

HACKH'S

# CHEMICAL DICTIONARY

Based on  
Recent  
Chemical  
Literature

*(American and British Usage)*

4th edition

Completely revised and edited by

**Julius Grant**

Containing the  
Words Generally Used  
In Chemistry, and Many  
of the Terms Used in the  
Related Sciences of Physics,  
Astrophysics, Mineralogy,  
Pharmacy, Agriculture,  
Biology, Medicine,  
Engineering, etc.

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- simple.** Not complex, as s. spectrum; not mixed, as s. ether; not double, as s. salt.
- simisin.** Sesame.
- simulator.** A device that produces a token performance, e.g., of plant or apparatus, by means different from the plant itself.
- simultaneous reaction.** (1) Side reaction. (2) Secondary reaction. (3) One of 2 or more reactions that occur at the same time in the same reacting system.
- sinactine.**  $C_{21}H_{29}NO_4 = 339.0$ . *l*-Tetrahydroepiberberine. A diisoquinoline alkaloid from *Sinomenium actum*.
- sinalbin.**  $C_{30}H_{41}O_{16}N_2S_2 = 722.27$ . A glucoside from the seeds of *Brassica (Sinapis) alba*, white mustard seed (Cruciferae). Colorless crystals, hydrolyzed to sinapine, *p*-oxybenzyl mustard oil, and glucose.
- sinamine.**  $C_4H_8N_2 = 82.1$ . Allylcyanamide. An amine from black mustard seed. **thio-** Allylsulfocarbimide.
- sinapic acid.**  $C_{11}H_{12}O_5 = 224.1$ . An unsaturated oxyacid derived from sinapine.
- sinapine.**  $C_{16}H_{25}O_6N = 327.3$ . An alkaloid from sinalbin, the glucoside of white mustard; hydrolyzes to sinapic acid and choline.
- sinapis alba.** White *mustard*. *s. nigra*. Black *mustard*.
- sinapolin.**  $C_{14}H_{12}O_2N_2 \cdot C_7H_{12}O_2N = 382.3$ . Diallylurea, in mustard oil.
- sine.** The ratio of the length of the side opposite an angle of a right-angled triangle to that of the hypotenuse. Cf. *cosine*.
- singular solution.** A solution with a maximum or minimum on its vapor-pressure curve.
- sinigrin.** Potassium myronate.
- sinistrin.**  $C_6H_{10}O_5 = 162.1$ . A levorotatory carbohydrate from squill.
- sinkaline.** Choline.
- sinomenine.**  $C_{19}H_{23}O_4N = 329.3$ . An isoquinoline alkaloid from *Sinomenium acutum* (Menispermaceae). Colorless needles, m.182.
- Sinox.** Trademark for an aqueous paste of sodium dinitroorthotolyl oxide; a weedicide.
- sinter.** (1) Saline incrustations formed around mineral springs. (2) See *sintering*. **calcareous-** Tufa, travertine, or onyx. **iron-** Amorphous scorodite. **pearl-** A modification of silica. **siliceous-** (1) Geyserite. (2) Fluorite.
- sintering.** The coalescence by heat of crystalline or amorphous particles into a solid mass, due to the formation of allotropic crystals. Cf. *fritted*.
- siomine.**  $(CH_2)_5N_4I_4 = 633.6$ . Hexamethyleneamine tetraiodide. Colorless powder, insoluble in water.
- sipalin.** A plasticizing mixture of the cyclohexyl and methylcyclohexyl esters of adipic acid.
- siphon.** A  $\cap$  shaped tube with one short leg which takes up liquid and delivers it, by atmospheric pressure, to a lower level.
- sipyllite.** A negative columbate of erbium and other rare-earth metals.
- Sirius.** Trade name for a viscose synthetic fiber.
- sirup.** Syrup.
- sisal.** S. hemp. A fiber from the leaves of *Agave sisalana*, a cultivated plant of Mexico and E. Africa; used in making rope, twine, and sacking. Cf. *henequen*. **s. wax.** A hard wax from s. waste, m.63, decomp. 95, d.1.007, sapon. val. 55, I. val. 26.
- sitosterol.**  $C_{27}H_{45}OH = 386.4$ . An isomer of cholesterol from wheat, corn, bran, and calabar beans; occurs in cigarette smoke. Cf. *cholane*. **beta-**  $C_{29}H_{48}O = 412.4$ . 22-Dihydrostigmasterol. **dihydro-**  $C_{27}H_{48}O \cdot H_2O = 406.37$ . m. 140, from wheat, insoluble in water.
- six hundred six (606).** Salvarsan.
- Six hundred sixty-six (666).** (1) Trademark for a line of common cold remedies. (2) Trade name for  $\gamma$ -benzene hexachloride, an insecticide.
- sizing.** The dressing and preparation: (1) of textiles for printing, (2) of surfaces to receive paint, (3) of paper to prevent water or ink absorption due to capillary attraction. **fortified-** Rosin s. whose effect is enhanced by reaction with maleic anhydride, which produces 2 extra carboxyl groups. **tub-** See *tub*.
- s. materials.** Starch, gums, gelatin, rosin, tragacanth, albumin, casein, and plastics; used to size textiles or paper.
- skatole.**  $C_9H_9N = 131.1$ . Methylindole. Colorless leaflets with strong fecal odor, m.95, insoluble in water; a protein decomposition product.
- skatoxyl.** The radical  $C_9H_8ON-$ , from skatole.
- skelgas.** Pentane.
- skep.** A heat-resistant, Russian, synthetic rubber copolymer of ethylene and propylene.
- skiadin viscous.** Injection of iodized oil.
- skiagenol.** A vegetable radiopaque oil (20% iodine).
- skiagram, skiagraph.** (1) Radiograph. Skiogram. A photograph made by X rays. (2) Scotograph.
- skiameter.** A device to measure the intensity of X rays preparatory to a photographic exposure.
- skimmianine.**  $C_{32}H_{25}O_9N_3 = 599.3$ . An alkaloid from the Japanese plant, *Skimmia japonica* (Rutaceae).
- skimming.** Removing floating matter from the surface of a liquid.
- skimmiol.** Taraxerol.
- skiogram.** Skiagram.
- skiver.** A sheepskin, split, and tanned with sumach, Cf. *roan*.
- sklero-** See *sclero*.
- skleron.** An aluminum alloy containing Li, Cu, Zn, and Mn.
- sklodowskite.**  $MgO \cdot 2UO_3 \cdot 2SiO_2 \cdot 7H_2O$ . A radioactive mineral (Congo). Named for Mme. Curie (née Sklodowska).
- skitography.** Scotography.
- Skraup, Zdenko Hans.** 1850-1910. Polish chemist. S. synthesis. Quinoline synthesis. The ring formation,  $C_6H_4 \cdot N : CH : CH : CH$ , obtained by heating an aromatic amine with a free ortho position (as aniline) with glycerin and concentrated sulfuric acid in presence of an aromatic nitro body (as nitrobenzene).
- skullcap.** Scutellaria.
- skunk.** The mammal *Mephitis mephitis*; it has an offensively odorous secretion. **s. bush.** Feverbush. The leaves of *Garrya Fremontii* (Cornaceae). California; a tonic containing garryine. **s. cabbage.** The rhizomes of *Symplocarpus foetidus* (Araceae); a stimulant and antispasmodic.
- skutterudite.**  $CoAs_3$ . A native arsenide.
- slack.** (1) Slake. Quench with water. (2) Lumpy and damp, as lime exposed to air. (3) Loose. (4)