

## GHS Classification

**ID326**

**CAS 105779-78-0**

### Physical Hazards

**5-Chloro-N-[2-[4-(2-ethoxyethyl)-2,3-dimethylphenoxy]ethyl]-6-ethylpyrimidine-4-amine; Pylimidifen**

Date Classified: Nov. 20, 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	Classification not possible	—	—	—	No data available
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	Classification not possible	—	—	—	No data available
11 Self-heating substances and mixtures	Classification not possible	—	—	—	Test methods applicable to liquid substances are not available (melting point: 69.4-70.9degC (Agricultural Chemical Registration Data), test temperature: 140degC).
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 and oxygen (but not fluorine), with the chlorine and oxygen 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	Classification not possible	—	—	—	Test methods applicable to solid substances with melting point of >55degC are not available (melting point: 69.4-70.9degC (Agricultural Chemical Registration Data)).

### Health Hazards

Hazard class	Classification	symbol	signal word	hazard statement	Rational for the classification
1 Acute toxicity (oral)	Category 3	Skull and crossbones	Danger	Toxic if swallowed	Based on the rat LD50 (oral route) value of 115mg/kg (Agricultural Chemical Registration Data (1993)).
1 Acute toxicity (dermal)	Not classified	—	—	—	Based on the rat LD50 (dermal route) value of >2,000mg/kg, together with the absence of mortality at doses of >2,000mg/kg (Agricultural Chemical Registration Data (1993)).
1 Acute toxicity (inhalation: gas)	Not applicable	—	—	—	Due to the fact that the substance is a solid according to the GHS definition 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)	Category 2	Skull and crossbones	Danger	Fatal if inhaled	Based on the rat LC50 (inhalation route) value of 0.069mg/L (Agricultural Chemical Registration Data (1993)).
2 Skin corrosion / irritation	Not classified	—	—	—	Based on no evidence of skin irritation observed in rabbit skin irritation tests (Agricultural Chemical Registration Data (1993)).
3 Serious eye damage / eye irritation	Category 2B	—	Warning	Causes eye irritation	Based on the data from rabbit eye irritation tests that suggest evidence of mild irritation which cleared up after 2-3 days (Agricultural Chemical Registration Data (1993)).
4 Respiratory/skin sensitization	Respiratory sensitization: Classification not possible Skin sensitization: Category 1	(Respiratory sensitization) — (Skin sensitization) Exclamation mark	(Respiratory sensitization) — (Skin sensitization) Warning	(Respiratory sensitization) — (Skin sensitization) May cause an allergic skin reaction	Respiratory sensitization: No data available Skin sensitization: Based on positive results in guinea pig skin sensitization tests using the Maximization method (Agricultural Chemical Registration Data (1996)).
5 Germ cell mutagenicity	Classification not possible	—	—	—	Based on the absence of data on in vivo studies, though in vitro reverse mutation tests and chromosome aberration tests showed negative (Agricultural Chemical Registration Data (1993)).
6 Carcinogenicity	Not classified	—	—	—	There was no treatment-related evidence of tumor formation observed in 2-year (rats) and 18-month (mice) carcinogenicity studies (Agricultural Chemical Registration Data (1993)).
7 Toxic to reproduction	Not classified	—	—	—	Based on no evidence of adverse effects on reproduction or teratogenicity effects on the pups observed in rat 2-generation reproduction studies and rat/rabbit teratogenicity studies (Agricultural Chemical Registration Data (1993)).
8 Specific target organs/systemic toxicity following single exposure	Category 1 (respiratory organs, nervous system)	Health hazard	Danger	Causes damage to organs (respiratory organs, nervous system)	In rat and mouse single dose toxicity studies, "hypoactivity" and "bradypnea," "partial eyelid closure," "decreased respiration rate," "gasping" and "open-mouth respiration" were seen (Agricultural Chemical Registration Data (1989)). These effects were observed at dosing levels within the guidance value ranges for Category 1.

9	Specific target organs/systemic toxicity following repeated exposure	Category 1 (liver), Category 2 (blood system)	Health hazard	Danger	Causes damage to organs through prolonged or repeated exposure (liver) May cause damage to organs through prolonged or repeated exposure (blood system)	Based on the evidence from animal studies including "increased liver weight," "hepatocellular swelling" and "anemia" (Agricultural Chemical Registration Data (1993)). These effects were observed at dosing levels within the guidance value ranges for Category 1 (liver) and Category 2 (blood system).
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 96 hours LC50=0.00211mg/L of the fish (Carp) (Agricultural Chemical Registration Data, 2005).
11 Hazardous to the aquatic environment (chronic)	Category 1	Environment	Warning	Very toxic to aquatic life with long lasting effects	Since acute toxicity was Category 1 and there was no rapidly degrading (BIOWIN), and since there was bio-accumulation (log Kow=4.84 (PHYSPROP Database, 2005)), it was classified into Category 1.