

GHS Classification

ID656

CAS 10024-97-2

Physical Hazards

Dinitrogen oxide

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	Not applicable	-	-	-	Gas (GHS definition)
2 Flammable gases	Not classified	-	-	-	Non-combustible
3 Flammable aerosols	Not applicable	-	-	-	Not aerosol products
4 Oxidizing gases	Category 1	Flame over circle	Danger	May cause or intensify fire; oxidizer	Oxidizing because of UNRTDG Subsidiary risks Class: 5.1 and GHS, 1st, P.58 (2.4.4.2)
5 Gases under pressure	Compressed gas	Gas cylinder	Warning	Contains gas under pressure; may explode if heated	Transported as refrigerated liquefied gases (UNRTDG)
6 Flammable liquids	Not applicable	-	-	-	Gas (GHS definition)
7 Flammable solids	Not applicable	-	-	-	Gas (GHS definition)
8 Self-reactive substances and mixtures	Not applicable	-	-	-	Gas (GHS definition)
9 Pyrophoric liquids	Not applicable	-	-	-	Gas (GHS definition)
10 Pyrophoric solids	Not applicable	-	-	-	Gas (GHS definition)
11 Self-heating substances and mixtures	Not applicable	-	-	-	Gas (GHS definition)
12 Substances and mixtures, which in contact with water, emit flammable gases	Not applicable	-	-	-	Gas (GHS definition)
13 Oxidizing liquids	Not applicable	-	-	-	Gas (GHS definition)
14 Oxidizing solids	Not applicable	-	-	-	Gas (GHS definition)
15 Organic peroxides	Not applicable	-	-	-	Gas (GHS definition). Inorganic substance.
16 Corrosive to metals	Not applicable	-	-	-	Test methods applicable to gas substances are not available

Health Hazards

Hazard class	Classification	symbol	signal word	hazard statement	Rational for the classification
1 Acute toxicity (oral)	Not applicable	-	-	-	Since there is no suitable liquid solvent, oral administration is impossible.
1 Acute toxicity (dermal)	Classification not possible	-	-	-	No data available
1 Acute toxicity (inhalation: gas)	Classification not possible	-	-	-	No data available
1 Acute toxicity (inhalation: mist)	Not applicable	-	-	-	Gas (GHS definition)
1 Acute toxicity (inhalation: dust, mist)	Not applicable	-	-	-	Gas (GHS definition)
2 Skin corrosion / irritation	Not classified	-	-	-	There is no examination data. But based on the information that there is no skin irritation (DFGOT vol9. (1998)), it was classified as out of Category.
3 Serious eye damage / eye irritation	Classification not possible	-	-	-	No data available
4 Respiratory/skin sensitization	Classification not possible	-	-	-	No data available
5 Germ cell mutagenicity	Classification not possible	-	-	-	It gave a negative result in the in vitro examination (ACGIH (2001)). However, we found no valid in vivo data, therefore we could not classify it.
6 Carcinogenicity	Not classified	-	-	-	Since it was A4 in ACGIH which is an evaluation organization, it carried out the outside of Category.
7 Toxic to reproduction	Category 1A	Health hazard	Danger	May damage fertility or the unborn child	It is classified into the Category 1A because natural abortion by insufflations increased in the case of the female workers working in the dental clinics (ACGIH (2001)). An animal experiments in rat shows embryotoxicity, the ferotoxicity and the skeletal malformation.
8 Specific target organs/systemic toxicity following single exposure	Category 3 (narcotic effects)	Exclamation mark	Warning	May cause respiratory irritation or may cause drowsiness and dizziness (narcotic effects)	There is anesthetic action with the case of animals and humans (DFGOT vol.9 (1998)), it is classified into Category 3.

9	Specific target organs/systemic toxicity following repeated exposure	Category 1 (blood, nervous system, liver, kidneys)	Health hazard	Danger	Causes damage to organs (blood, nervous system, liver, kidneys) through prolonged or repeated exposure	Based on the information that there is a disease of a hematopoietic system and the information that the obstacle to liver, the kidney, and a nervous system appears by occupational exposure when used with dentist as an anesthetic drug in human cases, it was classified to as Category 1 (blood, a nervous system, liver, kidney) (ACGIH (2001))
10	Aspiration hazard	Not applicable	-	-	-	Gas (GHS definition)

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.