

GHS Classification

ID723

Coal tar naphtha

CAS

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	Classification not possible	-	-	-	No data available
2 Flammable gases	Not applicable	-	-	-	Liquid (room temperature)
3 Flammable aerosols	Not applicable	-	-	-	Not aerosol products
4 Oxidizing gases	Not applicable	-	-	-	Liquid (room temperature)
5 Gases under pressure	Not applicable	-	-	-	Liquid (room temperature)
6 Flammable liquids	Category 2	Flame	Danger	Highly flammable liquid and vapour	Since flash point was 21 degC (<23 degC), and initial boiling point was 160 – 300 degC (> 35 degC), it was classified as Category 2.
7 Flammable solids	Not applicable	-	-	-	Liquid (room temperature)
8 Self-reactive substances and mixtures	Classification not possible	-	-	-	No data available
9 Pyrophoric liquids	Not classified	-	-	-	Flash point: 270degC (> 70degC)(NFPA , 1997)
10 Pyrophoric solids	Not applicable	-	-	-	Liquid (room temperature)
11 Self-heating substances and mixtures	Classification not possible	-	-	-	Test methods applicable to liquid substances are not available
12 Substances and mixtures, which in contact with water, emit flammable gases	Classification not possible	-	-	-	No data available
13 Oxidizing liquids	Classification not possible	-	-	-	No data available
14 Oxidizing solids	Not applicable	-	-	-	Liquid (room temperature)
15 Organic peroxides	Classification not possible	-	-	-	UNRTDG No. 3105 Class: 5.2
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	-	-	-	Based on the 5980mg/kg which is statistically calculated values of rat LD50 value using 4 data (IARC47 (1989), EHC20 (1982)), it considered as the outside of Category.
1 Acute toxicity (dermal)	Category 5	-	Warning	May be harmful in contact with skin	Based on rat LD50= 5ml/kg (reduced value of 4.40g/kg) (IARC47 (1989), EHC20 (1982)), it was set as Category 5.
1 Acute toxicity (inhalation: gas)	Not applicable	-	-	-	Liquid (room temperature)
1 Acute toxicity (inhalation: vapour)	Classification not possible	-	-	-	Insufficient data available
1 Acute toxicity (inhalation: dust, mist)	Category 5	-	Warning	May be harmful if inhaled	Category 5 because of SPECIES: Rat; ENDPOINT: LC50 (4–8h) VALUE: 5.3mg/L (EHC20, 1982)
2 Skin corrosion / irritation	Category 2	Exclamation mark	Warning	Causes skin irritation	Based on the statement of moderate irritation to Aromatic solvents which has a 138 – 264degC boiling range (EHC20 (1982)), it was classified as Category 2.
3 Serious eye damage / eye irritation	Category 2A	Exclamation mark	Warning	Causes serious eye irritation	Based on the statement of moderately irritation to Aromatic solvents which has a 138 – 264degC boiling range (EHC20 (1982)), it was set as Category 2A.
4 Respiratory/skin sensitization	Classification not possible; Skin sensitization: Not possible	(Respiratory sensitization)-; (Skin sensitization)-	(Respiratory sensitization)-; (Skin sensitization)-	(Respiratory sensitization)-; (Skin sensitization)-	Based on a statement that in the maximization test (including GLP test) using a guinea pigs, high-boiling aromatic solvent, coal tar naphtha did not cause the sensitization, it was put outside of the Category. In addition, this result is supported by the statement that sensitization is not indicated in the examination by humans using multiple solvent naphtha with different boiling points(IUCLID (2000)).
5 Germ cell mutagenicity	Not classified	-	-	-	Based on the description (IUCLID (2000)) that High Flash Aromatic Naphtha or Solvent naphtha gave negative for the in vivo somatic mutagenicity examination (the chromosomal aberration test (GLP), the micronucleus test (GLP)) using rats or mice, we classified it as Out Of Category. In addition, each in vitro mutagenicity test using three kinds of Solvent naphtha among which boiling points differ was negative. (IUCLID(2000))

6	Carcinogenicity	Classification not possible	-	-	-	It was presupposed that it cannot be categorized by technological direction. Since there is only the European Union classification. [Notes] Solvent naphtha (coal), Solvent naphtha (petroleum), and light arom. are classified into the category 2 (May cause cancer) according to the European Union classification (ESIS (2006)).
7	Toxic to reproduction	Not classified	-	-	-	Influences on the litter's count and fetal survival and increased cleft palates were observed as a result of the two-generation reproductive toxicity test and developmental toxicity test of High-Flash Aromatic Naphtha (Cas64742-95-6) using rats and mice. However, this effect was observed only in the group of high-dose causing high mortality to maternal animals(mortality rate of mother rats and mice is 88% and 44% respectively), and reproductive toxicity or developmental toxicity was not observed at any lower dose rates (IUCALID (2000), Toxicol.Ind.Health, vol.6.441-460, 1990). Therefore, it was placed out of classification.
8	Specific target organs/systemic toxicity following single exposure	Classification not possible	-	-	-	No data available.
9	Specific target organs/systemic toxicity following repeated exposure	Classification not possible	-	-	-	Insufficient data available
10	Aspiration hazard	Category 1	Health hazard	Danger	May be fatal if swallowed and enters airways	we classified it as Category 1 based on that solvent naphtha has dynamic viscosity of 0.949mm ² /s (30 degrees C) (The Solvent Pocket Book (2001)), and that Aromatic solvent A4 (boiling points 196 to 264 degrees C) showed the fatality rates of 5/10 (EHC20 (1982)). In addition, Solvent naphtha (petroleum), light arom. (Cas 64742-95-6), Solvent naphtha (petroleum) and heavy arom. (Cas 64742-94-5) are classified as R65 (may cause lung damage if swallowed.) (ESIS (2006))

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.