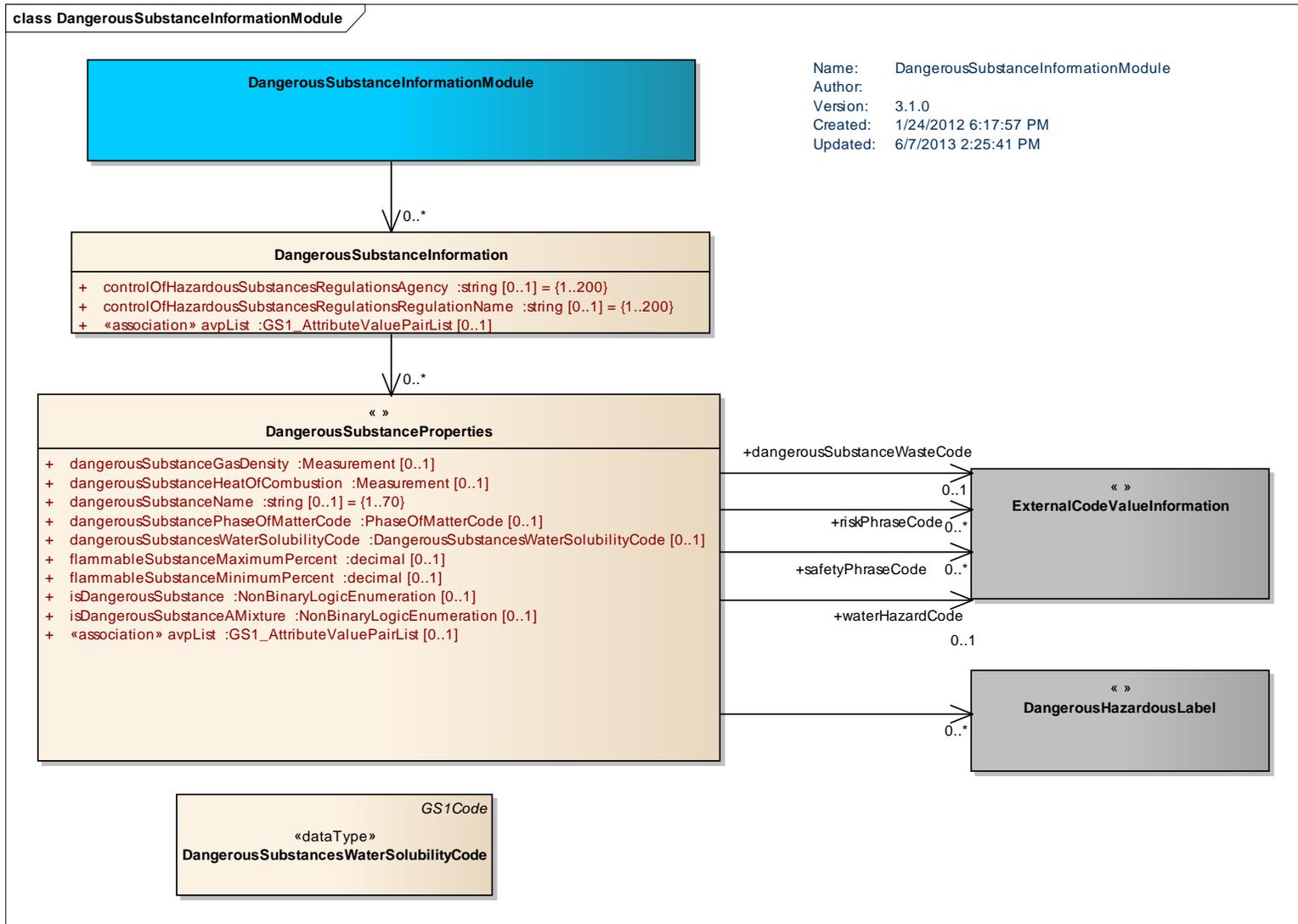




## 5.16. Dangerous Substance Information Module



 **Note:** Common class (in grey) is located in the GDSN Common Library.

Content	Attribute / Role	Datatype /Secondary class	Multipl city	Definition
DangerousSubstanceInformationModule				A module detailing substances that can harm people, other living organisms, property, or the environment.
Association		DangerousSubstanceInformation	0..*	Details on substances that can harm people, other living organisms, property, or the environment.
DangerousSubstanceInformation				Details on substances that can harm people, other living organisms, property, or the environment.
Association		DangerousSubstanceProperties	0..*	Properties of a dangerous substance.
Association	avpList	GS1_AttributeValuePairList	0..1	The transmission of non-standard data done in a simple, flexible, and easy to use method.
Attribute	controlOfHazardousSubstancesRegulationsAgency	string	0..1	The government or agency that owns regulation controlling hazard substances that may apply to the product.
Attribute	controlOfHazardousSubstancesRegulationsRegulationName	string	0..1	The name of the regulation controlling hazard substances that may apply to the product.
DangerousSubstanceProperties				Details on substances that can harm people, other living organisms, property, or the environment.
Association		GS1_AttributeValuePairList	0..1	Attribute value pair information.
Association		DangerousHazardousLabel	0..*	Information on visible labels on packaging indicating specific risks and required precautions associated with a dangerous/hazardous good.
Association	dangerousSubstanceWasteCode	ExternalCodeValueInformation	0..1	The dangerous substances waste code used to identify the substance's dangerous waste for example the European Waste Catalogue.
Association	riskPhraseCode	ExternalCodeValueInformation	0..*	The abbreviation codes for labelling obligations and special risks (health risks of skin, respiratory organs, swallow, eyes, reproduction) for handling of the substance.



Content	Attribute / Role	Datatype /Secondary class	Multiplcity	Definition
Association	safetyPhraseCode	ExternalCodeValueInformation	0..*	Safety phrases are defined as safety advice concerning dangerous substances and preparations defined in Annex 3 for example (S1): Keep locked up or S12: Do not keep the container sealed.
Association	waterHazardCode	ExternalCodeValueInformation	0..1	A code determining the degree to which the product would pose an environmental hazard to water.
