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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

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MEMORANDUM

OFFICE OF
PESTICIDES AND TOXIC SUBSTANCES

SUBJECT: Alachlor residue estimates for use in the Tolerance Assessment System

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Attached are our most current residue estimates for total alachlor (sum of alachlor and its metabolites). These estimates are updated from our most recent review (S. Hummel, 6/13/87). This update includes residue estimates from recently submitted residue and processing data for sorghum, sunflower seed, and cottonseed, currently in review in RCB (S. Hummel).

Current residue estimates are based on the maximum total alachlor residue found in field trials at the maximum typical application rate. None of the alachlor residue data have been completely validated, as discussed in our previous reviews (S. Hummel, 1/30/87, 6/13/87).

The maximum typical application rate for alachlor is 4 lb ai/A for most crops. Some crops have Section 3 or Section 24(c) application rates in excess of 4 lb ai/A, e.g. (corn, 8 lb ai/A on high organic soils; peanuts, 8 lb ai/A in NC and VA only). However these rates in excess of 4 lb ai/A are not typically used and consequently were not considered in our Special Review estimates.

TENTATIVE RESIDUE ESTIMATES (PPM ALACHLOR EQUIVALENTS)

<u>Crop</u>	<u>Estimates based on Maximum Residue found in Field Trials at Typical Use Pattern</u>
<u>Corn</u>	
grain	0.016
K+CWHR	0.005
forage	0.60
fodder&stover	0.20
meal	0.015
(soapstock)1/	0.029
crude oil	0.042
refined oil	0.0019
<u>Peanuts2/</u>	
nuts	0.27
hulls	0.9
meal	0.37
soapstock	0.05
crude oil	0.10
refined oil	0.02
forage	3.4
vines	3.4
<u>Soybeans</u>	
grain	0.21
hulls	0.32
meal	0.26
refined oil3/	0.04
protein	
concentrates	0.07
protein isolates	0.04
soapstock	0.38
forage	2.6
hay	2.0
<u>Sorghum</u>	
grain	0.053
grits	0.03
bran	0.09
germ	0.15
flour	0.13
forage	1.4
fodder&stover	0.65

TENTATIVE RESIDUE ESTIMATES (PPM ALACHLOR EQUIVALENTS), CONT.

<u>Crop</u>	<u>Estimates based on Maximum Residue found in Field Trials at Typical Use Pattern</u>
<u>Legumes</u>	
bean/pea forage ^{4/}	2.6
bean/pea hay ^{4/}	4.6
pea seeds	0.03
lima bean seeds	0.03
dry bean seeds	0.21
dry pea seeds	0.12
peas w/ pods ^{4/}	0.27
lima beans w/pods ^{4/}	0.21
<u>Sunflowers</u>	
sunflower seeds	0.85
meal w/hulls	1.09
crude oil	0.17
refined oil ^{5/}	0.008
<u>Cotton</u>	
cottonseed	0.041
refined oil ^{6/}	0.0004

- 1/ not regulated
- 2/ If 8 lb ai/A single application for use on peanuts is to remain registered under Section 24(c), then maximum residues are tentatively estimated at 0.87 ppm in peanuts, 2.7 ppm in peanut hulls, 4.8 ppm in peanut hay, and 12 ppm in peanut vines
- 3/ refined, deodorized oil for human consumption
- 4/ estimated from earlier residue data where only DEA metabolites of alachlor were measured
- 5/ estimated from concentration/reduction factors for corn oil
- 6/ estimate based on sunflower seed and corn oil processing data

cc: R. F., circo, S. Hummel, alachlor S.F., Alachlor S.R.F.,
PM#25, C. Monroe (SIS), PMSD/ISB
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