GHS Classification

ID660 **indene**

CAS 95-13-6 Date Classified: Aug. 18, 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	Not applicable	–	–	–	There are no chemical groups associated with explosive properties present in the molecules.
2	Flammable gases	Not applicable	–	–	–	Liquid (GHS definition)
3	Flammable aerosols	Not applicable	–	–	–	Not aerosol products
4	Oxidizing gases	Not applicable	–	–	–	Liquid (GHS definition)
5	Gases under pressure	Not applicable	–	–	–	Liquid (GHS definition)
6	Flammable liquids	Category 4	–	Warning	Combustible liquid	Category 4 because of its flash point: 78.3degC and liquid
7	Flammable solids	Not applicable	–	–	–	Liquid (GHS definition)
8	Self-reactive substances and mixtures	Not applicable	–	–	–	There are no chemical groups associated with explosive or self-reactive properties present in the molecule.
9	Pyrophoric liquids	Not classified	–	–	–	With no information on spontaneous combustibility. By UN transportation Recommendations, it is non-dangerous substances.
10	Pyrophoric solids	Not applicable	–	–	–	Liquid (GHS definition)
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 applicable	–	–	–	The chemical structure of the substance does not contain metals or metaloids(B, Si, P, Ge, As, Se, Sn, Sb, Te, Bi, Po, At).
13	Oxidizing liquids	Not applicable	–	–	–	Organic compounds containing no oxygen, fluorine and chlorine.
14	Oxidizing solids	Not applicable	–	–	–	Liquid (GHS definition)
15	Organic peroxides	Not applicable	–	–	–	Containing no oxygen
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)	Classification not possible	–	–	–	Classification not possible due to lack of clear data on LD50
1	Acute toxicity (dermal)	Classification not possible	–	–	–	No data available
1	Acute toxicity (inhalation: gas)	Not applicable	–	–	–	Liquid (GHS definition)
1	Acute toxicity (inhalation: vapour)	Classification not possible	–	–	–	Vapor pressures 1.1mmHg at 25degC is equivalent to 6875mg/m3. Since LC50: 14gm/m3 (RTECS (2004)) of the Soviet literature is over this value, it may be mist. Supposing that the temperature was raised and experiment was conducted with steam, there is potential of Category 4.
1	Acute toxicity (inhalation: dust, mist)	Classification not possible	–	–	–	LC50: 14g/m3 (the Soviet literature (RTECS (2004)) is unknown in steam or mist. Since it is 2.8 times of the maximum (5mg/m3) of category 4 if it is mist, it was set as the outside of Category. There is no information which can be used.
2	Skin corrosion / irritation	Category 3	–	Warning	Causes mild skin irritation	There is a report of human dermatitis. Since it was not considered to be serious, it was classified as "Category 3."
3	Serious eye damage / eye irritation	Category 2A-2B	Exclamation mark	Warning	Causes serious eye irritation	There is eye stimulate data to human (HSDB (2005)). However, since recovery period is not indicated, the result between 2A and 2B cannot be performed.
4	Respiratory/skin sensitization	Respiratory sensitization: Classification not possible; Skin sensitization: Category1	(Respiratory sensitization)-; (Skin sensitization)Exclamation mark	(Respiratory sensitization)-; (Skin sensitization)Warning	(Respiratory sensitization)-; (Skin sensitization)May cause allergic skin reaction	The information on respiratory sensitization has not been obtained. Since case reports on the human skin sensitization (HSDB (2005)) are found , it was referred to as Category 1.
5	Germ cell mutagenicity	Classification not possible	–	–	–	Classification not possible due to lack of data
6	Carcinogenicity	Classification not possible	–	–	–	The information on the carcinogenic was not acquired. There is also no existing classifications.
7	Toxic to reproduction	Classification not possible	–	–	–	Classification not possible due to lack of data on toxic to rproduction

8	Specific target organs/systemic toxicity following single exposure	Inhalation: Category 2 (liver, kidneys, spleen); Category 3 (respiratory tract irritation)	Health hazard	Warning	Inhalation: May cause damage to organs (liver, kidneys, spleen); May cause respiratory irritation or may cause drowsiness and dizziness (respiratory tract	Although there is the effect to the liver, kidney, spleen in human inhalation exposure and animals inhalation test, it was the literature of Priority 2, it is classified into "Category 2." Since the respiratory irritation was also suggested, it is classified into "Category 3."
9	Specific target organs/systemic toxicity following repeated exposure	Inhalation: Category 1 (liver, kidneys)	Health hazard	Danger	Inhalation: Causes damage to organs (liver, kidneys) through prolonged or repeated	Since the effects on the renal and liver is seen as a result of continuous exposure with the concentration below the guidance value of Category 1 in the animal experiment (ACGIH (2001)), it was classified to as "Category 1".
10	Aspiration hazard	Classification not possible	–	–	–	Although there was a report of the chemical pneumonia by aspiration in laboratory animals, we could not find the viscosity data and it could not be classified along the technical guideline.

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.