4340 '00 NOV 14 A8:11

NEW JERSEY GENERAL ASSEMBLY

JOHN V. KELLY
ASSEMBLYMAN, 36TH DISTRICT
BERGEN-ESSEX-PASSAIC COUNTIES
371 FRANKLIN AVENUE, 2ND FLOOR
NUTLEY, NJ 07110
(973) 667-6123
FAX (973) 667-9614

COMMITTEES
CHAIR
HOUSING COMMITTEE
NEW JERSEY FIRE SAFETY COMMISSION
MEMBER
APPROPRIATIONS COMMITTEE
GOVERNOR'S LANDLORD-TENANT TASK FORCE
ELLIS ISLAND ADVISORY COMMITTEE

DATE 11/13/00

FAX MESSAGE

FAX NUMBER (301) 827-6870

RE: Docket# OOP-1602/CP 1

TO:

Lyle JAFFE

Name

FDA Dockets MANAGEMENT

Company

Telephone

FROM John Kelly

PLEASE ADD PAGES 1361-1362 MERCK INDEX ENTRY FOR SODIUM FLUORIDE TO PETITION

thank you

Number of pages transmitted (including cover sheet) 3

OOP-1602

John V Kelly SUP1

Printed on Recycled Paper

NOV.13. 2000 6:35PM

DOCKET # OUT-1602 PCR 1

MERCK INDEX
11th EDITION
8565 SODIUM FLUORIDE
pages 1361-1362

and 2.5%
ng of 420
tinitrite
lum hexani
Co 14.59
yellow, cryst
Dec by min
rganic acid
of acetic
of potass
te. Cya
18.47% N
n and pro
928) and
dimentali
e on sick
te et al.
and toxi
185, 65
577 (19
alcohol
form Na
t. Insol
loc. fo
le. C
8%, Na
8% pu
e of ca
d pieces
ewhat
N. mp
aq sol
oin rea
ep well
Am.
nd sil
nd di
anut
anin
ropyl
bor
Na
% N
Ne
46
bat
pro
wa
Na
d
ol
dw
ol

ichromate(VI). Sodium bichromate; bi-
Na_2O_7; mol wt 261.96. Cr 39.70%,
$Na_2Cr_2O_7$. Usually prepd from Na_2-
ption of industrial processes: Müll-
nn's *Encyklopädie der Technischen*
rd ed., 1954) p 575; Faith, Keyes & *Chemicals*, F. A. Lowenheim, M. K. *Industrial Chemicals*, New York, 4th ed., 1975)

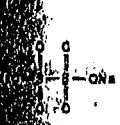
bright orange, somewhat deliques-
system: monoclinic sphenoidal.
prismatic, d_4^{18} 2.348. Bulk density:
anhydr on prolonged heating at
salt mp 356.7° and starts to dec at
28.2 cal/g. Very sol in water. A
0°: 70.6% $Na_2Cr_2O_7.2H_2O$; at 20°:
at 60°: 82.04%; at 80°: 88.39%; at
oln freezes at −3.5°; a 30% soln at
a 69% soln at −48°. Specific heat
al/g/°C. Solns are acidic: pH of
oln: 3.5.

manuf of dyes, many other syn-
inks, etc.; in chrome-tanning of
bleaching fats, oils, sponges; rea-
manuf chromic acid, other chro-
s; in corrosion-inhibitors, corro-
many metal treatments; electroen-
in dyeing; for hardening gelatin;
on plants and other plants and
2,760,854 (1956 to Pennsylvania
nd caustic to skin, mucous mem-

-infective.

ogurate(I). Gold sodium cyanide;
AuN_2Na; mol wt 272.03. C 8.82%,
8.45%. $NaAu(CN)_2$.
In water. *Poison!*

Dithionous acid dirodium salt.
Na 22.31%, O 46.58%, S 31.11%.
ations $MnO_2 + 2SO_2 \rightarrow MnS_2O_4$
$MnCO_3 + Na_2S_2O_4$; de Baat,
26); Pfanstiel, *Inorg. Syn.* 2, 170



rhombic, orthorhombic crystals.
Loses all of its water of crystn
it is dissociated into Na_2SO_4
6.05% (w/w); at 20°: 13.39%;

benzenesulfonate. *Dodecylbenz-*
dodecylbenzene sodium sulfo-
C-30; Conoco SD 40; Conoco
348.49. C 62.04%, H 8.39%,
$C_{12}H_{25}C_6H_4SO_3Na$. Manuf:
934); Huber *et al.*, *J. Am. Oil*
pat. 761,095 (1956 to Mon-
782,230 (1957 to Monsanto);
Continental Oil); Gerhart, Kar-
to Continental Oil).
105 mg/kg i.v., Hopper *et*
Ed. 38, 428 (1949).
Caution: May cause skin irrita-
vomiting.

sodium ethylate; caustic alco-

keep tightly closed, protected from light and in a cool place.

