

Product Name: 20 Volume Clear Developer
Date: 7/21/2015

SECTION 1 **IDENTIFICATION**

Supplier: Divina Professional Products
55 Container Drive
Terryville, Ct 06786
(860) 589-7502

Distributor:

U.S. PERS Emergency Telephone: 1-800-633-8253
Product Name: **20 Volume Clear Developer**
Synonyms: Hydrogen Peroxide Solution Albone, Hydrogen Dioxide, Perhydrol, Superoxol, Perone
Chemical Name: Hydrogen Peroxide
Chemical Formula: H₂O₂
CAS Number: 7722-84-1

SECTION 2 **HAZARDOUS COMPONENTS**

Emergency Overview
Warning



GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

H272: Oxidizing liquids (Category 3)
H319: Eye irritation (Category 2A)
H335: Specific target organ toxicity – single exposure (Category 3)
H412: Chronic aquatic toxicity (Category 3)

Hazard Statement(s)

H272: May intensify fire; oxidizer
H319: Causes serious eye irritation
H335: May cause respiratory irritation.
H412: Harmful to aquatic life with long-lasting effects

Precautionary Statement(s)

P210: Keep away from heat.
P220: Keep/Store away from clothing/ combustible materials.
P221: Take any precaution to avoid mixing with combustibles.
P261: Avoid breathing gas/mist/vapors/spray.
P264: Wash skin thoroughly after handling.
P271: Use only outdoors or in a well-ventilated area.
P273: Avoid release to the environment.
P280: Wear protective gloves/eye protection/face protection.

P321: Specific treatment (see First Aid Measures on this label).
P312: Call a POISON CENTER or doctor/physician if you feel unwell.
P337+P313: If eye irritation persists: Get medical advice/attention.
P370+378: In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.

P403+P233: Store in a well-ventilated place. Keep container tightly closed

P405: Store locked up.

P501: Dispose of contents/ container to an approved waste disposal plant.

SECTION 3 COMPOSITION/INFORMATION ON INGREDIENTS

<u>Component</u>	<u>CAS Number</u>	<u>Percent</u>
Hydrogen Peroxide	7722-84-1	8%-20%

SECTION 4 FIRST AID MEASURES

General Advice: Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

Inhalation: If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

Skin Contact: Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. Consult a physician.

Eye Contact: Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician. Continue rinsing eyes during transport to hospital.

Ingestion: Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth out with plenty of water. Consult a physician.

Notes to Physician: Treat Symptomatically. Hydrogen Peroxide decomposes rapidly in contact with organic matter and oxygen.

SECTION 5 FIRE FIGHTING MEASURES

Extinguishing Media: Flooding quantities of water only in the early stages of a fire. Water spray or fog. DO NOT use halogenated fire extinguishing agents

Firefighting: Alert Emergency Responders and tell them location and nature of hazard.

- May be violently or explosively reactive.
- Wear full body protective clothing with breathing apparatus.
- Prevent, by any means available, spillage from entering drains or water courses.

Use firefighting procedures suitable for surrounding area. Cool fire exposed containers with water spray from a protected location. DO NOT approach containers suspected to be hot. If safe to do so, remove containers from path of fire. When any large container (including road and rail tankers) is involved in a fire, consider evacuation by 800 meters in all directions.

General Fire Hazards/Hazardous Combustible Products: Non combustible liquid. Will not burn but increases intensity of fire. Contact with readily oxidizable organic material may cause ignition /fire. Heating may cause expansion or decomposition leading to violent rupture of containers.

Fire Incompatibility: Avoid contact with organic materials / compounds, particularly finely divided combustible materials as ignition may result. Violent catalytic decomposition will occur in contact with certain metals such as iron, copper, chromium, brass, bronze, lead, silver, manganese or their salts.

SECTION 6 **ACCIDENTAL RELEASE MEASURES**

Minor Spills: Clean up all spills immediately. Avoid contact with skin and eyes. Wear impervious gloves and safety glasses. Remove all ignition sources. Small quantities may be discharged to sewer with a large excess of water. Wipe up.

Major Spills

Personal precautions, protective equipment and emergency procedures: Clear area of personnel and move upwind. Alert Emergency Responders and tell them location and nature of hazard. May be violently or explosively reactive. Wear full body protective clothing with breathing apparatus. No smoking, naked lights or ignition sources. Increase ventilation.

Environmental Precautions: Prevent, by any means available, spillage from entering drains or water and water courses. Stop leak if safe to do so. Contain spill with sand, earth or vermiculite. If contamination of drains or waterways occurs, advise emergency services.

Methods and materials for containment and cleaning up: Collect recoverable product into labeled containers for recycling. DO NOT return unused product to containers. Absorb remaining product with sand, earth or vermiculite. Collect residues and place in labeled plastic containers with vented lids. Wash spill area with large quantities of water. After clean up operations, decontaminate and launder all protective clothing and equipment before storing and re-using.

