

GHS Classification

ID1114

anilinium chloride

CAS 142-04-1

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	-	-	-	Although it is flammable, UNRTDG is classified into 6.1 and III according to the UNRTDG No.(1548). Since 4.1 was not assigned, it was classified as out of Category.
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	-	-	-	Not classified because of UNRTDG No. 1548, Class: 6.1, III (not Class: 4.2)
11 Self-heating substances and mixtures	Not classified	-	-	-	UNRTDG is classified into 6.1 and III according to the U.N. number (1548) peculiar to a substance. Since 4.2 was not attached, it carried out the outside of Category.
12 Substances and mixtures, which in contact with water, emit flammable gases	Not applicable	-	-	-	The chemical structure of the substance does not contain metals or metalloids(B, Si, P, Ge, As, Se, Sn, Sb, Te, Bi, Po, At).
13 Oxidizing liquids	Not applicable	-	-	-	Solid (GHS definition)
14 Oxidizing solids	Not classified	-	-	-	UNRTDG No. 1548, Class: 6.1; PG III (Not 5.1).
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 are not available.

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	Because the LD50 in rats was 840mg/kg (RTECS (2004)), the substance was classified as Category 4. [Note.] Since there may be information about aniline instead of aniline hydrochloride, also refer to aniline (ID_No. 0007, CAS.No. 62-53-3) for the following items related to health hazards.
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	Category 2	Exclamation mark	Warning	Causes skin irritation	It was set as Category 2 from the description that there is irritation to humans (Moderate, RTECS (2004)), and the result that Standard Draize Test to rabbit (ICSC (J), (2001), HSFs (2003)).
3 Serious eye damage / eye irritation	Category 2A-2B	Exclamation mark	Warning	Causes serious eye irritation	Due to the descriptions that it irritates to human eyes, and that the result of Standard Draize Test of aniline hydrochloride using the rabbit (Moderate, RTECS (2004)), it was classified into Category 2A-2B. In addition, although it correspond to R41 (severe damages on the eye) in the EU risk epigram, this was classified based on the evaluations to anilines, and the information about aniline hydrochloride was restricted. Therefore, it was not made into the classified evidence.
4 Respiratory/skin sensitization	Respiratory sensitization: Classification not possible; Skin sensitization: Classification not possible	(Respiratory sensitization)-; (Skin sensitization)-	(Respiratory sensitization)-; (Skin sensitization)-	(Respiratory sensitization)-; (Skin sensitization)-	Respiratory sensitization: no data available. Skin sensitization: although there is description (sensitization of the skin may be carried out by repetition or long-term contact)(ICSC(J)(2001)) which suggests skin sensitization, there is no data which meets the classification standards of GHS, and since data is insufficient, it cannot classify.

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)	Although each is negative (IARC 27 (1982), EU-RAR (2004)) in the in vivo chromosomal aberration test using rat myeloid and mouse cells, a positive result is accepted in the in vivo small core examination using rat myeloid and mouse cells (EU-RAR (2004)). If it classifies based on technical guidelines flow from the above result, it can classify with Category 2. Furthermore, in evaluation of EU-RAR to aniline (the result of aniline hydrochloride is also used in part), they are Category 3 and the risk phrases R68, and this is also equivalent to the Category 2 of a GHS classification. So it is judged that Category 2 is appropriate.
6	Carcinogenicity	Category 2	Health hazard	Warning	Suspected of causing cancer (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard)	It is categorized into Group 3 which corresponds to outer GHS Category as anilines and aniline hydrochloride in IARC (IARC 27(1982); IARC Suppl.7 (1987)). But it is categorized into Category 3 which corresponds to GHS Category 2 as aniline according to evaluation of the latest EU (EU-RAR (2004)). So it was classified into Category 2. In addition, the carcinogenicity tests in NTP (NTP TR-130 (1978)) is performed using aniline hydrochloride, and negative result in mouse and positive result in rat are obtained. IARC and EU use this evaluation.
7	Toxic to reproduction	Classification not possible	-	-	-	Although there is a report (EU-RAR (2004), Catalog of Teratogenic Agents, 11th ed. (2004)) that the effect originating in the blood poison to dam of aniline hydrochloride arises in fetus by administration to pregnant female rats, there is no fertility data. And data is insufficient, it cannot classify.
8	Specific target organs/systemic toxicity following single exposure	Category 2 (blood system); Category 3 (respiratory tract irritation)	Health hazard; Exclamation mark	Warning	May cause damage to organs (blood system); May cause respiratory irritation or may cause drowsiness and dizziness (respiratory tract)	The substance was classified as Category 2 (blood) and Category 3 (airway irritant) based on the reports in Priority 2 (ICSC (J) (2001), HSFS (2003)) that "it causes irritation to airways, and may affect the blood and form methemoglobin" in humans.
9	Specific target organs/systemic toxicity following repeated exposure	Category 2 (blood, spleen, testes)	Health hazard	Warning	May cause damage to organs (blood, spleen, testes) through prolonged or repeated	Since in Priority2, within the range of the guidance value which is classified into Category 2, the effect on spleen, testis and blood of male rats (RTECS (2004)) and human blood is affected (ICSC (J), (2001)), it was classified into Category 2 (blood,spleen,teste).
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	-	-	-	Insufficient data available.
11 Hazardous to the aquatic environment (chronic)	Classification not possible	-	-	-	Classification not possible due to lack of data