8561. Sodium Ethyl Sulfate. Sodium sulfovinate. $C_2H_5NaO_4S$; mol wt 148.11. C 16.22%, H 3.40%, Na 15.52%, O 43.21%, S 21.65%. $NaC_2H_5SO_4$.

Monohydrate, white, very hygroscopic crystals. Sol in 0.7 part water, in alcohol. *Keep well closed.*

USE: In organic syntheses.

8562. Sodium Ferricyanide. *Trisodium hexakis(cyano-C)ferrate(3−); sodium hexacyanoferrate(III).* $C_6FeN_6Na_3$; mol wt 280.91. C 25.65%, Fe 19.88%, N 29.92%, Na 24.56%. $Na_3Fe(CN)_6$.

Monohydrate, ruby-red, deliquesc crystals. Sol in 5.5 parts cold water, 1.5 parts boiling water. *Keep well closed.*

8563. Sodium Ferrocyanide. *Tetrasodium hexakis(cyano-C)ferrate(4−); sodium hexacyanoferrate(II);* yellow prussiate of soda; sodium prussiate yellow. $C_6FeN_6Na_4$; mol wt 303.91. C 23.71%, Fe 18.36%, N 27.65%, Na 30.26%. $Na_4Fe(CN)_6$. Review of properties, chemistry and syntheses: *The Chemistry of Ferrocyanides*, American Cyanamid Co. (Beacon Press, New York, 1953) 112 pp.

Decahydrate, pale yellow, monoclinic, slightly efflorescent crystals. Steady dehydration occurs above 50°. Becomes anhydr at 81.5°. Dec 435°, forming sodium cyanide, iron, carbon, and nitrogen. Soly in water at 1°: 10.2% (calcd as the anhydr salt); at 17°: 14.7%; at 25°: 17.6%; at 53°: 28.1%; at 85°: 39%; at 96.6°: 39.7%. Practically insol in most organic solvents.

USE: Addition of sodium ferrocyanide solns to slightly acidic solns of iron salts causes precipitation of insol Prussian blue (ferric ferrocyanide), $Fe_4[Fe(CN)_6]_3$. Alkaline solns yield sol Prussian blue, $NaFe[Fe(CN)_6]$. Sodium ferrocyanide forms gels with heavy metals in general. Used in ore flotation. In photography for bleaching, toning, and fixing. To prevent caking of rock salt and foods. Additive to pickling baths. Peptizing agent in rubber. Anti stabilizer in welding rod coatings. Emulsion polymerization catalyst. *Toxicity:* Because of strong chemical bondage between the cyanide groups and the iron, ferrocyanides have a low order of toxicity. *Caution:* Do not mix with hot or concd acids and do not expose solns to sunlight for any length of time to avoid generation of hydrogen cyanide. Waste ferrocyanides in streams and lakes should not exceed 2 ppm because irradiated solns become toxic to fish, G. E. Burdick, M. Lipschultz, *C.A.* 44, 10939f (1950).

8564. Sodium Fluoborate. *Sodium tetrafluoroborate;* sodium borofluoride. BF_4Na; mol wt 109.82. B 9.85%, F 69.21%, Na 20.94%. $NaBF_4$. Prepd according to the equation $2H_3BO_3 + 8HF + Na_2CO_3 \rightarrow 2NaBF_4 + 7H_2O + CO_2$: Balz, Wilke-Dörfurt, *Z. Anorg. Allgem. Chem.* 189, 197 (1927); Kwasnik in *Handbook of Preparative Inorganic Chemistry*, vol. 1, G. Brauer, Ed. (Academic Press, New York, 2nd ed., 1963) p 222.

Orthorhombic, stout rectangular prisms d^{20} 2.47. mp 384° (slight decompn). Does not etch glass when absolutely dry. Soly in water (g/100 ml): 108 (26°); 210 (100°). Sparingly sol in alcohol. Aq solns have a bitter taste and are acid to litmus.

USE: Fluorinating agent; *see* Lawton, Levy, *J. Am. Chem. Soc.* 77, 6083 (1955).

