

GHS Classification

ID846

N-methyl-N,2,4,6-tetranitroaniline

CAS 479-45-8

Date Classified: Jul. 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	Division 1.1	Exploding bomb	Danger	Explosive; mass explosion hazard	UNRTDG Class: 1.1D
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	-	-	-	UNRTDG Class: 1.1
8 Self-reactive substances and mixtures	Not applicable	-	-	-	Classified in explosives
9 Pyrophoric liquids	Not applicable	-	-	-	Solid (GHS definition)
10 Pyrophoric solids	Not classified	-	-	-	UNRTDG Class: 1.1
11 Self-heating substances and mixtures	Not classified	-	-	-	UNRTDG Class: 1.1
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 Class: 1.1
15 Organic peroxides	Not applicable	-	-	-	Containing no -O-O- structure
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)	Not classified	-	-	-	Not classified because of SPECIES: Rat:LDLo VALUE: :5000mg/kg; REFERENCE SOURCE: RTECS (2005)
1 Acute toxicity (dermal)	Not classified	-	-	-	Based on rabbit LD50 value: >2000mg/kg (RTECS, 2005), it was set as the outside of Category.
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 description that there was skin irritation as effect of the humans (ACGIH (7th, 2001), PATTY (4th, 1994), DFGOT (vol.1, 1998)).
3 Serious eye damage / eye irritation	Category 2A	Exclamation mark	Warning	Causes serious eye irritation	There is the description that in the test applied to the eye of the rabbit (RTECS (2005)), severe irritation was acknowledged. So it was set as Category 2A.
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 allergic skin reaction	Respiratory organs: Although there were descriptions that asthmatic symptoms was acknowledged in the cases of human occupational exposure and there is possibility of sensitizing properties for respiratory organs in ACGIH (7th, 2001), DFGOT (1 vol. 1998), and ATSDR (1995), we presupposed that we could not classify it because of insufficiency of data, since these cases were not concluded to be positive. Skin: We classified it as Category 1 because it is classified to be Sh according to DFG (MAK/BAT, 2004), and there were case reports of allergic contact dermatitis in ACGIH (7th, 2001), DFGOT (1 vol. 1998), PATTY (4th, 1994), and ATSDR (1995) for cases of human exposure.
5 Germ cell mutagenicity	Classification not possible	-	-	-	Classification not possible due to lack of data
6 Carcinogenicity	Classification not possible	-	-	-	Classification not possible due to lack of data
7 Toxic to reproduction	Classification not possible	-	-	-	No data available

8	Specific target organs/systemic toxicity following single exposure	Category 3 (respiratory tract irritation)	Exclamation mark	Warning	may cause respiratory irritation or may cause drowsiness and dizziness (respiratory tract irritation)	It was set as Category 3 (respiratory irritant) from description that respiratory irritant is acknowledged in humans evidence of exposure of ACGIH (7th, 2001), PATTY (4th, 1994), DFGOT (vol.1, 1998), and ATSDR (1995).
9	Specific target organs/systemic toxicity following repeated exposure	Category 1 (liver, blood, central nervous system, respiratory organs); Category 2 (kidneys)	Health hazard	Danger; Warning	Causes damage to organs (liver, blood, central nervous system, respiratory organs) through prolonged or repeated exposure; May cause damage to organs (kidneys) through prolonged or repeated	Based on descriptions that myelosuppression, hepatotoxicity, and influence of the central nervous systems such as headache, lassitude, insomnia, etc. are observed in humans with exposure (PATTY (4th, 1994)), that, in evidence of human occupational exposure, a liver damages, anemia, asthmatic symptoms such as nocturnal paroxysmal coughings and dyspnea, and the lung tissue disorders were observed (ACGIH (7th, 2001), DFGOT (vol.1, 1998) and ATSDR (1995)), that in the oral study using rats, increase in methemoglobin, decrease in hemoglobin and renal tubular degeneration were observed with the given dose of the guidance value range of Category 2 (DFGOT (vol.1, 1998)), it was classified into Category 1 (liver, blood, a central nervous systems, the respiratory system) and Category 2 (kidney).
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.