

MATERIAL SAFETY DATA SHEET

SECTION 1 - PRODUCT IDENTIFICATION

PRODUCT NAME: **Wood-Vitality Step 1**

INFOTRAC 24 HOUR EMERGENCY PHONE NO.: 1-800-535-5053

MANUFACTURER: SMITH & CO.

5100 CHANNEL AVENUE, RICHMOND CA 94804
510-237-6842

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SECTION 2 - COMPOSITION/INFORMATION ON INGREDIENTS

<i>Chemical and Common Name</i>	<i>CAS #</i>	<i>Weight%</i>	<i>OSHA PEL</i>	<i>ACGIH TLV</i>
No hazardous ingredients.				
Environmentally friendly Hydrogen hydroxylate				
Water	7732-18-5	>50%	N/A	N/A
Environmentally friendly Inorganic anions [proprietary]				
N/A [mixture]		<50%	Not Established	Not Established
Environmentally friendly Inorganic cations [proprietary]				
N/A [mixture]		<50%	Not Established	Not Established
Environmentally friendly Organic anions [proprietary]				
N/A [mixture]		<50%	Not Established	Not Established
Environmentally friendly Organic cations [proprietary]				
N/A [mixture]		<50%	Not Established	Not Established
Environmentally friendly Organic nonionic oligomers [proprietary]				
N/A [mixture]		<50%	Not Established	Not Established

SECTION 3 - HAZARDS IDENTIFICATION

* EMERGENCY OVERVIEW *

Clear, colorless, odorless, liquid of low viscosity. Causes eye, skin and digestive tract irritation. Spray mist causes irritation to respiratory tract. High pH may be harmful to Aquatic Life. Noncombustible. Spills may be slippery. Reacts with acids, ammonium salts, reactive metals and some organics.

SKIN CONTACT:

Causes irritation due to high pH.

EYE CONTACT:

Causes irritation due to high pH.

INHALATION:

Spray mist irritating to respiratory tract due to high pH.

INGESTION:

May cause irritation to mouth, esophagus and stomach due to high pH.

CHRONIC HAZARDS:

No known chronic hazards. Not listed by NTP, IARC or OSHA as a carcinogen.

PHYSICAL HAZARDS:

None known

SECTION 4 - FIRST AID MEASURES

SKIN CONTACT:

In case of contact, immediately flush skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if there is discomfort.

EYE CONTACT:

In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention.

INHALATION:

Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

INGESTION:

If swallowed, DO NOT induce vomiting. Medically untrained persons should not attempt to induce vomiting. Get medical attention immediately. If victim is fully conscious, give a cupful of water. Never give anything by mouth to an unconscious person.

SECTION 5 - FIRE FIGHTING MEASURES

FLAMMABLE LIMITS: This material is noncombustible.

EXTINGUISHING MEDIA:

This material is compatible with all extinguishing media.

HAZARDS TO FIRE-FIGHTERS: See Section 3 for information on hazards when this material is present in the area of a fire.

FIRE-FIGHTING EQUIPMENT: The following protective equipment for fire fighters is recommended when this material is present in the area of a fire: chemical goggles, body-covering protective clothing, chemical resistant gloves and rubber boots.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

PERSONAL PROTECTION: It is generally good practice to wear chemical goggles, body-covering protective clothing, chemical resistant gloves, and rubber boots due to high pH. See section 8.

ENVIRONMENTAL HAZARDS: Sinks and mixes with water. The high pH of this material may be harmful to some Aquatic Life, see Section 12. Only water will evaporate from a spill of this material.

SMALL SPILL CLEANUP: Mop up and pH-neutralize liquid, then discharge to sewer in accordance with federal, state and local regulations or permits.

LARGE SPILL CLEANUP: Keep unnecessary people away; isolate hazard area and deny entry. Do not touch or walk through spilled material. Stop leak if you can do so without risk. Prevent runoff from entering into storm sewers and ditches which lead to natural waterways. Isolate, dike and store discharged material, if possible. Use sand or earth to contain spilled material. If containment is impossible, pH-neutralize contaminated area and flush with large quantities of water. Once pH-neutralized, product does not pose an environmental hazard.

CERCLA RQ: There is no CERCLA Reportable Quantity for this material. If a spill goes off site, notification of state and local authorities is Recommended.

SECTION 7 - HANDLING AND STORAGE

HANDLING: Avoid contact with eyes, skin and clothing due to high pH. Avoid breathing spray mist due to high pH. Keep container closed. Promptly clean residue from closures with cloth dampened with water. Promptly clean up spills due to high pH.

STORAGE: Keep containers closed. Store in clean steel or plastic containers. Separate from acids, reactive metals, and ammonium salts. Storage temperature 0-95° C. Loading temperature 45-95 ° C. Do not store in aluminum, copper, brass, zinc or galvanized containers.

SECTION 8 - EXPOSURE CONTROLS/PERSONAL PROTECTION

EYE PROTECTION:

Wear Chemical goggles due to high pH.

SKIN PROTECTION:

Wear body-covering protective clothing & gloves due to high pH.

RESPIRATORY PROTECTION:

Use a NIOSH-approved dust and mist respirator where spray mist occurs due to high pH. Observe OSHA regulations for respirator use (29 C.F.R. §1910.134)

ENGINEERING CONTROLS:

Use with adequate ventilation due to high pH. Keep containers closed. Safety shower and eyewash fountain should be within direct access.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

STABILITY:

This material is stable under all conditions of use and storage.

COLOR:

Clear & Colorless.

