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^{1 *} First evaluation
** Evaluation in CCPR periodic review programme

ABBREVIATIONS WHICH MAY BE USED

Ache acetylcholinesterase ADI acceptable daily intake AFI(D) alkali flame-ionization (detector)

ai active ingredient

ALAT alanine aminotransferase

approx. approximate

ASAT aspartate aminotransferase

BBA Biologische Bundesanstalt für Land- und Forstwirtschaft

bw body weight

(not b.w.)

c centi- (x 10⁻²)
CA Chemical Abstracts

CAS Chemical Abstracts Services

CCPR Codex Committee on Pesticide Residues

ChE cholinesterase

CNS central nervous system cv coefficient of variation

CXL Codex Maximum Residue Limit (Codex MRL). See MRL.

DFG Deutsche Forschungsgemeinschaft

DL racemic (optical configuration, a mixture of dextro- and laevo-)

DP dustable powder

DS powder for dry seed treatment

EBDC ethylenebis(dithiocarbamate) EC (1) emulsifiable concentrate

(2) electron-capture [chromatographic detector]

ECD electron-capture detector

EMDI estimated maximum daily intake EPA Environmental Protection Agency

ERL extraneous residue limit

ETU ethylenethiourea

 F_1 filial generation, first F_2 filial generation, second

f.p. freezing point

FAO Food and Agriculture Organization of the United Nations

FDA Food and Drug Administration FID flame-ionization detector FPD flame-photometric detector

g (not gm) gram ì g microgram

GAP good agricultural practice(s) GC-MS gas chromatography - mass spectrometry

G.I. gastrointestinal GL guideline level

Abbreviations 3

GLC gas-liquid chromatography
GLP Good Laboratory Practice
GPC gel-permeation chromatography

GSH glutathione

h (not hr) hour(s)
ha hectare
Hb haemoglobin
hl hectolitre

HPLC high-performance liquid chromatography

HPLC-MS high-performance liquid chromatography - mass spectrometry

IBT Industrial Bio-Test Laboratories

i.d. internal diameteri.m. intramusculari.p. intraperitoneal

IPCS International Programme on Chemical Safety

IR infrared

IRDC International Research and Development Corporation (Mattawan, Michigan, USA)

i.v. intravenous

JMPR Joint FAO/WHO Meeting on Pesticide Residues (Joint Meeting of the FAO Panel of

Experts on Pesticide Residues in Food and the Environment and a WHO Expert Group

on Pesticide Residues)

LC liquid chromatography LC₅₀ lethal concentration, 50%

LC-MS liquid chromatography - mass spectrometry

LD₅₀ lethal dose, median

LOAELlowest observed adverse effect level

LOD limit of determination (see also "*" at the end of the Table)

LSC liquid scintillation counting or counter

MFO mixed function oxidase i m micrometre (micron)

min minute(s)

(not min.)

MLD minimum lethal dose

M molar mo month(s) Abbreviations 4

(not mth.)

MRL Maximum Residue Limit. MRLs include draft MRLs and Codex MRLs (CXLs). The

MRLs recommended by the JMPR on the basis of its estimates of maximum residue levels enter the Codex procedure as draft MRLs. They become Codex MRLs when they have passed through the procedure and have been adopted by the Codex

Alimentarius Commission.

MS mass spectrometry
MTD maximum tolerated dose

n normal (defining isomeric configuration)
NCI National Cancer Institute (United States)

NMR nuclear magnetic resonance NOAEL no-observed-adverse-effect level

NOEL no-observed-effect level NP(D) nitrogen-phosphorus (detector) NTE neuropathy target esterase

OP organophosphorus pesticide

PHI pre-harvest interval

ppm parts per million. (Used only with reference to the concentration of a pesticide in an

experimental diet. In all other contexts the terms mg/kg or mg/l are used).

PT prothrombin time

PTT partial thromboplastin time

PTU propylenethiourea

RBC red blood cell

s.c. subcutaneous

SC suspension concentrate (= flowable concentrate)

SD standard deviation
SE standard error
SG water-soluble granule
SL soluble concentrate
SP water-soluble powder
sp./spp. species (only after a generic name)

sp gr specific gravity

(not sp. gr.)

 $\begin{array}{ll} t & \text{tonne (metric ton)} \\ T_3 & \text{tri-iodothyronine} \end{array}$

T₄ thyroxine

TADI Temporary Acceptable Daily Intake

tert tertiary (in a chemical name)

TLC thin-layer chromatography

TMDI theoretical maximum daily intake

TMRL Temporary Maximum Residue Limit

TPTA triphenyltin acetate
TPTH triphenyltin hydroxide

TSH thyroid-stimulating hormone (thyrotropin)

UDMH 1,1-dimethylhydrazine (unsymmetrical dimethylhydrazine) USEPA United States Environmental Protection Agency

Abbreviations 5

USFDAUnited States Food and Drug Administration

UV ultraviolet

v/v volume ratio (volume per volume)

WG water-dispersible granule WHO World Health Organization

WP wettable powder wt/vol weight per volume

w/w weight ratio (weight per weight)

< less than

 \leq less than or equal to

> greater than

 \geq greater than or equal to

(following residue levels, e.g. 0.01* mg/kg): level at or about the limit of determination

INTRODUCTION

The report of the Joint Meeting of the FAO Panel of Experts on Pesticide Residues in Food and the Environment and the WHO Toxicological and Environmental Core Assessment Groups (JMPR), held in Geneva, 18-27 September 1995, contains a summary of the evaluations of residues in foods of the various pesticides considered as well as information on the general principles followed by the Meeting. The present document contains summaries of the residues data considered, together with the recommendations made.

The Evaluations are issued in two parts:

Part I: Residues (by FAO)

Part II: Toxicology (by WHO)

For those interested in both aspects of pesticide evaluation, not only both parts but also the reports containing summaries of residue and toxicological considerations will be available. Special attention is drawn to Annex I containing updated ADIs, MRLs, and temporary ADIs and MRLs, which also appears in full as part of the report of the Meeting.

Some of the compounds considered at this Meeting have been previously evaluated and reported on in earlier publications. In general only new information is summarized in the relevant monographs and reference is made to previously published evaluations, which should also be consulted. In the case of older compounds which are re-evaluated as part of the periodic review programme of the Codex Committee on Pesticide Residues (CCPR) however, a comprehensive review of all available data, including data which may have previously been submitted, is carried out. Compounds evaluated for the first time are indicated by a single asterisk and those evaluated in the CCPR periodic review programme by a double asterisk in the Table of Contents.

The name of the compound appearing as the title of each monograph is followed by its Codex Classification Number in parentheses.

References to previous Reports and Evaluations of Joint Meetings are listed in Annex II.

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The monographs in these Evaluations were prepared by the following participants in the 1995 JMPR for the FAO Panel of Experts on Pesticide Residues in Food and the Environment:

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