



**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB 30000.28-2013

Replacing GB 20602-2006

**Rules for classification and labelling of chemicals - Part 28:
Hazardous to the aquatic environment**

化学品分类和标签规范 第28部分：对水生环境的危害

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Foreword

Section 4 of this chapter, Chapter 6, are mandatory, the rest are recommended. GB 30000 "chemical classification and labeling norms," the expected structure and national standards will be replaced as follows:

- Part 1. General (instead of GB 13690-2009);
- Part 2. Explosives (instead of GB 20576-2006);
- Part 3. flammable gases (instead of GB 20577-2006);
- Part 4. Aerosol (instead of GB 20578-2006);
- Part 5. oxidizing gas (instead of GB 20579-2006);
- Part 6. pressurized gas (instead of GB 20580-2006);
- Part 7. flammable liquids (instead of GB 20581-2006);
- Part 8. Flammable solids (instead of GB 20582-2006);
- Part 9. Self-reactive substances and mixtures (instead of GB 20583-2006);
- Part 10. Pyrophoric liquids (instead of GB 20585-2006);
- Part 11. Spontaneous solid (instead of GB 20586-2006);
- Part 12. Self-heating substances and mixtures (instead of GB 20584-2006);
- Part 13. water, emit flammable gases and mixtures (instead of GB 20587-2006);

1 Scope

GB 30000.28-2013 is the Chinese national standard on rules for classification and labelling of chemicals - part 28: hazardous to the aquatic environment. It carries no /T suffix, which in the Chinese system means compliance is mandatory: a product or a practice within its scope has to meet it to be lawfully made, sold or carried out in China. It was issued on 10 October 2013 by the General Administration of Quality Supervision, Inspection and Quarantine of the People's Republic of China; Standardization Administration of China, and has been in force since 1 November 2014. Classification: ICS , CCS A80. This page is published from the official record of the standard held by the Chinese standards administration: the identification, the dates, the classification and the issuing body are taken from there. The clause text, the tables and the numeric limits are in the document itself, which is delivered complete in English translation.

This part of GB 30000 specifies the terms and definitions have the aquatic environmental hazards of chemicals, classification criteria, and decision logic label. This section applies to have the aquatic environmental hazards of chemicals under the United Nations' Globally Harmonized System of Classification and Labelling "(Fourth Revised Revised edition) (hereinafter referred to as the GHS) of classification and labeling.

2 Normative references

The following documents for the application of this document is essential. For dated references, only the dated version suitable for use herein Member. For undated references, the latest edition (including any amendments) applies to this document.

GB 13690 chemical classification and hazard communication General

GB/T 21800 bioaccumulation of chemicals flow-through fish test

GB/T 21801 Chemicals biodegradability breath test measurement method

GB/T 21802 Chemicals biodegradability modified MITI test (I)

GB/T 21803 Chemicals biodegradability DOC reduction test

GB/T 21805 Chemicals algal growth inhibition test

GB/T 21815.1 of chemicals in seawater biodegradation test shake-flask method

GB/T 21828 chemicals Daphnia magna reproduction test

GB/T 21830 daphnia acute chemical activity inhibition test

GB/T 21831 Chemicals biodegradability. Closed bottle test

GB/T 21852 Chemical Distribution coefficient (n-octanol - water) high performance liquid chromatography test

GB/T 21853 Chemical Distribution coefficient (n-octanol - water) shake flask method test

GB/T 21854 chemicals in fish early life stage toxicity test

3.1 Terms and Definitions

GB 13690 and defined by the following terms and definitions apply to this document.

3.1.1 Acute aquatic toxicity acuteaquatictoxicity Can short exposure to the substance in the water organism damage, the nature of the material itself.

3.1.2 Acute (short-term) hazard acute (short-term) hazard Acute toxicity of chemicals on aquatic organisms in the water of the harm caused by short-term exposure.

3.1.3 Availability availability Substance becomes a soluble or disaggregate species level. Metal availability, refers to the metal (M) compound of a metal ion moiety may It exploded from the remainder of the compound (molecule) out of level.

