Chemical product safety passport. General requirements.

Date of bringing into force – 2009-01-01

1. Scope

Given standard sets out general requirements for Safety passport of chemical product (hereinafter referred to as SP) as related to its construction, content, presentation and provision of included information.

Given standard is effective for Safety passport being worked out for chemical products (substance, mixture, material, industrial wastes).

Safety passport is obligatory integral part of technical documentation for chemical product (substance, mixture, material, industrial wastes) and is assigned to provide user with reliable information on safety industrial use, storage, transportation and disposal of chemical product as well as on its use in everyday life.

Safety passport is not applied for mineral resources, ready-made medicine preparations, ready-made perfumes and cosmetic products, radiating, nuclear and radioactive substances, food products and chemical products of special usage.

2. Terms and definitions

Given standard contains the following terms with respective definitions:

2.1. **Article** – product have passed all technological stages of manufacturing and ready for use for human needs satisfaction in form it is issued by the manufacturer, without further elaboration.

2.2. **Material** – product of industrial processing of chemical substance or mixture of substances designed for production (manufacturing) of other materials, products and articles and also used for product handling.

2.3. **Handling of chemical products** – stages of product "life-cycle" including its manufacturing, transportation, storage, usage, disposal (recycling, destruction) and trade and turnover within state territory (import, export and transit).

2.4. **Mixture of substances** – mixture or solution consisting of two or more chemical substances which do not react.

2.5. **Chemical product** – chemical substance, mixture of substances or material. Chemical product doesn't mean articles which while used do not change their chemical composition, physical state and do not release into environment chemical substances in

concentrations able to make adverse effects on health and property of people, state and municipal property, environment.

2.6. **Chemical substance** – chemical element or chemical compound existing in nature or obtained in artificial way.

3. General provisions

3.1. SP should contain reliable information in brief and concise form. Such information should be enough to enable consumer to take necessary measures for protection of health and safety of people in the workplace, protection of environment on every stage of product "life-cycle", including its disposal in a form of wastes.

3.2. SP being an integral part of UN Recommendations "Globally Harmonized System of classification and labelling of chemicals (GHS)" should facilitate the removal of technical barriers in trade of potentially hazardous chemical products.

3.3. SP should be compiled by the organization (person) manufacturing or supplying product on market. Organization (person) developing SP bears all responsibility for completeness and reliability of the included information. Information necessary for SP development should be obtained from sources competent in matters related to relevant SP sections or as a result of investigations (testing) being conducted in accordance with regulatory documents. Recognition of competence is carried out in order stated by Competent Authority of the country.

3.4. Organization (person) responsible for representing chemical product on market (manufacturer, supplier, importer or seller) is obliged to provide consumer with relevant SP free of charge.

3.5. On consumer request SP should be provided to him also in case when the information on dangerous properties and dangerous effects is generally known.

3.6. Registration of chemical products being in use is carried out on basis of SP.

4. Rules of Safety passport compilation

4.1. SP structure

4.1.1. Information in SP is presented in the following sections in specified order:

1. Identification of chemical product and information on manufacturer or supplier;

- 2. Identification of hazards;
- 3. Composition/information on components;
- 4. First-aid measures;
- 5. Firefighting measures;
- 6. Accidental release measures;
- 7. Handling and storage;
- 8. Exposure control/personal protection;

9. Physical and chemical properties;

- 10. Stability and reactivity;
- 11. Toxicological information;
- 12. Ecological information;
- 13. Disposal considerations;
- 14. Transport information;
- 15. Regulatory information (information on national and international legislation);
- 16. Additional information.

4.2. General requirements for content of SP sections

4.2.1. Every of 16 above mentioned sections should contain reliable information. In case of absence of such information it must be indicated.

4.2.2. Content of every section should comply with the requirements and recommendations of Annex A.

Section can be divided into subsections.

4.2.3. Information which should be represented in SP is not limited. The length of SP should be commensurate with the hazard of chemical product and depend on data necessary to ensure safety while using of chemical product.

4.2.4. All pages of SP, including any annexes, should be numbered and bear either an indication of the length of SP (such as "page 1 of 3") or an indication whether there is a page following (such as "Continued on next page" or "End of safety passport").

4.2.5. Figures and values should be expressed in units of International System of Units. It is allowed to additionally indicate figures and values in units used in the region of product export.

4.2.6. SP should be compiled and edited before placing of chemical product on market.

4.2.7. SP is subject for updating and re-edition on receiving of additional and new information significant for completeness and reliability of data included in mandatory sections. New edition of SP should be provided to all product consumers within 12 months before re-edition.

4.2.8. Date of edition (day, month, year) should be indicated in the first and further editions.

4.2.9. Before edition or re-edition after including of additional data SP is subject to registration in order stated by Competent Authority of the country.

