

## GHS Classification

**ID719**

**Distillates (petroleum), solvent-refined heavy paraffinic; Distillates (petroleum), solvent-refined light naphthenic; Lubricating oils (pe**

**CAS 8002-05-9, 8012-**

Date Classified: Feb. 20, 2007 (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	Not classified	-	-	-	Not classified because of its flash point: 149-232degC (NFPA, 13th, 2002)
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	-	-	-	The ignition points is 260 - 371 degC (NFPA (13th, 2002)), and exceeds 70 degC.
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	-	-	-	No data available
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	-	-	-	SPECIES: Rat ENDPOINT: LD50 VALUE: > 5000 mg/kg REFERENCE SOURCE: IUCLID (2000)
1 Acute toxicity (dermal)	Not classified	-	-	-	Based on rat LD50 >5000mg/kg (IUCLID (2000)), it was set as the outside of Category.
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	Category 4 because of "SPECIES: Rat; ENDPOINT: LC50 = 2.18 mg/L." (IUCLID, 2000)
2 Skin corrosion / irritation	Category 3	-	Warning	Causes mild skin irritation	It was classified as Category 3 based on several reports which observed mild irritation in rabbit tests (IUCLID (2000)).
3 Serious eye damage / eye irritation	Category 2B	-	Warning	Causes eye irritation	By the test using a rabbit, there was a report (IUCLID (2000)) described to be mild irritation. So it was set as Category 2B.
4 Respiratory/skin sensitization	Respiratory sensitization: Classification not possible; Skin sensitization: Not possible	(Respiratory sensitization)-; (Skin sensitization)-	(Respiratory sensitization)-; (Skin sensitization)-	(Respiratory sensitization)-; (Skin sensitization)-	[respiratory sensitization] No data. [Skin sensitization] In multiple tests(including the maximization test) based on OECD Guideline 406 using the guinea pigs, a result that none of them had the sensitization was obtained (IUCLID (2000)), and therefore it was put outside of the Category.

5	Germ cell mutagenicity	Category 2	Health hazard	Warning	Suspected of causing genetic defects (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard)	Based on the increase in the abnormal cells in the cytogenetic study [chromosomal aberration test] (somatic cell in vivo mutagenicity test) using the rat (IUCALID (2000)), and based on the fact that increase was observed in frequency of the chromosomal aberration in the peripheral blood lymphocyte of the human who received occupational exposure (IARC suppl.7 (1987)), and on the fact that there being no information about the productive cell in vivo genotoxicity study. So we classified it as Category 2.
6	Carcinogenicity	Not classified (Highly refined oil), Category 1A(crude oil or slightly refined oil)	Health hazard	Danger	May cause cancer (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard)	Un-refined or slight processed oil is classified into group 1, and highly refined oil is into group 3 (IARC (1987)), and the proposal of ACGIH (2006) can also be said to be the almost same category. It is classified into the 1st group according to Occupational Health Society (1977) as un-refined and a half-refined article. As mentioned above, according to the classification of IARC which the classification has decided, highly refined oil is set to outside of category and unrefined oils or low grade treated oil to Category 1A.
7	Toxic to reproduction	Classification not possible	-	-	-	No data available
8	Specific target organs/systemic toxicity following single exposure	Category 2 (lung)	Health hazard	Warning	May cause damage to organs (lung)	There is the statement that there is the grossly, histopathological acute changes (details unknown) in dependence to dose (1.51 – 5.05mg/L) in the rat test of inhalation exposure (IUCALID (2000)), it is classified into Category 3 (lung).
9	Specific target organs/systemic toxicity following repeated exposure	Category 1 (lung, skin)	Health hazard	Danger	Causes damage to organs (lung, skin) through prolonged or repeated	It was classified to as Category 1 (lungs, skin) since that pulmonary fibrosis, lipid pneumonias and lipogranuloma of lungs are reported in humans who received exposure of the mineral oils or the mist over many years (ACGIH (2001) and IARC 33 (1984),EHC 20 (1982)), and generation of the serious folliculitis is reported in the epidemiological study by occupational exposure to cutting oil (IARC 33 (1984)).
10	Aspiration hazard	Category 1	Health hazard	Danger	May be fatal if swallowed and enters airways	It was classified into Category 1 based on the reports that ingestion of mineral oil causes the aspiration into the lungs, and as a result it occurs the pneumonie huileuses or chemical pneumonia in the human (EHC 20 (1982), IARC 33 (1984), ICSC (2001), ACGIH (2001)).

### 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.

petroleum), C15–30, hydrotreated neutral oil-based; Lubricating oils (petroleum), C20–50, hydrotreated neutral oil-based; Petroleum; Paraffin oils