

## GHS Classification

**ID420**

**Dibromotetrafluoroethane; Halone-2402**

**CAS**

Date Classified: Nov. 20, 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	—	—	—	Containing no chemical groups with explosive properties
2 Flammable gases	Not applicable	—	—	—	Classified as "liquid" according to GHS definition (1,2-dibromo-1,1,2,2-tetrafluoroethane).
3 Flammable aerosols	Not applicable	—	—	—	Not aerosol products
4 Oxidizing gases	Not applicable	—	—	—	Classified as "liquid" according to GHS definition (1,2-dibromo-1,1,2,2-tetrafluoroethane).
5 Gases under pressure	Not applicable	—	—	—	Classified as "liquid" according to GHS definition (1,2-dibromo-1,1,2,2-tetrafluoroethane).
6 Flammable liquids	Not classified	—	—	—	Non-flammable (1,2-dibromo-1,1,2,2-tetrafluoroethane, HSDB (2006))
7 Flammable solids	Not applicable	—	—	—	Classified as "liquid" according to GHS definition (1,2-dibromo-1,1,2,2-tetrafluoroethane).
8 Self-reactive substances and mixtures	Not applicable	—	—	—	Containing no chemical groups with explosive or self-reactive properties
9 Pyrophoric liquids	Not classified	—	—	—	Non-flammable (1,2-dibromo-1,1,2,2-tetrafluoroethane, HSDB (2006)).
10 Pyrophoric solids	Not applicable	—	—	—	Classified as "liquid" according to GHS definition (1,2-dibromo-1,1,2,2-tetrafluoroethane).
11 Self-heating substances and mixtures	Not classified	—	—	—	Non-flammable (1,2-dibromo-1,1,2,2-tetrafluoroethane, HSDB (2006))
12 Substances and mixtures, which in contact with water, emit flammable gases	Not applicable	—	—	—	Containing no metals or metalloids (B, Si, P, Ge, As, Se, Sn, Sb, Te, Bi, Po, At)
13 Oxidizing liquids	Not applicable	—	—	—	Organic compounds containing fluorine (but not oxygen and chlorine), with the fluorine bound to carbon and hydrogen (but not to other elements)
14 Oxidizing solids	Not applicable	—	—	—	Classified as "liquid" according to GHS definition (1,2-dibromo-1,1,2,2-tetrafluoroethane).
15 Organic peroxides	Not applicable	—	—	—	Organic compounds containing no "-O-O-" structure
16 Corrosive to metals	Classification not possible	—	—	—	Test methods applicable to gaseous substances are not available (boiling point: 47.35degC (1,2-dibromo-1,1,2,2-tetrafluoroethane, HSDB (2006), test temperature: 55degC). As for the isomers with boiling point of >55degC, classification is not possible due to lack of data.

**Health Hazards**

Hazard class	Classification	symbol	signal word	hazard statement	Rational for the classification
1 Acute toxicity (oral)	Not classified	—	—	—	Based on the rat LD50 (oral route) value of 54,650mg/kg (RTECS (2006)) (dibromotetrafluoroethane).
1 Acute toxicity (dermal)	Classification not possible	—	—	—	No data available
1 Acute toxicity (inhalation: gas)	Not applicable	—	—	—	Due to the fact that the substance is a liquid according to the GHS definition and inhalation of its gas is not expected.
1 Acute toxicity (inhalation: vapour)	Category 5	—	Warning	May be harmful if inhaled	Based on the rat LC50 (4 hour inhalation of vapour) value of 584mg/L (RTECS (2006)) was lower than 90% of the saturated vapour concentration (429,000ppm) under a saturated vapour pressure of 3.25*10 <sup>4</sup> (+2)mmHg (25degC) [equivalent to 43.3kPa (25degC)] (HSDB (2006)), the substance was considered as "vapour" and classified as Category 5. (1,2-dibromotetrafluoroethane)
1 Acute toxicity (inhalation: dust, mist)	Classification not possible	—	—	—	No data available
2 Skin corrosion / irritation	Classification not possible	—	—	—	No data available
3 Serious eye damage / eye irritation	Classification not possible	—	—	—	No data available
4 Respiratory/skin sensitization	Respiratory sensitization: Classification not possible Skin sensitization: Classification not possible	(Respiratory sensitization) — (Skin sensitization) —	(Respiratory sensitization) — (Skin sensitization) —	(Respiratory sensitization) — (Skin sensitization) —	Respiratory sensitization: No data available Skin sensitization: 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 (narcotic effects)	Exclamation mark	Warning	(Narcotic effects) May cause drowsiness or dizziness	Based on the evidence from animal studies including "somnolency (reduced locomotor activity) and ataxia" (RTECS (2006)).
9 Specific target organs/systemic toxicity following repeated exposure	Classification not possible	—	—	—	Insufficient data available
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)	Classification not possible	-	-	-	No data available
11 Hazardous to the aquatic environment (chronic)	Classification not possible	-	-	-	No data available