

GHS Classification

ID700

Carbon black

CAS 1333-86-4

Date Classified: Jun. 20, 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 classified (Materials of animal or vegetable origin). Classification not possible (Materials of mineral origin)	-	-	-	Materials of animal or vegetable origin: UNRTDG No. 1361 (CARBON, animal or vegetable origin, Class4.2, Packing Group II or III). Materials of mineral origin: no data available
2 Flammable gases	not applicable (Materials of animal or vegetable origin and	-	-	-	Solid (GHS definition)
3 Flammable aerosols	not applicable (Materials of animal or vegetable origin and	-	-	-	Not aerosol products
4 Oxidizing gases	not applicable (Materials of animal or vegetable origin and	-	-	-	Solid (GHS definition)
5 Gases under pressure	not applicable (Materials of animal or vegetable origin and	-	-	-	Solid (GHS definition)
6 Flammable liquids	not applicable (Materials of animal or vegetable origin and	-	-	-	Solid (GHS definition)
7 Flammable solids	Not classified (Materials of animal or vegetable origin). Classification not possible (Materials of mineral origin)	-	-	-	It is based on Animal-and-plant materials: the UN number 1361 (CARBON, animal or vegetable origin, Class4.2, Packing Group II or III). Mineral materials: No data.
8 Self-reactive substances and mixtures	Not classified (Materials of animal or vegetable origin). Classification not possible (Materials of mineral origin)	-	-	-	It is based on the Animals-and-plants system materials: UN number 1361 (CARBON, animal or vegetable origin, Class4.2, Packing Group II or III). Mineral systems materials: no data.
9 Pyrophoric liquids	not applicable (Materials of animal or vegetable origin and	-	-	-	Solid (GHS definition)
10 Pyrophoric solids	Not classified (Materials of animal or vegetable origin). Classification not possible (Materials of mineral origin)	-	-	-	Materials of animal-and-plant origin: It is based on the UN Number 1361 (CARBON, animal or vegetable origin, Class4.2, Packing Group II or III). Materials of mineral origin: No data.
11 Self-heating substances and mixtures	Category 1-2 (Materials of animal or vegetable origin). Classification not possible (Materials of mineral origin)	Flame	Danger	Self-heating; may catch fire	It is based on the Animals-and-plants system materials: UN number 1361 (CARBON, animal or vegetable origin, Class4.2, Packing Group II or III). Mineral systems materials: data without.
12 Substances and mixtures, which in contact with water, emit flammable gases	not applicable (Materials of animal or vegetable origin and	-	-	-	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 (Materials of animal or vegetable origin and	-	-	-	Solid (GHS definition)
14 Oxidizing solids	not applicable (Materials of animal or vegetable origin and	-	-	-	Containing no oxygen, chlorine and fluorine.

15	Organic peroxides	Not applicable (Materials of animal or vegetable origin and	-	-	-	Containing no -0-0- structure
16	Corrosive to metals	Classification not possible (Materials of animal or vegetable origin and mineral	-	-	-	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)	Not classified	-	-	-	SPECIES: Rat ENDPOINT: LD50 VALUE: 15400 mg/kg REFERENCE SOURCE: RTECS (2004)
1 Acute toxicity (dermal)	Classification not possible	-	-	-	Although there are data of >3 gm/kg (RTECS (2004)) of a rabbit, it cannot be specified as LD50 value.
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	Classification not possible	-	-	-	Insufficient data available
3 Serious eye damage / eye irritation	Classification not possible	-	-	-	Insufficient data available.
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)-	No data available
5 Germ cell mutagenicity	Classification not possible	-	-	-	Although we have the positive findings by the somatic cell in vivo genotoxicity study (the DNA adduct formation examination of the rat alveolar cells, and the rat alveolar cells hprt mutation examination)(DFGOTvol.18 (2002)), we have no data in which the positive result has been clearly shown in the in vitro mutagenicity test.
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 based on 2B of IARC classification and 2nd group B of Japan Society for Occupational Health.
7 Toxic to reproduction	Classification not possible	-	-	-	No data available
8 Specific target organs/systemic toxicity following single exposure	Classification not possible	-	-	-	No data available.
9 Specific target organs/systemic toxicity following repeated exposure	Category 1 (lung)	Health hazard	Danger	Causes damage to organs (lung) through prolonged or repeated	It is classified into Category 1 based on the pneumoconiosis on humans (DFGOT vol.18 (2002)) and the influence on lungs (a epithelial hyperplasia, metaplasia, pulmonary fibrosis, and multiplication of alveolar cell etc.) (DFGOTvol.18 (2002)) in a rat inhalation test at the range of the guidance value Category 1.
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)	Not classified	-	-	-	Since it was suggested from 24-hour LC50/5000mg/L of Crustacea (Daphnia magna) (GCLD, 2000) that relevant toxicity is not indicated in the water solubility (insoluble (HSDB, 2004)) of this substance, it carried out the outside of
11 Hazardous to the aquatic environment (chronic)	Classification not possible	-	-	-	Classification not possible, since water-insoluble and no acute toxicity is reported within the saturated aqueous solution, and behavior in water and bioaccumulative potential are unknown.