

## 化 学 品 安 全 技 术 说 明 书

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### MSDS标题

MALONONITRILE DIMER MSDS报告

### 产品标题

2-氨基-1-丙烯-1, 1, 3-三碳腈; 2-氨基-1-丙烯基-1, 1, 3-三甲腈

### CAS号

868-54-2

### 化学品及企业标识

## PRODUCT NAME

MALONONITRILE DIMER

## NFPA

Flammability	1
Toxicity	2
Body Contact	0
Reactivity	0
Chronic	2
SCALE: Min/Nil=0 Low=1 Moderate=2 High=3 Extreme=4	

## PRODUCT USE

Intermediate.

## SYNONYMS

C<sub>6</sub>H<sub>4</sub>N<sub>4</sub>, NCCH<sub>2</sub>C((NH<sub>2</sub>)=C(CN)CN, "2-amino-1-propene-1, 1, 3-tricarbonitrile", "2-amino-1-propene-1, 1, 3-tricarbonitrile", "2-amino-1, 1, 3-prop-1-enecarbonitrile", "2-amino-1, 1, 3-prop-1-enecarbonitrile", "1, 1, 3-tricyano-2-amino-1-propene", "1, 1, 3-tricyano-2-amino-1-propene"

## CANADIAN WHMIS SYMBOLS

## EMERGENCY OVERVIEW

### RISK

Contact with acids liberates very toxic gas.

## 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. Nitrile poisoning exhibits similar symptoms to poisoning due to hydrogen cyanide. The substances irritate the eyes and skin, and are absorbed quickly and completely through the skin. The use of the term "organic nitriles" should be discouraged. Cyanide poisoning can cause increased saliva output, nausea without vomiting, anxiety, confusion, vertigo, dizziness, stiffness of the lower jaw, convulsions, spasm, paralysis, coma and irregular heartbeat, and stimulation of breathing followed by failure. Often the skin becomes cyanosed (blue-gray), and this is often delayed. Doses which are not lethal are eventually excreted in the urine.

#### 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**

The material is not thought to produce adverse health effects or skin irritation following contact (as classified using animal models). Nevertheless, good hygiene practice requires that exposure be kept to a minimum and that suitable gloves be used in an occupational setting.

## **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. Chronic exposure to cyanides and certain nitriles may result in interference to iodine uptake by thyroid gland and its consequent enlargement. This occurs following metabolic conversion of the cyanide moiety to thiocyanate. Thyroid insufficiency may also occur as a result of metabolic conversion of cyanides to the corresponding thiocyanate. Exposure to small amounts of cyanide compounds over long periods are reported to cause loss of appetite, headache, weakness, nausea, dizziness, abdominal pain, changes in taste and smell, muscle cramps, weight loss, flushing of the face, persistent runny nose and irritation of the upper respiratory tract and eyes. These symptoms are not specific to cyanide exposure and therefore the existence of a chronic cyanide toxicity remains speculative. Repeated minor contact with cyanides produce a characteristic rash with itching, papules (small, superficial raised spots on the skin) and possible sensitization. Concerns have been expressed that low-level, long term exposures may result in damage to the nerves of the eye.