GHS Classification

ID887 butyl lactate

CAS 138-22-7 Date Classified: Oct. 1, 2005 (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	Flash point: >60degC and <=93degC
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	–	–	–	Flash point: 382degC (NFPA (12th, 1997) p325-23)
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 oxygen (but not chlorine and fluorine) chemically bonded only to carbon and hydrogen (but not to other elements).
14	Oxidizing solids	Not applicable	–	–	–	Liquid (GHS definition)
15	Organic peroxides	Not applicable	–	–	–	Containing no -0-0- structure
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: > 2000 mg/kg REFERENCE SOURCE: RTECS (2005)
1	Acute toxicity (dermal)	Not classified	–	–	–	Based on rabbit LD50 value: >5000mg/kg (RTECS, 2005), it was set as the outside of Category.
1	Acute toxicity (inhalation: gas)	Not applicable	–	–	–	Liquid (GHS definition)
1	Acute toxicity (inhalation: vapour)	Classification not possible	–	–	–	No data available
1	Acute toxicity (inhalation: dust, mist)	Not classified	–	–	–	Not classified because of SPECIES: Rat; ENDPOINT: LC50(4hr.; VALUE: >5.14mg/L(RTECS, 2005)
2	Skin corrosion / irritation	Category 2	Exclamation mark	Warning	Causes skin irritation	It was set as Category 2 from description that the moderate irritation was acknowledged by application on the skin of the rabbit (RTECS (2005)).
3	Serious eye damage / eye irritation	Classification not possible	–	–	–	There was description that conjunctival irritation in humans is not checked by the test, and there was also not animal test data. So it cannot be classified since data is insufficient.
4	Respiratory/skin sensitization	Respiratory sensitization: Classification not possible; Skin sensitization: Classification not	–	–	–	No data available
5	Germ cell mutagenicity	Classification not possible	–	–	–	No data available
6	Carcinogenicity	Classification not possible	–	–	–	No data available
7	Toxic to reproduction	Classification not possible	–	–	–	No data available

8	Specific target organs/systemic toxicity following single exposure	Category 3 (respiratory tract irritation, narcotic effects)	Exclamation mark	Warning	May cause respiratory irritation or may cause drowsiness and dizziness (respiratory tract irritation, narcotic effects)	From description in ACGIH (7th, 2001) that stimulus of the pharynx and laryngeal mucosa with a cough, headache, and the sleepiness are seen in human occupational exposure, it was judged that there were respiratory irritant and anesthetic actions, and it was set as Category 3 (respiratory irritation, anesthesia action).
9	Specific target organs/systemic toxicity following repeated exposure	Classification not possible	–	–	–	Classification not possible due to lack of data
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	–	–	–	It carried out the outside of Category from 72-hour ErC50=929mg/L of algae (Selenastrum) (ECETOC TR91, 2003).
11	Hazardous to the aquatic environment (chronic)	Not classified	–	–	–	Since not water-insoluble (aqueous solubility =40000mg/L(PHYSPROP Database, 2005)) and acute toxicity is low.