SECTION 7 **HANDLING AND STORAGE**

Procedure For Handling: Avoid generating and breathing mist. Handle and open container with care. Atmosphere should be regularly checked against established exposure standards to ensure safe working conditions are maintained. Use good occupational work practice. Observe manufacturer's storing and handling recommendations. Avoid all personal contact, including inhalation. Wear protective clothing when risk of exposure occurs. Avoid smoking, naked lights, heat or ignition sources. Use in a well-ventilated area. Avoid contact with incompatible materials. DO NOT return unused product to containers. Avoid sources of heat. Mild steel, brass, bronze and copper equipment should not be used. When handling, DO NOT eat, drink or smoke. Always wash hands with soap and water after handling. Work clothes should be laundered separately. Launder contaminated clothing before re-use.

Recommended Storage Methods: Polyethylene or polypropylene container. Packing as recommended by manufacturer. Container to have vented cap. Properly passivated aluminum or stainless steel containers. Porcelain, vitreous stoneware.

Storage Requirements: Keep cool. Store below 25°C. Observe manufacturer's storing and handling recommendations. Store in original containers and Store under cover. No smoking, naked lights, heat or ignition sources. Store in a cool, dry and well-ventilated area. Store in a cool area and away from sunlight. Store away from incompatible materials. DO NOT use mild steel or galvanized containers. Store in an upright position Protect containers against physical damage. Check regularly for spills and leaks.

SECTION 8 **EXPOSURE CONTROL/PERSONAL PROTECTION**

Control Parameters

Components with workplace control parameters

Component	CAS-No.	Value	Control Parameters	Basis
Hydrogen peroxide	7722-84-1	TWA	1 ppm	USA. ACGIH Threshold Limit Values (TLV)
	Remarks	Eye, skin, & Upper Respiratory Tract irritation. Confirmed animal carcinogen with unknown relevance to humans.		
		TWA	1 ppm 1.4 mg/m ³	USA. NIOSH Recommended Exposure Limits
		TWA	1 ppm 1.4 mg/m ³	USA. Occupational Exposure Limits (OSHA) – Table Z-1 Limits for Air Contaminants
		The value in mg/m ³ is approximate.		
		TWA	1 ppm 1.4 mg/m ³	USA. OSHA – TABLE Z-1 Limits for Air Contaminants – 1910.1000

Exposure Controls

Appropriate Engineering Controls: Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Personal Protective Equipment

Eye/Face Protection: Tightly fitting safety goggles. Faceshield (8-inch minimum). Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin Protection: Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Body Protection: Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory Protection: Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multipurpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of Environmental Exposure: Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

SECTION 9 **PHYSICAL AND CHEMICAL PROPERTIES**

Appearance:	Clear, colorless liquid
Odor:	Slightly Pungent
Odor Threshold:	no data available
pH (1% solution):	4.0-5.0
Melting Range(°F):	59-91
Boiling Point and Boiling Range:	212-217°F (100-103°C)
Freezing Point:	9-21°F (-13 - -6°C)
Flash Point:	not applicable
Evaporation Rate:	>1 BuAc=1
Flammability (solid, gas):	no data available
Upper/Lower Flammability or Explosive Limits:	no data available
Vapor Pressure (mmHg):	28.00 mmHg (86°F (30°C))
Vapor Density:	no data available
Specific Gravity (water = 1):	1.07-1.13
Water Solubility (g/L):	Miscible
Partition coefficient (n-octanol/water):	no data available
Auto-ignition Temperature:	no data available
Decomposition Temperature:	no data available
Viscosity:	no data available
Explosive Properties:	no data available
Volatile Component (%vol):	100
Oxidizing Properties:	no data available
Molecular Weight:	34.01 g/mol

SECTION 10 **STABILITY AND REACTIVITY**

Chemical Stability: Stable under recommended storage condition.

Conditions Contributing To Instability: Avoid any contamination of this material as it is very reactive and any contamination is potentially hazardous. Presence of heat source and direct sunlight. Solutions of hydrogen peroxide decompose slowly releasing oxygen. Heat or contaminants will accelerate decomposition. Containers may be pressurized. Hydrogen peroxide is decomposed by alkalis and even ordinary dust or rust.

Storage Incompatibility: Rotate all stock to prevent ageing. Use on FIFO (First In-First Out) basis. Avoid any contamination of this material as it is very reactive and any contamination is potentially hazardous. Segregate from combustible materials, particularly finely divided combustible materials and reducing agents.

Incompatible Materials: Zinc, Powdered metals, Iron, Copper, Nickel, Brass, Iron and iron salts.

