

CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY
DEPARTMENT OF PESTICIDE REGULATION
MEDICAL TOXICOLOGY BRANCH

SUMMARY OF TOXICOLOGY DATA
SODIUM BISULFATE

Chemical Code # 905, Tolerance # 50263
December 20, 2002

I. DATA GAP STATUS¹

| | |
|------------------------|----------------------------|
| Chronic toxicity, rat: | Data gap, no study on file |
| Chronic toxicity, dog: | Data gap, no study on file |
| Oncogenicity, rat: | Data gap, no study on file |
| Oncogenicity, mouse: | Data gap, no study on file |
| Reproduction, rat: | Data gap, no study on file |
| Teratology, rat: | Data gap, no study on file |
| Teratology, rabbit: | Data gap, no study on file |
| Gene mutation: | Data gap, no study on file |
| Chromosome effects: | Data gap, no study on file |
| DNA damage: | Data gap, no study on file |
| Neurotoxicity: | Not required at this time |

Toxicology one-liners are attached.

¹ See notes on page 2.

All record numbers through 182475 examined.

** indicates an acceptable study.

Bold face indicates a possible adverse effect.

File name: T021220

Prepared by Gee, December 20, 2002

See the "Reregistration Eligibility Decision (RED)" of the Office of Prevention, Pesticides and Toxic Substances, US EPA, dated December, 1993, on "Mineral Acids" for further information.

There are 48 products currently registered in California containing sodium bisulfate. All of these

are registered as adjuvants (water modifiers) and/or as swimming pool/spa additives for pH adjustment, among other properties. Of the 48, 45 products carry the signal word "Danger" and 3 "Caution." (The RED indicates that sodium bisulfate can also be used as a disinfectant for toilet bowls.)

As stated in the RED of US EPA, sodium bisulfate yields sodium and sulfate, both common chemical entities in the environment. Sulfate salts are considered GRAS. There are no registered food uses for sodium bisulfate. US EPA, therefore, had no concern for dietary exposure in the 1993 RED.

Sodium bisulfate solutions at 60 - 70% active ingredient are category III for dermal exposure but I for eye irritation, hence the label precautions.

Based on the physical properties, uses and known break down products, no further studies are being required at this time.

II. TOXICOLOGY ONE-LINERS AND CONCLUSIONS

These pages contain summaries only. Individual worksheets may contain additional effects.

No study on file. CHRONIC TOXICITY, RAT

No study on file. CHRONIC TOXICITY, DOG

No study on file. ONCOGENICITY, RAT

No study on file. ONCOGENICITY, MOUSE

No study on file. REPRODUCTION, RAT

No study on file. TERATOLOGY, RAT

No study on file. TERATOLOGY, RABBIT

No study on file. GENE MUTATION

No study on file. CHROMOSOME EFFECTS

DNA DAMAGE

No study on file.

NEUROTOXICITY

Not required at this time.

OTHER

50263-015 182474; Acute oral toxicity; 811; Rat; Northview Pacific Laboratories, Inc Study # X8G081G; 3/15/90; Sodium Bisulfate; 5/sex/dose (except for 3000 mg/kg females: 10 rats), administered by gavage; 1750 (F only), 2000, 2250, 2500, 3000 and 3500 (M only) mg/kg of body weight; mortality: 1750 (F): 1/5; 2000 (M/F): 0/5, 2/5; 2250 (M/F): 1/5; 2500 (M/F): 0/5, 4/5; 3000 (M/F): 3/5, 1/10; 3500 (M): 4/5; clinical signs (dose not specified): weight loss, dehydration, scruffy coats, lethargy and death; necropsy: gross abnormalities observed in the animals that died on test included mottled red lungs and livers mottled with pale areas; several of these animals were also observed to have either lesions on their stomachs or stomachs ruptured with contents emptied into the peritoneal cavity; LD50 (M) = 2800 (2393-3276) mg/kg; the study failed to establish a dose-response for the females; Unacceptable, not upgradeable. (Kellner, 10/1/01).

50263-015 182475; Primary Skin Irritation Study; 815; Rabbit; Northview Pacific Laboratories, Inc., NVP Report # X8G081G; 3/15/90; Sodium Bisulfate; 6 rabbits (sex not specified); A 0.5 g portion of the test material (moistened with deionized water) was applied to two sites, one intact and one abraded, on the back of each animal, applied under two layer thick cotton gauze patches measuring one inch square; the entire trunks of the animals were wrapped in a non-occlusive manner for the twenty-four hours; observations (intact sites): erythema (score 1) was noted in 3/6 rabbits at 24 hours, with clearing by 72 hours; edema (score 1) was seen in 2/6 rabbits at 24 hours and cleared by 72 hours; Toxicity Category IV; Study acceptable. (Kellner, 10/2/01).