

GHS Classification

ID963

Manganese sulphate monohydrate

CAS 10034-96-5

Date Classified: May 24, 2006 (Environmental Hazards: Mar. 31, 2006)

Physical Hazards

Reference Manual: GHS Classification Manual (Feb. 10, 2006)

Hazard class	Classification	symbol	signal word	hazard statement	Rational for the classification
1 Explosives	Not applicable	-	-	-	There are no chemical groups associated with explosive properties present in the molecules.
2 Flammable gases	Not applicable	-	-	-	Solid (GHS definition)
3 Flammable aerosols	Not applicable	-	-	-	Not aerosol products
4 Oxidizing gases	Not applicable	-	-	-	Solid (GHS definition)
5 Gases under pressure	Not applicable	-	-	-	Solid (GHS definition)
6 Flammable liquids	Not applicable	-	-	-	Solid (GHS definition)
7 Flammable solids	Not classified	-	-	-	Non-combustible (ICSC (J) (1996))
8 Self-reactive substances and mixtures	Not applicable	-	-	-	There are no chemical groups associated with explosive or self-reactive properties present in the molecule.
9 Pyrophoric liquids	Not applicable	-	-	-	Solid (GHS definition)
10 Pyrophoric solids	Not classified	-	-	-	Non-combustible (ICSC (J), 1996)
11 Self-heating substances and mixtures	Not classified	-	-	-	Not combustible (ICSC(J) (1996))
12 Substances and mixtures, which in contact with water, emit flammable gases	Classification not possible	-	-	-	No data available
13 Oxidizing liquids	Not applicable	-	-	-	Solid (GHS definition)
14 Oxidizing solids	Classification not possible	-	-	-	No data available
15 Organic peroxides	Not applicable	-	-	-	Inorganic substance
16 Corrosive to metals	Classification not possible	-	-	-	Liquid at a test temperature, 55degC. Test methods applicable to solid substances are not available.

Health Hazards

Hazard class	Classification	symbol	signal word	hazard statement	Rational for the classification
1 Acute toxicity (oral)	Classification not possible	-	-	-	No data available
1 Acute toxicity (dermal)	Classification not possible	-	-	-	No data available
1 Acute toxicity (inhalation: gas)	Not applicable	-	-	-	Solid (GHS definition)
1 Acute toxicity (inhalation: vapour)	Classification not possible	-	-	-	No data available
1 Acute toxicity (inhalation: dust, mist)	Classification not possible	-	-	-	No data available
2 Skin corrosion / irritation	Classification not possible	-	-	-	No data available
3 Serious eye damage / eye irritation	Classification not possible	-	-	-	No data available
4 Respiratory/skin sensitization	Respiratory sensitization: Classification not possible; Skin sensitization: Classification not possible	-	-	-	No data available
5 Germ cell mutagenicity	Category 2	Health hazard	Warning	Suspected of causing genetic defects (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard)	There is a positive result (DFGOT vol.12, 1999) by the chromosome aberration test using the mouse marrow cells ,which are the in vivo mutagenicity tests using a somatic, but there is no positive result by the in vivo genotoxicity study using the germ cells. So it is set as Category 2.

6	Carcinogenicity	Classification not possible	-	-	-	Classification not possible due to lack of data
7	Toxic to reproduction	Classification not possible	-	-	-	Classification not possible due to lack of data
8	Specific target organs/systemic toxicity following single exposure	Classification not possible	-	-	-	No data available.
9	Specific target organs/systemic toxicity following repeated exposure	Not classified	-	-	-	Based on the descriptions that no significant toxicities was observed with the dose exceeding the guidance value range for category 2 in 13-week feeding oral administration test on rats and mice (DFGOT (vol.12, 1999) and NTP TR428 (1993)), it was classified as out the Category.
10	Aspiration hazard	Classification not possible	-	-	-	No data available

Environmental Hazards

Hazard class	Classification	symbol	signal word	hazard statement	Rational for the classification
11 Hazardous to the aquatic environment (acute)	Classification not possible	-	-	-	No data available
11 Hazardous to the aquatic environment (chronic)	Classification not possible	-	-	-	No data available.