8565. Sodium Fluoride. Chemifluor; Duraphat; Fluoros; Luride-SF; Villaumite; Florocid; Flura-Drops; Karidium; Lemofluor; Ossalin; Ossini; Osteofluor; Zymafluor. FNa; mol wt 42.00. F 45.24%, Na 54.75%. NaF. Prepd by fusing cryolite with NaOH; by adding equiv amounts of NaOH or Na_2CO_3 to 40% HF (precipitation is instantaneous and crystal size depends on pH, but too much HF yields sodium bifluoride, $NaHF_2$): Müller, *Chem.-Ztg.* 52, 5 (1928); Kwasnik in *Handbook of Preparative Inorganic Chemistry*, vol. 1, G. Brauer, Ed. (Academic Press, New York, 2nd ed., 1963) pp 235-236. Technical grades are 90% and 95% NaF, light (37 cu in/lb) and dense (23 cu in/lb), and 98%. The *impurities* are mainly sodium and aluminum fluosilicates,

OUT-1602

NOV. 13. 2000 6:30PM

DOCKET # OOP-1602/CP 1

Pharmacology: Caruso *et al.*, *Handb. Exp. Pharmakol.* XX (Part 2), F. Smith, Ed. (Springer, Berlin, 1970) pp 144-165. Toxicity: H. F. Smyth *et al.*, *Am. Ind. Hyg. Assoc. J.* 30, 470 (1969).

Cubic or tetragonal crystals (NaCl lattice). d 2.78, mp 993°, bp 1704°. *Poisonous!* Soly in water (g/100 ml): 4.0 (15°); 4.3 (25°); 5.0 (100°). Insol in alc. Aq solns have an alkaline reaction caused by partial hydrolysis. pH of freshly prepd satd soln 7.4. Aq solns etch glass, but the dry crystals or powder may be kept in glass bottles. Sodium fluoride sold as household insecticide must be tinted Nile Blue. LD_{50} orally in rats: 0.18 g/kg (Smyth).

Human Toxicity: Severe symptoms from ingestion of less than one gram; death from 5 to 10 g. *Sublethal:* Nausea and vomiting, abdominal distress, diarrhea, stupor, weakness. *Lethal:* Muscular weakness, tremors, convulsions, collapse, dyspnea, respiratory and cardiac failure, death. *Chronic:* Mottling of tooth enamel, osteosclerosis. *See Clinical Toxicology of Commercial Products*, R. E. Gosselin *et al.*, Eds. (Williams & Wilkins, Baltimore, 4th ed., 1976) Section III, pp 159-163.

USE: As insecticide, particularly for roaches and ants; in other pesticide formulations; constituent of vitreous enamel and glass mixes; as a steel degassing agent; in electroplating; in fluxes; in heat-treating salt compositions; in the fluoridation of drinking water; for disinfecting fermentation apparatus in breweries and distilleries; preserving wood, pastes and mucilage; manuf of coated paper; frosting glass; in removal of HF from exhaust gases to reduce air pollution. Dental caries prophylactic.

THERAP CAT (VET): Anthelmintic; pediculicide, acaricide.

8566. Sodium Folate. *Folic acid sodium salt;* sodium pteroylglutamate; sodium Folvite. $C_{19}H_{18}N_7NaO_6$; mol wt 463.39. C 49.24%, H 3.92%, N 21.16%, Na 4.96%, O 20.72%.

Sold only as sterile soln in ampuls. Clear, mobile liquid. Yellow to orange-yellow color. pH between 8.5 and 11.0. For spectrophotometric data *see* Folic Acid.

THERAP CAT: Water-soluble hematopoietic vitamin.

8567. Sodium Formaldehydesulfoxylate. *Hydroxymethanesulfinic acid sodium salt;* formaldehyde sodium sulfoxylate; formaldehydesulfoxylic acid sodium salt; sodium hydroxymethanesulfinate; sodium methanalsulfoxylate; Aldanil; Rongalite; Rongalite C. CH_3NaO_3S; mol wt 118.09. C 10.17%, H 2.56%, Na 19.47%, O 40.65%, S 27.16%. $Na[HOCH_2SO_2]$. Prepn: Heyl, Greer, *Am. J. Pharm.* 94, 80 (1922); Binns, U.S. pat. 2,013,128 (1935 to Virginia Smelting); Postnikov, Kunin, *J. Appl. Chem. USSR* 13, 185 (1940). Structure of dihydrate: Truter, *J. Chem. Soc.* 1958, 3064; 1962, 3400. Of limited value in treatment of mercuric chloride poisoning: Modell *et al.*, *J. Pharmacol. Exp. Ther.* 61, 66 (1937).

Dihydrate, crystals, mp 63-64°, dec at higher temp. Odorless when freshly prepd, but quickly develops a characteristic (garlic) odor. Freely sol in water; practically insol in abs alcohol, ether, benzene. Readily dec by dil acids. Aq soln is practically neutral. *Keep well closed in a cool place.* LD s.c. in mice, 4.0 g/kg: Rosenthal, *Public Health Rept. (U.S.)* 49, 908 (1934).

USE: In vat color printing pastes: Borsteimann, Fordemwalt, U.S. pat. 2,597,281 (1952 to Am. Cyanamid). In polymerization of ethylenic compds: Brit. pats. 816,252; 852,593 (1959 to Hercules Powder; 1960 to Air Reduction). In manuf of arsphenamines: Krumwiede, *J. Am. Pharm. Assoc.* 8, 795 (1919); Heyl, Miller, *ibid.* 11, 432 (1922).

