

INTERNATIONAL PROGRAMME ON CHEMICAL SAFETY







Environmental Health Criteria 240

Principles and Methods for the Risk Assessment of Chemicals in Food

Annex 2 DOSE CONVERSION TABLE



A joint publication of the Food and Agriculture Organization of the United Nations and the World Health Organization





This report contains the collective views of an international group of experts and does not necessarily represent the decisions or the stated policy of the United Nations Environment Programme, the International Labour Organization or the World Health Organization.

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Published under the joint sponsorship of the United Nations Environment Programme, the International Labour Organization and the World Health Organization, and produced within the framework of the Inter-Organization Programme for the Sound Management of Chemicals.





The International Programme on Chemical Safety (IPCS), established in 1980, is a joint venture of the United Nations Environment Programme (UNEP), the International Labour Organization (ILO) and the World Health Organization (WHO). The overall objectives of the IPCS are to establish the scientific basis for assessment of the risk to human health and the environment from exposure to chemicals, through international peer review processes, as a prerequisite for the promotion of chemical safety, and to provide technical assistance in strengthening national capacities for the sound management of chemicals.

The Inter-Organization Programme for the Sound Management of Chemicals (IOMC) was established in 1995 by UNEP, ILO, the Food and Agriculture Organization of the United Nations, WHO, the United Nations Industrial Development Organization, the United Nations Institute for Training and Research and the Organization for Economic Co-operation and Development (Participating Organizations), following recommendations made by the 1992 UN Conference on Environment and Development to strengthen cooperation and increase coordination in the field of chemical safety. The purpose of the IOMC is to promote coordination of the policies and activities pursued by the Participating Organizations, jointly or separately, to achieve the sound management of chemicals in relation to human health and the environment.

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ANNEX 2: DOSE CONVERSION TABLE

Where accurate doses cannot be calculated on the basis of measured body weights and food consumption, approximate doses can be estimated using the dose conversion factors in the following table, taken from EHC 70.

Table A-1. Approximate relation of mg/kg in the diet to mg/kg body weight per day

Species	Weight (kg)	Food consumed per day (g) (liquids omitted)	Type of diet	1 mg/kg in food = x mg/kg body weight per day	1 mg/kg body weight per day = x mg/kg of diet
Mouse	0.02	3	Dry laboratory chow diets	0.150	7
Chick	0.40	50		0.125	8
Rat (young)	0.10	10		0.100	10
Rat (old)	0.40	20		0.050	20
Guinea-pig	0.75	30		0.040	25
Rabbit	2.0	60		0.030	33
Dog	10.0	250		0.025	40
Cat	2	100	Moist, semi- solid diets	0.050	20
Monkey	5	250		0.050	20
Dog	10	750		0.075	13
Human	60	1 500		0.025	40
Pig or sheep	60	2 400	Relatively dry grain forage mixtures	0.040	25
Cow (maintenance)	500	7 500		0.015	65
Cow (fattening)	500	15 000		0.030	33
Horse	500	10 000		0.020	50