

US EPA ARCHIVE DOCUMENT

REVIEW SUMMARY

013803

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ECOLOGICAL EFFECTS BRP  
REVIEW SUMMARY

Chemical trade name Ansar 529

Common name MSMA

Chemical monosodium acid methanearsenate

Company Ansar

Submission TEMP PERMIT 6308-EXP PETITION 5615 REGISTRATION 361357

Date submitted \_\_\_\_\_ Date received 12/6/78

Type of chemical herbicide

Use sugar cane (Tex + La.), wheat

Data submitted for review

Environmental safety:


- Mammal LD50 \_\_\_\_\_
- mammal chronic \_\_\_\_\_
- Fish \_\_\_\_\_
- Bird \_\_\_\_\_
- shrimp, crab, oyster \_\_\_\_\_
- Other \_\_\_\_\_

Environmental chemistry (70-15)

- Fish residue \_\_\_\_\_
- Other \_\_\_\_\_

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Chemical MSMAConclusions:

1. toxicity difference in aquatic organisms between pure MSMA, Arsenic 529 and Dacronate is probably due  

2. sugarcane - La. + Tex. only, 2-4 lbs ai/A, max of 2 applications, do not apply after June 1, want 216 lbs ai (36 gal) - half goes to Tex + half to La.
3. wheat - for wild oats, foxtail + wild mustards (these are only a problem in Minne., Mont., N.D., S.D., Wash., Ore., Neb., Idaho), treat before 4<sup>th</sup> leaf stage, use 2-3 lbs ai/A; want 107 gal. (642 lbs ai); most testing to be done Feb 1 - June 15.

Recommendations

NAC 12/6/74 JPE

chemical MSMA

Location ANSUL

Req. No.

Exp permit no. 6308-EXP

Petition no. 361357  
5615

Accession NO

Submission date 12/6/74

ORGANISM	TEST	LD <sub>50</sub>	LC <sub>50</sub>			TEST MATERIAL
			Dietary	Aquatic		
			24 hr	48 hr	96 hr	
Rat		1.8g/kg (1.6-2.0g/kg)		95% C.I.		35% MSMA equiv.
Mallard	8 day subacute	1	>5,000 ppm			51.3%
Bobwhite	8 day subacute	1	3300 ppm (1941-5610 ppm)	95% C.I.		51.3%
Rat		1.8g/kg (1.5-2.2g/kg)		95% C.I.		Ansar 170 52.65% MSMA equiv.
Bluegill				>1000	>1000	pure MSMA
Bluegill				37.9	31.1	Ansar 529 (34.8%)
fathead minnow				16.2	13.4	Ansar 529 (34.8%)
longnose killifish				N.E. at 40 ppm		Ansar 170 (51.3%)
"				NE at 40 ppm		Ansar 184 (63%)
Oysters				NE at 1.0		Ansar 170
"				NE at 1.0		Ansar 184
pink shrimp				NE at 1.0		Ansar 170
"				NE at 1.0		Ansar 184
Bluegill				45.0	40.0	Daconate (37.66%)

Chemical MSMA

Citation Answer

Reg. no. \_\_\_\_\_

Exp permit \_\_\_\_\_

Retition \_\_\_\_\_

Submission  
DATE \_\_\_\_\_

Accession no.

ORGANISM	DOSE	SYMPTOM / EFFECT	TEST MATERIAL
Rat 90 day	100 ppm	N.E. → body weights, food consumption, hematology, urinalysis, organ weights, histological observations	Tech
dog 90 day	30 ppm	N.E. → body weight, food consumption, hematology, liver & kidney function, urinalysis, organ weights, tissue histology	Tech