
MATERIAL SAFETY DATA SHEET

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product name: FORMALDETOX

Catalog number: 202

General use: Detoxifies formalin solutions.

Product description: White granules of sodium percarbonate.

Manufacturer

Anatech Ltd.
1020 Harts Lake Road
Battle Creek, MI 49037
USA

Emergency contact information

Health:	Anatech Ltd.	800-262-8324	8 am - 5 pm ET, M-F
Transportation:	CHEMTREC	800-424-9300	24 hours

2. COMPOSITION AND INFORMATION ON INGREDIENTS

(Note: Percentage composition is withheld as a trade secret.)

<u>Component</u>	<u>CAS #</u>	<u>Exposure limits</u>
Sodium percarbonate	156630-89-4	Not established.
Sodium carbonate	497-19-8	Not established.
Sodium metasilicate	7722-84-1	Not established.

3. HAZARDS IDENTIFICATION

Emergency overview

White granules of sodium percarbonate; a mild oxidizer.

Not likely to pose a hazard under normal conditions of use.

Potential health effects

(Human health effects only.)

Primary route(s) of exposure: Eyes.

Inhalation: Slight nose and throat irritant.

Eye: Severe eye irritant. Can cause burns to eyes.

Skin: Slight irritant.

Ingestion: Severe irritant of the mouth, throat, esophagus and stomach.

3. HAZARDS IDENTIFICATION (continued)

Chronic effects: Prolonged and repeated inhalation can cause sore throat, nose bleeds and chronic bronchitis. Repeated skin contact can cause dermatitis.

Signs and symptoms: Eyes may water and become reddened. Inhalation can cause coughing. Ingestion will result in bloating of stomach, nausea, vomiting.

4. FIRST AID MEASURES

Inhalation: Remove victim to fresh air if coughing or difficulty in breathing is experienced. Consult a physician if symptoms persist or worsen. Administer oxygen or artificial respiration as needed.

Eye: Flush eyes for at least 15 minutes in an eyewash station. If symptoms persist after washing, consult a physician.

Skin: Remove contaminated clothing, including footwear; wash before reuse or discard. For minor exposure, wash affected area with water and mild soap, rinsing thoroughly; apply a good quality skin lotion. In cases of prolonged, repeated or extensive exposure, rinse affected area or entire body for at least 15 minutes. For severe conditions, consult a physician.

Ingestion: Call a poison control center immediately. If victim is conscious, have him/her drink several glasses of water to dilute the solution. Induce vomiting only upon the advice of a physician or poison control authority.

5. FIRE FIGHTING MEASURES

Flammable properties

Flash point: Not applicable.

Flammable limit: Not applicable.

Autoignition temperature: Not applicable.

Flammability classification: Nonflammable.

Flame propagation: None.

Hazardous products of combustion: Decomposition from exposure to moisture liberates oxygen and generates heat which can support combustion. Decomposes with heat to liberate oxygen which also may cause a pressure burst if material is confined.

Extinguishing media: ABC rated portable fire extinguishers should be used. Professional fire fighters may use water spray, dry chemical or carbon dioxide.

Fire fighting instructions: Sealed chemical suits and self contained breathing apparatus are necessary for fighting fires involving substantial volumes of this product.

6. ACCIDENTAL RELEASE MEASURES

Remove dry granules. Wash affected area with water.

Comply with all applicable governmental regulations on spill reporting and on the handling and disposal of hazardous waste.

7. HANDLING AND STORAGE

Handling: No special precautions required.

Storage: Store at room temperature. Store in a dry place in original container away from excessive heat. Do not allow contamination with moisture or heavy metal salts.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Engineering controls: Good general room ventilation is essential.

Personal protective equipment

Respiratory protection: Generally not needed, but a NIOSH-approved particle mask may be used if desired.

Skin protection: Use protective gloves when handling this powder. An eyewash station and safety shower must be nearby, preferably in the same room, no more than 10 seconds away.