Attribute	dangerousSubstanceGasDensity	Measurement	0..1	The density of gas contained within the trade item. This can be used by the data receiver to determine the total stored amounts of gas within a storage facility in accordance with dangerous substance regulations. Use appropriate measurement for example in Europe (grams per Cubic Centimetre).
Attribute	dangerousSubstanceHeatOfCombustion	Measurement	0..1	The amount of heat generated by the item should it catch on fire expressed as amount of energy per pound for example BTU's (British Thermal Units) per pound.
Attribute	dangerousSubstanceName	string	0..1	The name of the type of dangerous substance contained in the trade item for example Butane.
Attribute	dangerousSubstancePhaseOfMatterCode	PhaseOfMatterCode	0..1	A set of qualitatively different states, depending on temperature and pressure related physical properties. They are divided into solid, liquid,gaseous and mixed forms of the substance.
Attribute	dangerousSubstancesWaterSolubilityCode	DangerousSubstancesWaterSolubilityCode	0..1	A code indicating the solubility or miscibility in respect with water. Solubility is the ability of a given substance to dissolve in a solvent. Miscibility is the property of liquids to mix in all proportions, forming a homogeneous solution.
Attribute	flammableSubstanceMaximumPercent	decimal	0..1	The maximum percentage of the flammable substance contained in the trade item. This can be used by the data receiver to support determining total stored amounts within a storage facility in accordance with dangerous substance regulations.
Attribute	flammableSubstanceMinimumPercent	decimal	0..1	The minimum percentage of the flammable substance contained in the trade item. This can be used by the data receiver to support determining total stored amounts within a storage facility in accordance with dangerous substance regulations.
Attribute	isDangerousSubstance	NonBinaryLogicEnumeration	0..1	An indicator whether or not a trade item is classified and labelled as containing a dangerous substance.



Content	Attribute / Role	Datatype /Secondary class	Multiplcity	Definition
Attribute	isDangerousSubstanceAMixture	NonBinaryLogicEnumeration	0..1	An indicator whether or not the dangerous substance is a mixture of several substances.
Association	avpList	GS1_AttributeValuePairList	0..1	The transmission of non-standard data done in a simple, flexible, and easy to use method.