", "6-(10-hydroxy-6-oxo-trans-1-undecenyl)-beta-resorcylic acid-N-lactone", "6-(10-hydroxy-6-oxo-trans-1-undecenyl)-beta-resorcylic acid-N-lactone", "resorcylic acid, 6-(10-hydroxy-6-oxo-1-undecenyl)-, mu lactone, trans-", "resorcylic acid, 6-(10-hydroxy-6-oxo-1-undecenyl)-, mu lactone, trans-", (-)-zearalenone, (S)-zearalenone, (10S)-zearalenone, trans-zearalenone, "Compound F-2", FES, "F-2 toxin", "Fusarium toxin", "Mycotoxin F2", "Toxin F2", NCI-C50226, RAL

CANADIAN WHMIS SYMBOLS

EMERGENCY OVERVIEW

RISK

Irritating to skin.

POTENTIAL HEALTH EFFECTS

ACUTE HEALTH EFFECTS

SWALLOWED

Although ingestion is not thought to produce harmful effects, the material may still be damaging to the health of the individual following ingestion, especially where pre-existing organ (e.g. liver, kidney) damage is evident. Present definitions of harmful or toxic substances are generally based on doses producing mortality (death) rather than those producing morbidity (disease, ill-health). Gastrointestinal tract discomfort may produce nausea and vomiting. In an occupational setting however, ingestion of insignificant quantities is not thought to be cause for concern. Considered an unlikely route of entry in commercial/industrial environments.

EYE

Although the material is not thought to be an irritant, direct contact with the eye may produce transient discomfort characterized by tearing or conjunctival redness (as with windburn).

SKIN

This material can cause inflammation of the skin on contact in some persons. There is some evidence to suggest that this material can cause inflammation of the skin on contact in some persons. Skin contact is not thought to have

harmful health effects, however the material may still produce health damage following entry through wounds, lesions or abrasions. The material may cause severe skin irritation after prolonged or repeated exposure and may produce on contact skin redness, swelling, the production of vesicles, scaling and thickening of the skin. Repeated exposures may produce severe ulceration.

INHALED

The material is not thought to produce adverse health effects or irritation of the respiratory tract (as classified using animal models). Nevertheless, good hygiene practice requires that exposure be kept to a minimum and that suitable control measures be used in an occupational setting. Persons with impaired respiratory function, airway diseases and conditions such as emphysema or chronic bronchitis, may incur further disability if excessive concentrations of particulate are inhaled.

CHRONIC HEALTH EFFECTS

Principal routes of exposure are usually by skin contact/absorption and inhalation of generated dust. Mycooestrogens are dietary oestrogens of fungal origin. Cereals stored under moist conditions can become contaminated by moulds that produce mycooestrogens. Both domestic livestock and humans consume significant quantities of mycooestrogen following consumption of contaminated rice, corn, wheat and barley. In common with other oestrogen mimics, mycooestrogens may alter fertility and produce reproductive deficits in farm animals and mammals. Zearalenone is held responsible for the fertility problems and oestrogenisation of farm animals, in particular pigs, observed after feeding of contaminated hay or corn ("mould corn disease"). Has produced oestrogenic effects in animals and field cases of a specific oestrogenic syndrome in pigs and infertility in cattle have been recorded at feed levels of 0.1-6.8 mg/kg and 14 mg/kg respectively. Oestrogenic syndrome in pigs is characterised by enlarged oedematus vulvae and mammary glands. Ingestion of grain contaminated with zearalenone during late gestation might be related to still-birth and splayleg in sows. Has produced congenital malformations in rat skeleton. Zearalenone has been identified in cornmeal and cornflakes destined for human consumption at levels up to 70 microgram/kg - this corresponds to doses 400-600 times lower than those required to cause effects in monkeys and mice under experimental conditions. Substantially higher levels have occasionally been found in beer and sour porridge prepared from contaminated maize and sorghum in certain areas of Africa. Although no adverse effects have as yet been reported in man possible health hazards connected with daily intake may be significant. Has caused increases in pituitary and liver tumours in mice. No increase in the incidence of tumours has been observed in rats.