



Structure and recent changes of Annex I of the Convention



UNECE Convention on the
Transboundary Effects of
Industrial Accidents

**Assistance
Programme**





Annex I of the Convention

- Annex I to the Convention defines and the qualifying criteria for hazardous substances
- Hazard categories and named hazardous substances in the scope of the Convention
- Threshold (qualifying) quantities



Structure of Annex I of the Convention

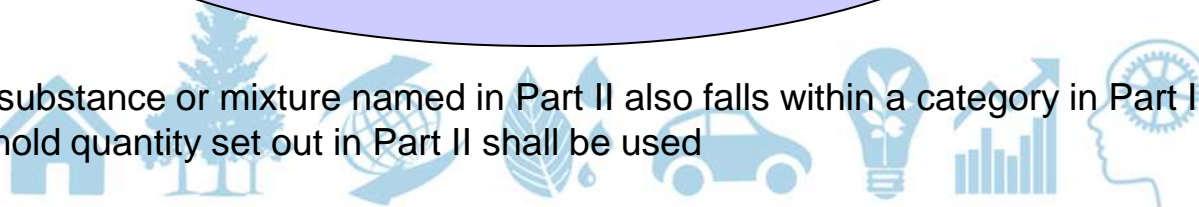


**Part I – Categories of substances and
preparations not specifically
named in Part II**

Part II – Named substances

Named substances –
Substances of high concern /TDI,
Methyl isocyanate,
Phosgene, Chlorine/
Widely used substances /Ammonium nitrate,
LPG, Petroleum products/

Where a substance or mixture named in Part II also falls within a category in Part I,
the threshold quantity set out in Part II shall be used



Current Annex I of the Convention

Category	Threshold Quantity (Tones)
1. Flammable (note 2)	50 000
2a. Highly flammable (note 3a and b)	200
2b. Highly flammable (note 3c)	50 000
3. Extremely flammable (note 4)	50
4. Toxic (note 5)	200
5. Very toxic (note 6)	20
6. Oxidizing (note 7)	200
7a. Explosive, where the substance, preparation or article falls under Division 1.4 of the GHS criteria (note 8)	200
7b. Explosive, where the substance, preparation or article falls under Division 1.1, 1.2, 1.3, 1.5 or 1.6 of the GHS criteria (note 8)	50
8a. Dangerous for the environment – “Toxic to aquatic organisms” (note 9)	500
8b. Dangerous for the environment – “Very toxic to aquatic organisms” (note 10)	200



Приложение I (Часть II)

Категория

Пороговое К-во (метрических тонн)

Аммиак	500
1а. Нитрат аммония ¹¹	10,000
1б. Нитрат аммония ¹²	5,000
1с. Нитрат аммония ¹³	2,500
1д. Нитрат аммония ¹⁴	50
2а. Нитрат калия ¹⁵	10,000
2б. Нитрат калия ¹⁶	5,000
Акрилонитрил	25
3. Хлор	25
4. Этиленоксид	50
Фторид водорода	50
Сероводород	50
Диоксид серы	250





Приложение I (Часть II)

Категория

Пороговое К-во (метрических тонн)

5. Водород	50
6. Диизоцианат толуола	100
7. Серный газ	75
8. Алкилы свинца	50
9. Фосген	0.75
10. Метилизоцианат	0.15
11. Сжиженные чрезвычайно горючие газы (включая сжиженный нефтяной газ) и природный газ	200
12. Нефтепродукты: газолиты и сырая нефть; керосины (включая топливо для реактивных двигателей); газойли (включая дизельное топливо, бытовое печное топливо и компоненты смешения газойля)	25,000





Changes in Annex I of the Convention

- Transition to the UN Globally Harmonized System of Classification and Labelling of Chemicals (GHS)
- Adopted at the 8th meeting of the Conference of the Parties
- Entry into force – December 2015





Changes in Annex I of the Convention

- Changes in the hazard criteria (cut-off values)
- Introduction of new hazard categories (Flammable aerosols, organic peroxides)
- Changes in some of the quantity thresholds
- Inclusion of new substances in the list of named substances





