

## 化 学 品 安 全 技 术 说 明 书

填表时间 2019-12-26

打印时间 2025-08-21

### MSDS标题

XANTHINE MSDS报告

### 产品标题

2, 6-二羟基嘌呤;2,6-(1H,3H)-嘌呤二酮;3, 7-二氢-1H-嘌呤-2, 6-二酮

### CAS号

69-89-6

### 化学品及企业标识

## PRODUCT NAME

XANTHINE

## NFPA

Flammability	1
Toxicity	2
Body Contact	2
Reactivity	1
Chronic	0

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

## PRODUCT USE

Organic synthesis, medicine. Occurs in animal organs, yeast, potatoes, coffee beans, tea. Isolated from urinary bladder stones. The xanthines describes a broad group of substances (including caffeine, theobromine and theophylline) which have therapeutic value in respect of effects on kidney, smooth muscle, the myocardium and the central nervous system. The

chief use of the xanthines is in paroxysmal dyspnoea associated with left heart failure.

## SYNONYMS

C5-H4-N4-O2, "3, 7-dihydro-1H-purine-2, 6-dione", "3, 7-dihydro-1H-purine-2, 6-dione", "purine base", "2, 6-dioxopurine", "2, 6-dioxopurine", isoxanthine, "purine-2, 6-diol", "purine-2, 6-diol", "2, 6(1, 3)-purinedion", "purine-2, 6-(1H, 3H)-dione", "purine-2, 6-(1H, 3H)-dione", "9H-purine-2, 6-(1H, 3H)-dione", "9H-purine-2, 6-(1H, 3H)-dione", "xanthic oxide", xanthin, XAN

## CANADIAN WHMIS SYMBOLS

None

## EMERGENCY OVERVIEW

### RISK

### 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. Xanthine derivatives may produce nausea, vomiting, anorexia, stomach pain, vomiting of blood and diarrhea. Protein in the urine, increased amounts of urine output, and increased excretion of renal tubular cells and red blood cells may also occur. Effects on breathing may include increased rate and stoppage. Central nervous system effects may include restlessness, dizziness, headache, sleep disturbance, very brisk reflexes, stammering speech, muscle twitches and convulsions alternating with severe depression. Overdose can cause coma. Cardiovascular effects include palpitations, low blood pressure, fast heart rate, extra contractions, life-threatening irregularities of the ventricles and failure of circulation. Other symptoms of overexposure include rash, fever, flushing, high blood sugar, inappropriate secretion of antidiuretic hormone, and relaxation of the smooth muscle of the airways.

## **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). The dust may produce eye discomfort causing smarting, pain and redness.

## **SKIN**

Skin contact with the material may damage the health of the individual; systemic effects may result following absorption. The material is not thought to be a skin irritant (as classified using animal models). Temporary discomfort, however, may result from prolonged dermal exposures. Good hygiene practice requires that exposure be kept to a minimum and that suitable gloves be used in an occupational setting. Toxic effects may result from skin absorption.

## **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 by accidental skin and eye contact and inhalation of generated dusts. No human exposure data available. For this reason health effects described are based on experience with chemically related materials. As with any chemical product, contact with unprotected bare skin; inhalation of vapor, mist or dust in work place atmosphere; or ingestion in any form, should be avoided by observing good occupational work practice.