3.1.4 Bioavailability bioavailability; biologicalavailability The degree of biological substances are absorbed and distributed in the body of a biological region.

3.1.5 Bioaccumulation bioaccumulation Biological substances are absorbed via all routes of exposure (ie air, water, sediment/soil and food), and the net result of the conversion of the discharge.

3.1.6 Bioaccumulation bioconcentration Substances are absorbed by organisms via waterborne exposure, transformation and elimination of the net result.

3.1.7 Chronic aquatic toxicity chronicaquatictoxicity Can have detrimental effects on water in contact with the substance of the organism, the contact time is determined based on the life cycle of the organism, is the material itself Properties.

3.1.8 Complex mixture complexmixtures Multi-component material multi-componentsubstances Complex substances complexsubstances Individual substances with different solubility and physical and chemical properties of a complex mixture of mixture. In most cases, they can be described With specific carbon chain length/number of degree of substitution range homolog substances.

3.1.9 Degradation of degradation Organic molecules into smaller molecules and eventually to carbon dioxide, water and salts.

3.1.10 Long-term harm long-termhazard Chronic toxicity of chemicals to aquatic organisms in the water of the harm caused by long-term exposure.

3.1.11 No Observed Effect Concentration noobservedeffectconcentration; NOEC The lowest test concentration measured just below an effective statistically adverse effects was concentration. NOEC does not produce statistically valid Adverse effects should be subject to regulation.

3.2 Acronyms The following abbreviations apply to this document. BCF. Bioconcentration

Factor (BioconcentrationFactor) BOD. Biochemical Oxygen Demand
(BiochemicalOxygenDemand) COD. Chemical oxygen demand (ChemicalOxygenDemand)
QSAR/QSARs. Quantitative Structure Activity Relationships
(QuantitativeStructure-activityRelationship/Quantitative Structure-activityRelationships)

3.3 Symbol The following symbols apply to this document. EC_x. x% effect concentration.
EC₅₀. effect concentration half. ErC₅₀. Based on the growth rate of decline in EC₅₀. LC₅₀.
lethal concentration. L (E) C₅₀. LC₅₀ or EC₅₀.

4.1 Basic Elements

4.1.1 The basic elements for this section For the basic elements of this section are.

- Acute aquatic toxicity;
- Chronic aquatic toxicity;
- May be formed in vivo or actual accumulation;
- Organic compounds (biotic or abiotic) degradation.

4.1.2 use the principles of data According to the data priority internationally harmonized
test methods can also be using the data obtained by the national equivalent test methods.
Typically, light Water and marine species toxicity data can be considered equivalent to the
data, they should (GLP) follow the principles of good laboratory to produce and use by
OECD Test Guidelines or equivalent test guidelines drawn. If you can not get this data, you
should use the best available data quality sort.

4.1.3 Acute aquatic toxicity Acute aquatic toxicity is generally used fish 96hLC₅₀ (GB/T
27861 Test Guidelines or equivalent), crustacea 48hEC₅₀ (GB/T 21830 Test Guidelines or
equivalent) and/or algae 72h or 96hEC₅₀ (GB/T 21805 Test Guidelines or equivalent) is
determined. This Some species can be considered representative of all aquatic organisms,
if an appropriate test method, may also consider other types of creatures (such as
duckweed) data.

4.1.4 Chronic aquatic toxicity Use NOEC or other equivalent EC_x data, according to GB/T
21854 (fish early life stage toxicity test), GB/T 21828 Data (Daphnia magna reproduction
test) and GB/T 21805 (algal growth inhibition test) produce acceptable. You can also use
other proven Effective and internationally recognized test data.

4.1.5 bioaccumulation potential Bioaccumulation potential is usually n-octanol/water
partition coefficient, usually GB/T 21853 or GB/T 21852 determined lg K_{ow}. But if you can
get the experimentally determined bioconcentration factor (BCF), should be used in
preference bioconcentration factor (BCF). Bioaccumulation Coefficient should be
determined according to GB/T 21800 or GB/T 21858.