ODOR:

Odorless or musty odor.

pH:

Approximately 10

SPECIFIC GRAVITY:

Approximately 1.02 g/cm³ (20°C), 8.4 lbs/gal

SECTION 10 - STABILILTY AND REACTIVITY

STABILITY: This material is stable under all conditions of use and storage.

CONDITIONS TO AVOID: None.

MATERIALS TO AVOID: May form a non-hazardous gel when mixed with acid. Also, flammable hydrogen gas may be produced on contact with aluminum, tin, lead, and zinc.

HAZARDOUS DECOMPOSITION PRODUCTS:

None, except as above.

SECTION 11 - TOXICOLOGICAL INFORMATION

ACUTE DATA: This material has not been tested for primary eye irritation potential. Similar solutions produce corneal, iridal and conjunctival irritation.

This material has not been tested for primary skin irritation potential. Similar solutions produce skin irritation and are more irritating to abraded skin than intact skin. Human experience confirms that irritation occurs when alkaline salts get on clothes at the collar, cuffs or other areas where abrasion may occur. The acute oral toxicity of this product has not been tested. When similar salts were tested on a 100% solids basis, their single dose acute oral LD50 in rats ranged from 1500 mg/kg to 3200 mg/kg. The acute oral lethality resulted from nonspecific causes.

SUBCHRONIC DATA: In a study of rats fed these materials in drinking water for three months, at 200, 600 and 1800 ppm, changes were reported in the blood chemistry of some animals, but no specific changes to the organs of the animals due to specific material administration were observed in any of the dosage groups. Another study reported adverse effects to the kidneys of dogs fed such materials in their diet at 2.4g/kg/day for 4 weeks, whereas rats fed the same dosage did not develop any treatment-related effects. Decreased numbers of births and survival to weaning was reported for rats fed these materials in their drinking water at 600 and 1200 ppm.

SECTION 11 - TOXICOLOGICAL INFORMATION **CONTINUED**

SPECIAL STUDIES: This product was not mutagenic to the bacterium E. Coli when tested in a mutagenicity bioassay. There are no known reports of carcinogenicity of such materials. Frequent ingestion over extended periods of time of gram quantities is associated with the formation of kidney stones and other inorganic urinary calculi in humans. None of the ingredients is listed by IARC, NTP or OSHA as a carcinogen.

SECTION 12 - ECOLOGICAL INFORMATION

ECO TOXICITY: The following data is reported on a 100% solids basis: A 96 hour median tolerance for fish (*Gambusia affinis*) of 4100 ppm; a 96 hour median tolerance for water fleas (*Daphnia magna*) of 325 ppm; a 96 hour median tolerance for snail eggs (*Lymnea*) of 844 ppm; and a 96 hour median tolerance for Amphipoda of 120 ppm.

ENVIRONMENTAL FATE: This material is not persistent in aquatic systems, but its high pH when undiluted or unneutralized is acutely harmful to Aquatic Life. Diluted material rapidly depolymerizes to yield dissolved minerals in a form that is indistinguishable from natural dissolved minerals. It does not contribute to BOD. This material does not bioaccumulate except in species that use minerals as a structural material such as diatoms and sponges. None of the ingredients will appreciably bioconcentrate up the food chain.

PHYSICAL/CHEMICAL: Sinks and mixes with water. Only water will evaporate from this material.

SECTION 13 - DISPOSAL CONSIDERATIONS

CLASSIFICATION: Disposed material is not a hazardous waste.

DISPOSAL METHOD: Neutralize high pH and landfill solids in accordance with federal, state and local regulations. Flush neutral liquid to sewer in accordance with federal, state and local regulations and permits.

SECTION 14 - TRANSPORTATION INFORMATION

DOT UN STATUS: This material is not regulated hazardous material for transportation.
Harmonized Tariff Code: 3402.19.5000

SECTION 15 - REGULATORY INFORMATION

CERCLA: No CERCLA Reportable Quantity has been established for this material.
SARA TITLE III: Not an Extremely Hazardous Substance under §302 Not a Toxic Chemical under §313. Hazard Categories under §§311/312: Acute
TSCA: All ingredients of this material are listed on the TSCA inventory.

SECTION 16 - OTHER INFORMATION

Prepared by: Steve Smith

THE INFORMATION ON THIS SAFETY DATA SHEET IS BELIEVED TO BE ACCURATE AND IT IS THE BEST INFORMATION AVAILABLE TO SMITH & COMPANY. THIS DOCUMENT IS INTENDED ONLY AS A GUIDE TO THE APPROPRIATE PRECAUTIONS FOR HANDLING A CHEMICAL BY A PERSON TRAINED IN CHEMICAL HANDLING. SMITH & CO. MAKES NO WARRANTY OF MERCHANTABILITY OR ANY OTHER WARRANTY, EXPRESS OR IMPLIED WITH RESPECT TO SUCH INFORMATION OR THE PRODUCT TO WHICH IT RELATES, AND WE ASSUME NO LIABILITY RESULTING FROM THE USE OR HANDLING OF THE PRODUCT TO WHICH THIS SAFETY DATA SHEET RELATES. USERS AND HANDLERS OF THIS PRODUCT SHOULD MAKE THEIR OWN INVESTIGATIONS TO DETERMINE THE SUITABILITY OF THE INFORMATION PROVIDED HEREIN FOR THEIR OWN PURPOSES.

The following pertains to all Smith & Co. products, including this one:

California State Product Liability Warning (Business and Professions Code, Section 1714.45): This product is inherently unsafe. It cannot be made safe.

California State Health & Safety Code Section 25249.6: Detectable amounts of chemicals known to the State of California to cause cancer, birth defects or other reproductive harm may be found in this material, its containers, paper labels or packing materials associated therewith.

SMITH & CO.

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