Annex A (mandatory)

Minimal requirements for structure, content and form of information included into SP

Name of the section	Content
1. Identification of chemical product and information on manufacturer or supplier	Name of chemical product according to technical documents. Other ways of identification. Recommended use of the chemical and restrictions on use. Full official name, address and phone number of organization (name of the person) responsible for production, import and placing of chemical product on market. Emergency phone number.
2. Identification of hazards	 GHS classification of chemical product and classification in accordance with national or regional requirements. GHS label elements, including precautionary statements. Other hazards which do not result in classification or are not covered by the GHS.
3. Composition/information on components	 In case of substance: chemical name in accordance with IUPAC, chemical formula; CAS number; common name, synonyms, etc.; impurities and functional additives which are themselves classified and affect hazard of the substance. In case of mixture: information on components which can facilitate consumer or other interested parties to identify risks of product use; for all components being hazardous for human beings and environment: identification of the component (name and other); concentration or concentration limits, information on hazard (classification, occupational exposure limits). NOTE – For information on components, the competent authority rules for CBI take priority over the rules for product identification. Information on
4. First-aid measures	components should be necessary to ensure consumer safety. Most important symptoms/effects, acute and delayed. Description of necessary measures, subdivided according to the different routes of exposure, i.e., inhalation, skin and eye contact, and ingestion. Indication of immediate medical attention and special treatment needed, if necessary. It is necessary to note if there are any delayed effects and if it is preferable to get special medical help (toxicologist, dermatologist, etc.).

5. Firefighting measures	General description of fire and explosion hazard. Indicators of fire and
	explosion hazard. Specific hazards arising from nature of any hazardous
	combustion products.
	Suitable (and unsuitable) extinguishing media.
	Personal protective equipment and precautions for firefighters.
	Emergency procedures for personal and collective protection, e.g.
	removal of ignition and dust sources, protective equipment for respiratory
	system, skin, eyes.
6. Accidental release	Environmental precautions (insulation, protection of ground and surface
measures	waters, soil, announcement of settlers, etc.).
	Methods and materials for containment and cleaning up (including using
	of adsorbents, water and others means for dilution). Unsuitable methods,
	materials and conditions if appropriate.
	Precautions for safe handling including:
	 technical means;
	 environmental precautions;
7. Handling and storage	 recommendations on safe moving and transportation.
	Conditions for safe storage including:
	 special construction of storage and tanks, e.g. proofness of walls,
	ventilation;
	 incompatible materials;
	 acceptable temperature and humidity limits, requirements on
	lightning, medium (e.g., inert medium);
	 special electrical equipment and measures against static discharge;
	 limits of storage under specified conditions;
	 suitable package material;
	 additional requirements for storage conditions.
8. Exposure control/personal protection	Control parameters, e.g., occupational exposure limit values or biological
	limit values (according to standards and other technical documents).
	Appropriate engineering control measures.
	Personal protection measures, such as personal protective equipment.

	Appearance, physical state (solid, liquid, gas), color, etc.
9. Physical and chemical properties	Odor (odor threshold).
	Melting point/freezing point.
	Initial boiling point and boiling range.
	Flash point.
	Ignition temperature.
	Auto-ignition temperature. Decomposition temperature.
	Upper/lower flammability or explosive limits.
	Vapor pressure vs. temperature.
	Vapor density vs. pressure.
	Evaporation rate.
	Relative density.
	Solubility (depending on medium).
	Partition coefficient: n-octanol/water.
	Viscosity, pH.
	Chemical stability and reactivity.
	Possibility of hazardous reactions.
10. Stability and reactivity	Conditions to avoid (e.g., static discharge, shock or vibration).
	Incompatible substances and materials.
	Hazardous decomposition products.
	Concise but complete and comprehensible description of the various
	toxicological (health) effects in case of contact with chemical product,
	including:
	 information on the likely routes of exposure (inhalation, ingestion, skin
11. Toxicological information	and eye contact);
	 adverse effects in case of direct contact with chemical product,
	consequences of such effects, delayed effects (e.g., sensitization,
	carcinogenicity, effects on reproduction, etc);
	 acute toxicity, doses (concentrations) of minimal toxic effect and other
	numerical values of toxicity.
	Possible effects on the environment (water, soil, air).
12. Ecological information	Persistence and transformations in the environment.
	Ecotoxicity.
	Mobility in soil.
	Hygienic limits in the environment.
	Other adverse effects.

	Description of waste residues and information on their safe handling and
13. Disposal considerations	methods of disposal, including the disposal of any contaminated
	packaging. Information on disposal and recycling in accordance with
	national legislation.
14. Transport information	UN Number in accordance with UN Recommendations.
	UN Proper shipping name.
	Appropriate transport vehicles.
	Transport hazard class(es).
	Transport labelling and packing group.
	Environmental hazards (e.g., marine, water pollutant).
	Special precautions on transport or conveyance either within or outside
	premise in accordance with effective rules.
15. Regulatory information (information on national and international legislation)	Information on regulation of safety handling of chemical product.
	Information on documents on human and environment protection.
	Information on international precautionary labelling.
16. Additional information	Identification of revised sections in case of revision (re-edition) of SP.
	References used for SP compilation.

Key words: safety passport, substance (material), chemical product, reliable information, protection of human health, environmental protection, consumer.