THERAP CAT: Treatment of mercury poisoning.

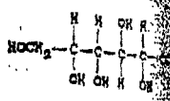
8568. Sodium Formate. $CHNaO_2$; mol wt 68.02. C 17.66%, H 1.48%, Na 33.81%, O 47.05%. HCOONa.

White, deliquesc granules or cryst powder; slight odor of formic acid. d 1.92. mp 253°; at higher temp dec into sodium oxalate and hydrogen, then into sodium carbonate. Sol in about 1.3 parts water; sol in glycerol, slightly in alcohol. The aq soln is neutral. pH about 7. Has buffering action. *Keep well closed.*

USE: In dyeing and printing fabrics; also in anal. chemistry as a precipitant for the "noble" metals. Solubilizes trivalent metal ions in soln by forming complex ions. Buffering action adjusts the pH of strong mineral acids to higher values.

THERAP CAT: Caustic, astringent.

8569. Sodium Gluconate. Gluco[illegible] $C_6H_{11}NaO_7$; mol wt 218.13. C 33.[illegible] 10.54%, O 51.34%. The normal sodium [illegible]



Crystals. The technical grade may [illegible] Soly in water at 25°: 59 g/100 ml. Sp[illegible] Insol in ether. Aq solns are stable to [illegible]

USE: As sequestering agent forming [illegible] with calcium in alkaline media and wi[illegible] solns. Used in metal plating, mineral [illegible] danting fabrics, and in water-paste [illegible] gested as a photographic processing [illegible]

8570. Sodium Glycerophosphate. [illegible] *mono(dihydrogen phosphate) disodium* [illegible] mol wt 216.03. C 16.68%, H 3.[illegible] 44.44%, P 14.34%. Three isomer[illegible] phosphoric acid disodium salt ((HOC[illegible] D(+)- and L(−)-α-glycerophosph[illegible] ($HOCH_2CH(OH)CH_2OPO_3Na_2$). [illegible] Pyman, *Pharm. J.* 92, 511 (1914). E[illegible] prostatic carcinoma: M. K. Schwartz [illegible] *Sci.* 166, 775 (1969). Chronic toxicit[illegible] L. Raheja *et al.*, *Toxicology* 8, 115 [illegible] form as cariostatic agent: T. H. Gra[illegible] *Oral Biol.* 20, 717 (1975). GC determ[illegible] *Chromatog.* 206, 387 (1981).

β-Form hemiundecahydrate, whi[illegible] crystals; dec above 130°. Sol in abo[illegible] sol in hot water. (pH of aq soln: ab[illegible] hol.

THERAP CAT: Tonic.

THERAP CAT (VET): Has been used [illegible]

8571. Sodium Hexachloroplatinate. [illegible] *chloroplatinate(2−);* sodium platinic[illegible] platinate. Cl_6Na_2Pt; mol wt 453.77. [illegible] Pt 42.99%. $Na_2[PtCl_6]$. Prepn: Gr[illegible] *parative Inorganic Chemistry* vol. [illegible] demic Press, New York, 2nd ed., 1965 [illegible] Peters, *Inorg. Syn.* 13, 173 (1971).

Yellow, hygroscopic crystals. Ea[illegible] 25° and relative humidity > 30% (re[illegible] by heat at 110° for one hour). uv ma[illegible] nm (ε 24,500). Sol in water, alcoho[illegible]

USE: Catalyst.

8572. Sodium Hexafluorosilicate. [illegible] sodium silicofluoride; Salufer. F_6Na_2Si; [illegible] 60.62%, Na 24.46%, Si 14.92%. Na[illegible] of commerce is about 98% pure.

White, granular powder. d 2.68 [illegible] decompn. Sol in 150 parts cold; 40 [illegible] in alc. The soln in cold water is neu[illegible] 125 mg/kg. *Handbook of Toxicolog[illegible]* Ed. (Saunders, Philadelphia, 1956) [illegible]

USE: In enamels for china and po[illegible] as insect exterminator and poison [illegible] of woolens.

THERAP CAT (VET): Pediculicide.

8573. Sodium Hydride. HNa. [illegible] Na 95.79%. NaH. Prepd by bea[illegible] sodium dispersed in oil or mixed w[illegible] thracene above 250°: Hansley, [illegible] 23, 1332 (1945). Laboratory [illegible] sodium dispersions: Matsop[illegible] (1957). Book: J. Plesek[illegible] *Use in the Laboratory and in Ind[illegible]* don, 1968) 185 pp.

Silvery needles; the commerc[illegible] powder. d 1.396. Dec 425[illegible] violently with lower alcohols [illegible]

NOV. 13. 2000 6:36PM