

GHS Classification

ID716
CAS 64741-44-2

Distillates (petroleum), straight-run middle

Date Classified: Jul. 24, 2006 (Environmental Hazards: Mar. 23, 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	-	-	-	UNRTDG No. 1202, Class: 3
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 3	Flame	Warning	Flammable liquid and vapour	Category 3 based on UNRTDG Class: 3, PG3
7 Flammable solids	Not applicable	-	-	-	Liquid (room temperature)
8 Self-reactive substances and mixtures	Not classified	-	-	-	Classified in UNRTDG No. 1202, Class: 3
9 Pyrophoric liquids	Not classified	-	-	-	Flash point: >177degC(>70degC) (EHC171(1996))
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	Not classified	-	-	-	UNRTDG class3 No.1202
13 Oxidizing liquids	Not classified	-	-	-	UNRTDG No. 1202 Class: 3
14 Oxidizing solids	Not applicable	-	-	-	Liquid (room temperature)
15 Organic peroxides	Not classified	-	-	-	UNRTDG No. 1202 Class: 3
16 Corrosive to metals	Not classified	-	-	-	UNRTDG No.1202, Class: 3

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; ENDPOINT: LD50; > 5000 mg/kg bw; REFERENCE SOURCE: EHC (1996)
1 Acute toxicity (dermal)	Classification not possible	-	-	-	Considering rat dermal LD50 >2000, > 5000 mg/kg (EHC (1996)), it was set as Category which is lower toxicity from Category 3. But it could not be decided, it cannot be classified.
1 Acute toxicity (inhalation: gas)	Not applicable	-	-	-	Liquid (room temperature)
1 Acute toxicity (inhalation: vapour)	Classification not possible	-	-	-	No data available
1 Acute toxicity (inhalation: dust, mist)	Category 4	Exclamation mark	Warning	Harmful if inhaled	Inhalation study of gasoline was done that aerosol is mixed with steam, it was thought that aerosol is main. And It was set as Category 4 based on value 4.6mg/L (IUCLID (2000)) that is lower value of rat inhalation LC50.
2 Skin corrosion / irritation	Category 2	Exclamation mark	Warning	Causes skin irritation	It was highly irritating in rabbit skin irritation tests. But it was classified as Category 2 because description of irreversible lesions is not observed (IUCLID (2000), EHC (1006)).
3 Serious eye damage / eye irritation	Category 2B	-	Warning	Causes eye irritation	Based on the statement of slightly irritating (IUCLID (2000)) by the tests for rabbit eye irritation, it was set as Category 2B. This Category is also supported by the case report in human (eye irritation recovers in four days and injection recovers in 24 hours).
4 Respiratory/skin sensitization	Respiratory sensitization: Classification not possible; Skin sensitization: Not	(Respiratory sensitization); (Skin sensitization)-	(Respiratory sensitization); (Skin sensitization)-	Respiratory sensitization: Since there is no data, it cannot be classified. Skin sensitization: It was put outside of the division, based on the fact that the skin sensitization was not identified in the skin sensitization test with guinea pigs(IUCLID (2000), EHC (1996)).	
5 Germ cell mutagenicity	Not classified	-	-	-	Based on the negative results in the mice dominant lethality tests and in the rat myeloid cell chromosomal aberration tests (IUCLID (2000)), we classified it as Out Of Category.
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 was set as 2 based on the category A3 by ACGIH. [special notes] EU has classified diesel fuels into category 3 (it will be Category 2 if a technical guide is obeyed), and desulfurization gas oil into a category 2 (it will be 1B if a technical guide is obeyed). Each of these is considered to be the classifications corresponding to gasoline. On the other hand, IARC classifies with a group 3 to Distillate(light) diesel fuel, and this will become the outside of Category if a technological direction is obeyed. As a result, category of light oil is distributed to 1B, 2, and out of category. By this classifications, the Japanese properties of diesel fuel was also taken into consideration, and it was set as 2.

7	Toxic to reproduction	Not classified	-	-	-	Since there was no significant effect to the reproductive function and reproductive potential, and the development of neonatal in the rat administration test to female in premating and conception, during gravid period, and to male(ACGIH (2003)), it was considered as on the outside of Category. This classification is supported also because it is not observed developmental toxicity in other test of pregnant rat administrated (EHC (1996)).
8	Specific target organs/systemic toxicity following single exposure	Category 1 (kidneys); Category 3 (respiratory tract irritation, narcotic)	Health hazard; Exclamation mark	Danger; Warning	Cause damage to organs (kidneys); May cause respiratory irritation or may cause drowsiness and dizziness (respiratory tract irritation, narcotic)	In the case in which gasoline was exposed in large quantities in humans, there are progressive oliguria and acute tubular necrosis (EHC (1996), ATSDR (1995)), it is classified into category 1(kidney). And based on investigation report of lethargica, coma by kerosene oral ingestion in human (ATSDR (1995)), it is classified into Category 3 (anaesthetic). Moreover, it is classified into Category 3 (respiratory irritation) based on the statement which stimulates a respiratory tracts (ICSC (2004)). In addition, lungs injury by aspiration was classified according to vacuum respiratory toxicity information.
9	Specific target organs/systemic toxicity following repeated exposure	Category 1 (kidneys)	Health hazard	Danger	Causes damage to organs (kidneys) through prolonged or repeated	It was classified to as Category 1 (kidney) since that the acute renal tubular necrosis (EHC (1996), ATSDR (1995)), the acute renal damage accompanied by anemia and thrombocytopenia, etc. are reported in repeated exposure to humans (EHC (1996)).
10	Aspiration hazard	Category 1	Health hazard	Danger	May be fatal if swallowed and enters airways	Category 1 because of "possible to cause chemical pneumonia by misswallowing of the liquid." (ATSDR, 1995)

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.