Eye protection: Use splash-proof goggles. Do not use safety glasses. An eyewash station and safety shower must be nearby, preferably in the same room, no more than 10 seconds away.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: White granules.

Odor: None.

Physical state: Solid.

pH: Not applicable.

Vapor pressure: Not applicable.

Vapor density: Not applicable.

Melting point: Not applicable.

Boiling point: Not applicable.

Solubility in water: 140 g/l @ 24°C (75°F)

Specific gravity: Not applicable.

10. STABILITY AND REACTIVITY

Chemical stability: Slow release of oxygen is normal.

Conditions to avoid: Heat and moisture.

Incompatibility with other materials: Water, acids, bases, salts of heavy metals, reducing agents, organic materials and flammable substances.

Hazardous decomposition products: Oxygen; decomposition releases steam and heat.

Hazardous polymerization: None.

11. TOXICOLOGICAL INFORMATION

Acute eye effects: The material produced severe damage when administered to rabbit eyes.

Acute skin effects: The material produced slight irritation when applied to rabbit skin. No sensitization was noted when administered as a 75% w/v mixture during induction and as a 25% w/v mixture at challenge.

Acute oral effects: OSHA considers chemicals to be toxic if their LD₅₀ is at or below 500 mg/kg. LD₅₀ is the dose killing 50% of the test animals in a given time (usually 4 hours). LD₅₀ was 14,034 mg/kg in rats.

Acute inhalation effects: OSHA considers chemicals to be toxic if their LC₅₀ is at or below 20 mg/kg. LC₅₀ is the airborne concentration killing 50% of the test animals. LC₅₀ was > 4,580 mg/m³ in rats.

Chronic effects/carcinogenicity: None known.

Teratology: None known.

Reproductive effects: None known.

Mutagenicity: None known.

12. ECOLOGICAL INFORMATION

Ecotoxicity:

Fish

Pimephales promelas: LC₅₀: 70.7 mg/l

Pimephales promelas: 96 hr NOEC: 1 mg/l

Crustaceans

Daphnia pulex: EC₅₀: 4.9 mg/l

Daphnia pulex: 48 hr NOEC: 1 mg/l

Environmental fate: Toxic for aquatic organisms. The hazard for the environment is limited because it does not bioaccumulate, and it degrades abiotically into products of low toxicity.

13. DISPOSAL CONSIDERATIONS

Dissolve in water and pour down the drain. Aqueous solutions are not hazardous.

14. TRANSPORTATION INFORMATION

Packaging for hazardous shipments must meet the specifications as required by the current editions of *International Air Transportation Association (IATA) Dangerous Goods Regulations* and the United States Department of Transportation *49 CFR*.

DOT (ground and air) and IATA: **Proper Shipping Name:** Sodium carbonate peroxyhydrate
UN #: 3378
Hazard Class: 5.1
Packing Group: II

15. REGULATORY INFORMATION

OSHA (USA): Under the Hazard Communication Standard and the Laboratory Standard, this product is a hazardous material: it is an eye irritant. The OSHA Standards cited mandate that exposed workers receive proper training in the properties of this product, work practices involved with its handling and disposal, and interpretation of its MSDS.

FDA (USA): Not applicable.

EPA (USA): Formaldetox is a reportable substance under SARA Title III.

16. OTHER INFORMATION

Label warnings: Severe eye irritant. Keep off mucous membranes.

NFPA (National Fire Protection Association) Rating:

General note: This rating is applicable only to safeguard the lives of individuals who may be concerned with fires occurring in an industrial plant or storage location. The ratings provide information to emergency personnel on whether to evacuate the area or how to perform control procedures. It is not descriptive of hazards under normal conditions of occupational use, and is even less applicable to anticipated laboratory-scale use.

Health 2: Materials that, under emergency conditions, can cause temporary incapacitation or residual injury.

Flammability 0: Materials that will not burn under typical fire conditions, including intrinsically noncombustible materials such as concrete, stone, and sand.

Instability 1: Materials that in themselves are normally stable, but that can become unstable at elevated temperatures and pressures.

Special: OX