

## GHS Classification

**ID521**

**CAS 21725-46-2**

### Physical Hazards

**2-(4-chloro-6-ethylamino-1,3,5-triazin-2-yl)amino-2-methylpropionitrile**

Date Classified: Dec. 18, 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	Not applicable	—	—	—	Containing no chemical groups with explosive properties
2 Flammable gases	Not applicable	—	—	—	Classified as "solid" according to GHS definition
3 Flammable aerosols	Not applicable	—	—	—	Not aerosol products
4 Oxidizing gases	Not applicable	—	—	—	Classified as "solid" according to GHS definition
5 Gases under pressure	Not applicable	—	—	—	Classified as "solid" according to GHS definition
6 Flammable liquids	Not applicable	—	—	—	Classified as "solid" according to GHS definition
7 Flammable solids	Not classified	—	—	—	Non-flammable (ICSC (2004))
8 Self-reactive substances and mixtures	Not applicable	—	—	—	Containing no chemical groups with explosive or self-reactive properties
9 Pyrophoric liquids	Not applicable	—	—	—	Classified as "solid" according to GHS definition
10 Pyrophoric solids	Not classified	—	—	—	Non-flammable (ICSC (2004))
11 Self-heating substances and mixtures	Not classified	—	—	—	Non-flammable (ICSC (2004))
12 Substances and mixtures, which in contact with water, emit flammable gases	Not applicable	—	—	—	Containing no metals or metalloids (B, Si, P, Ge, As, Se, Sn, Sb, Te, Bi, Po, At)
13 Oxidizing liquids	Not applicable	—	—	—	Classified as "solid" according to GHS definition
14 Oxidizing solids	Not applicable	—	—	—	Organic compounds containing chlorine (but not oxygen and fluorine), with the chlorine bound to carbon and hydrogen (but not to other elements)
15 Organic peroxides	Not applicable	—	—	—	Organic compounds containing no "—O—O—" structure
16 Corrosive to metals	Not classified	—	—	—	Test methods applicable to solid substances with melting point of >55degC are not available (melting point: 167–169degC (Agricultural Chemical Registration Data)). Assigned to Division 6.1 (UN#2763 Triazine Pesticide, solid, toxic (ICSC (2004))) (UN Recommendations on the Transport of Dangerous Goods)

### Health Hazards

Hazard class	Classification	symbol	signal word	hazard statement	Rational for the classification
1 Acute toxicity (oral)	Category 4	Exclamation mark	Warning	Harmful if swallowed	Based on the rat LD50 (oral route) value of 306mg/kg (Agricultural Chemical Registration Data (1983)).
1 Acute toxicity (dermal)	Not classified	—	—	—	Based on the rat LD50 (dermal route) value of >6,590mg/kg (Agricultural Chemical Registration Data (1983)).
1 Acute toxicity (inhalation: gas)	Not applicable	—	—	—	Due to the fact that the substance is a solid according to the GHS criteria and inhalation of its gas is not expected.
1 Acute toxicity (inhalation: dust, mist)	Classification not possible	—	—	—	No data available
1 Acute toxicity (inhalation: dust, mist)	Classification not possible	—	—	—	Classification cannot be determined, though the available rat inhalation study reported the LC50 value of >0.809mg/L (4 hours) (Agricultural Chemical Registration Data (1983)).
2 Skin corrosion / irritation	Category 3	—	Warning	Causes mild skin irritation	Based on the description in the report on rabbit skin irritation tests (24 hours, occluded) (PATTY (4th, 1999)): "Mildly irritating."
3 Serious eye damage / eye irritation	Category 2A	Exclamation mark	Warning	Causes serious eye irritation	Based on the description in the report on rabbit eye irritation tests (PATTY (4th, 1999)): "Mild to moderate irritation" and "severe irritation following instillation of 90% formulation, which took about two weeks to resolve." The substance is thus considered a moderate irritant.
4 Respiratory/skin sensitization	Respiratory sensitization: Classification not possible Skin sensitization: Not classified	(Respiratory sensitization) — (Skin sensitization) —	(Respiratory sensitization) — (Skin sensitization) —	(Respiratory sensitization) — (Skin sensitization) —	Respiratory sensitization: No data available Skin sensitization: No skin sensitizing potential was found in guinea pig sensitization tests employing the Buehler method (Agricultural Chemical Registration Data (1998)).
5 Germ cell mutagenicity	Not classified	—	—	—	Based on negative data in in vitro assays (reverse mutation tests, chromosome aberration tests and unscheduled DNA synthesis tests) and in vivo assays (mouse chromosome aberration tests, dominant lethal tests and unscheduled DNA synthesis tests) (Agricultural Chemical Registration Data (1983, 1996, 1997)).
6 Carcinogenicity	Not classified	—	—	—	There was no treatment-related increase in tumor incidence observed in carcinogenicity studies in rats and mice (Agricultural Chemical Registration Data (1983, 1996)).
7 Toxic to reproduction	Not classified	—	—	—	Based on no evidence of adverse effects on reproduction or offspring development observed in rat 3-generation reproduction studies and rat/rabbit teratogenicity studies (Agricultural Chemical Registration Data (1983)).

8	Specific target organs/systemic toxicity following single exposure	Category 3 (Narcotic effects)	Exclamation mark	Warning	(Narcotic effects) May cause drowsiness or dizziness	Based on the evidence from animal studies including "lethargy" (RTECS (2003)).
9	Specific target organs/systemic toxicity following repeated exposure	Category 2 (kidneys, heart)	Health hazard	Warning	May cause damage to organs through prolonged or repeated exposure (kidneys, heart)	Based on the evidence from animal studies including "acute renal failure, acute renal tubular necrosis, and myocardiosis including myocardial infarction" (RTECS (2003)). The effects on experimental animals were observed at dosing levels within the guidance value ranges for Category 1 (kidneys) and Category 2 (heart). Since the referenced study (RTECS (2003)) is assigned a priority rating of 2, these effects are classified into Category 2.
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)	Category 1	Environment	Warning	Very toxic to aquatic life	It was classified into Category 1 from ErC50=20microg/L of the algae (Green Algae) (Agricultural Chemical Registration Data, 2004).
11 Hazardous to the aquatic environment (chronic)	Category 1	Environment	Warning	Very toxic to aquatic life with long lasting effects	Although acute toxicity is Category 1 and bio-accumulation is low (log Kow=2.22(PHYSROP Database, 2005)), since there was no rapidly degrading (BIOWIN), it was classified into Category 1.