

GHS Classification

ID736

CAS 1395-21-7

Physical Hazards

Subtilisins, as crystalline active enzyme

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

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

Hazard class	Classification	symbol	signal word	hazard statement	Rational for the classification
1 Explosives	Classification not possible	-	-	-	No data available
2 Flammable gases	Not applicable	-	-	-	Solid (room temperature)
3 Flammable aerosols	Not applicable	-	-	-	Not aerosol products
4 Oxidizing gases	Not applicable	-	-	-	Solid (room temperature)
5 Gases under pressure	Not applicable	-	-	-	Solid (room temperature)
6 Flammable liquids	Not applicable	-	-	-	Solid (room temperature)
7 Flammable solids	Classification not possible	-	-	-	No data available
8 Self-reactive substances and mixtures	Classification not possible	-	-	-	No data available
9 Pyrophoric liquids	Not applicable	-	-	-	Solid (room temperature)
10 Pyrophoric solids	Classification not possible	-	-	-	No data available
11 Self-heating substances and mixtures	Classification not possible	-	-	-	No data available
12 Substances and mixtures, which in contact with water, emit flammable gases	Classification not possible	-	-	-	No data available
13 Oxidizing liquids	Not applicable	-	-	-	Solid (room temperature)
14 Oxidizing solids	Classification not possible	-	-	-	No data available
15 Organic peroxides	Classification not possible	-	-	-	No data available
16 Corrosive to metals	Classification not possible	-	-	-	No data available

Health Hazards

Hazard class	Classification	symbol	signal word	hazard statement	Rational for the classification
1 Acute toxicity (oral)	Classification not possible	-	-	-	Insufficient data available
1 Acute toxicity (dermal)	Classification not possible	-	-	-	Insufficient data available
1 Acute toxicity (inhalation: gas)	Not applicable	-	-	-	Solid (room temperature)
1 Acute toxicity (inhalation: vapour)	Classification not possible	-	-	-	Insufficient data available
1 Acute toxicity (inhalation: dust, mist)	Classification not possible	-	-	-	Insufficient data available
2 Skin corrosion / irritation	Category 2-3	Exclamation mark	Warning	Causes skin irritation	Irritation on human skin is reported. But there is no information on the extent (ACGIH, 2001). Therefore, it was classified as Category 2-3.
3 Serious eye damage / eye irritation	Category 2A	Exclamation mark	Warning	Causes serious eye irritation	It was set as Category 2A based on what severe eye irritations is reported by Draize test of the rabbit (RTECS, 2004).
4 Respiratory/skin sensitization	Respiratory sensitization: Category 1; Skin sensitization: Category 1	(Respiratory sensitization)Health hazard; (Skin sensitization)Exclamation mark	(Respiratory sensitization)Danger; (Skin sensitization)Warning	(Respiratory sensitization)May cause allergy or asthma symptoms or breathing difficulties if inhaled; (Skin sensitization)May cause allergic skin reaction	Human skin sensitization (identified in a skin patch test) and respiratory sensitization (such as airway obstruction, bronchus contraction, the fall of the amount of breathing and asthma) have been reported (ACGIH, 2001). Therefore, both skin sensitization sensitization and respiratory sensitization were referred to as Category 1.
5 Germ cell mutagenicity	Classification not possible	-	-	-	No data available

6	Carcinogenicity	Classification not possible	-	-	-	No data available
7	Toxic to reproduction	Classification not possible	-	-	-	No data available
8	Specific target organs/systemic toxicity following single exposure	Category 1 (respiratory)	Health hazard	Danger	Cause damage to organs (respiratory)	Pulmonary edemas are acknowledged by guinea pigs inhalation exposures (ACGIH, 2001), and this exposure concentrations is set as category 1 as compared with a guidance value. Moreover, it is classified into Category 1 (respiratory systems) based on respiratory irritation being reported in humans (ACGIH, 2001).
9	Specific target organs/systemic toxicity following repeated exposure	Classification not possible	-	-	-	No data available
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.