Changes in the structure of Annex I of the Convention

PART I. Categories of substances and mixtures not specifically named in Part II	Threshold quantity (metric tons)
1. ACUTE TOXIC Category 1, all exposure routes	20
2. ACUTE TOXIC -- Category 2, all exposure routes -- Category 3, inhalation exposure route	200
3. STOT SPECIFIC TARGET ORGAN TOXICITY – SINGLE EXPOSURE STOT SE Category 1	200
4. Explosives — unstable explosives or explosives, where the substance, mixture or article falls under Division 1.1, 1.2, 1.3, 1.5 or 1.6 of Chapter 2.1.2 of the GHS criteria or substances or mixtures having explosive properties according to Test series 1 of Part I of the UN Recommendations on the Transport of Dangerous Goods: Tests and criteria and do not belong to the hazard classes Organic peroxides or Self-reactive substances and mixtures	50
5. Explosives, where the substance, mixture or article falls under Division 1.4 of Chapter 2.1.2 of the GHS criteria	200
6. FLAMMABLE GASES Category 1 or 2	50
7. AEROSOLS Category 1 or 2, containing flammable gases Category 1 or 2 or flammable liquids Category 1 according criteria in Chapter 2.3.2 of GHS	500
8. AEROSOLS Category 1 or 2, not containing flammable gases Category 1 or 2 nor flammable liquids Category 1	50000
9. OXIDISING GASES, category 1	200





Changes in Annex I Part I



Current Annex I

Toxic and very toxic

- 4. Toxic – 200 t.
- 5. Very toxic – 20 t.

Cut-off values

- Toxic

LD50 (oral, mg/kg) $25 < LD50 < 200$

LD50 (dermal, mg/kg) $50 < LD50 < 400$

LC50 (inhalation, mg/l) $0.5 < LC50 < 2$

- Very toxic

LD50 (oral, mg/kg) $LD50 < 25$

LD50 (dermal, mg/kg) $LD50 < 50$

LC50 (inhalation, mg/l) $LC50 < 0.5$

New Annex I (after 2015)

Acute toxicity, Cat. 1, 2 and 3*

- ACUTE TOXIC Category 1 – 20 t.
- ACUTE TOXIC Category 2 and 3* - 200 t.

Cut-off values

* Inhalation route only

- ACUTE TOXIC Category 1

LD50 (oral, mg/kg) $LD50 < 5$

LD50 (dermal, mg/kg) $LD50 < 50$

LC50 (inhalation vapours, mg/l) $LC50 < 0.5$

LC50 (inhalation gases, ppmV) $LC50 < 100$

LC50 (dusts and mists, mg/l) $LC50 < 0.05$

- ACUTE TOXIC Category 2 and 3*

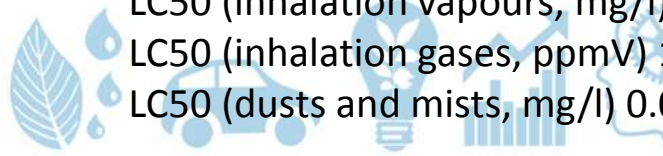
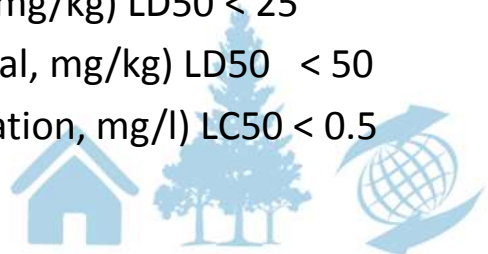
LD50 (oral, mg/kg) $5 < LD50 < 50$

LD50 (dermal, mg/kg) $50 < LD50 < 200$

LC50 (inhalation vapours, mg/l) $0.5 < LC50 < 2$

LC50 (inhalation gases, ppmV) $100 < LC50 < 500$

LC50 (dusts and mists, mg/l) $0.05 < LC50 < 0.5$





Changes in Annex I of the Convention

- The adopted changes represent an important change to the Convention
- Expertise on chemicals and GHS is usually distributed throughout several authorities
- In order to implement the new criteria, competent authorities need to coordinate and cooperate with other authorities
- Network of experts and decisionmakers





Спасибо за внимание!

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