

US EPA ARCHIVE DOCUMENT

ENVIRONMENTAL
REVIEW SUMMARY

013803

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ECOLOGICAL EFFECTS BRP
REVIEW SUMMARY

Chemical trade name Ansar 529 H.C. Herbicide

Common name MSMA

Chemical monosodium acid methanearsonate

Company Ansul

Submission TEMP PERMIT PETITION 3F1357 REGISTRATION 6308-29

Date submitted _____ Date reviewed 9-6-74

Type of chemical herbicide

Use sugarcane (Louisiana only)

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 MSMA

Conclusions:

1. herbicide for post-emergent weed control, max. of 2 applications, do not apply after June 1, for La. sugarcane only
2. binds in most soils, especially where Al is present or in clay soil
∴ doesn't tend to leach
3. in an aquatic situation it tends to react much as phosphorus does; when oxygen tension in water decreases arsenic is released
4. arsenic can ^{bio-}accumulate under reducing conditions + with low oxygen tension (aquatic situations)
5. toxicities of arsenicals: arsenites > arsenates > organic arsenicals
inorganic
6. 6 lbs ai / gal.

Recommendations

The directions for use on sugarcane are unclear. In one sentence the rate of application is stated as $\frac{1}{3}$ to $\frac{2}{3}$ gallons (2 to 4 lbs ai) per acre while in another sentence it is stated as 4 to $6\frac{3}{4}$ pints (3 to 5 lbs ai) per acre.

RL HE 9-6-74