SECTION 11 **TOXICOLOGICAL INFORMATION**

Acute Toxicity

SAFETY DATA SHEET
20 Volume Clear Developer

- Oral: No deaths occurred. (Rat) LD₀ > 5,000 mg/kg. (10 %) (as aqueous solution)
- Dermal: May be harmful in contact with skin. (rat and rabbit) LD₅₀ > 2,000 mg/kg. (35 %) (as aqueous solution)
- Inhalation: No deaths occurred. (Rat) 4 h LD₀ > 0.17 mg/l. (50 %) (saturated vapor)

SECTION 11 **TOXICOLOGICAL INFORMATION - Continued**

Skin Irritation: Not irritating. (Rabbit) (3 - 10 %) (aqueous solution)

Eye Irritation: Causes serious eye irritation. (Rabbit) (10 %) (aqueous solution)
Causes serious eye irritation. (Rabbit) (8 %) (aqueous solution)

Specific Target Organ Toxicity - Single Exposure: May cause respiratory irritation.

Repeated Dose Toxicity

- Repeated drinking water administration to rat and mouse / affected organ(s): Gastro-intestinal tract / signs: irritation
- Repeated inhalation administration to Rat / affected organ(s): nose / signs: irritation

Carcinogenicity: Chronic drinking water administration to rat and mouse/affected organ(s): Gastro-intestinal tract/signs: Increased incidence of tumors was reported. Classified by the International Agency for Research on Cancer as: Group 3: Unclassifiable as to carcinogenicity in humans.

Genotoxicity: Assessment in Vitro: Genetic changes were observed in laboratory tests using: bacteria, animal cells
Assessment in Vivo: Genetic changes were observed in a laboratory test using: mice, rats

Human Experience:

Inhalation: Throat: irritation. (based on reports of occupational exposure to workers)

Skin contact: Skin: bleaching of hair. (based on reports of occupational exposure to workers)

Eye contact: Eye: irritating. (based on reports of occupational exposure to workers)

Ingestion:

Gastrointestinal tract: bloating, ulceration, burns. (accidental exposure to concentrated solutions)

Lung: accumulation of fluid in the lungs, death. (severity of effects depends on extent of exposure)

SECTION 12 **ECOLOGICAL INFORMATION**

Chemical Fate and Pathway

Biodegradation: Readily biodegradable. (0.02 d) biodegradation 99 %

Octanol Water Partition Coefficient: log Pow = -1.57 (calculated)

Ecotoxicology

Aquatic toxicity data: Harmful. Pimephales promelas (fathead minnow) 96 h LC₅₀ = 16.4 mg/l

Aquatic invertebrates: Toxic. Daphnia pulex (Water flea) 48 h EC₅₀ = 2.4 mg/l

Algae: Toxic. Skeletonema costatum 72 h ErC₅₀ = 1.38 mg/l

Microorganisms: Activated sludge 0.5 h EC₅₀ = 466 mg/l

Activated sludge 3 h EC₅₀ > 1,000 mg/l

Chronic toxicity to aquatic invertebrates: Harmful. *Daphnia magna* (Water flea) 21 d NOEC (reproduction) = 0.63 mg/l

SECTION 13 **DISPOSAL CONSIDERATIONS**

Waste Treatment Methods

Empty container retains product residue. Observe all label precautions. Do not distribute, make available, furnish or reuse empty container. Triple rinse empty container and add rinse water to pool. Dispose of container with normal trash.

SECTION 14 **TRANSPORT INFORMATION**



DOT: UN Number: 2984
UN Proper Shipping Name: Hydrogen peroxide, aqueous solutions
Transport Hazard Class: 5.1
Packing Group: III

TDG: UN Number: 2984
UN Proper Shipping Name: Hydrogen peroxide, aqueous solutions
Transport Hazard Class: 5.1
Packing Group: III
Marine Pollutant: No

IMDG: UN Number: 2984
UN Proper Shipping Name: Hydrogen peroxide, aqueous solutions
Transport Hazard Class: 5.1
Packing Group: III
Marine Pollutant: No

IATA: UN Number: 2984
UN Proper Shipping Name: Hydrogen peroxide, aqueous solutions
Transport Hazard Class: 5.1
Packing Group: III

SECTION 15 **REGULATORY INFORMATION**

SAFETY DATA SHEET
20 Volume Clear Developer

SARA 302 Components: The following components are subject to reporting levels established by SARA Title III, Section 302:

	CAS-No.	Revision Date
Hydrogen peroxide	7722-84-1	1993-04-24

SARA 313 Components: SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

SARA 311/312 Hazards: Reactivity Hazard, Acute Health Hazard, Chronic Health Hazard

SECTION 15	REGULATORY INFORMATION - Continued
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Massachusetts Right To Know Components:	CAS-No.	Revision Date
Hydrogen peroxide	7722-84-1	1993-04-24

Pennsylvania Right To Know Components:	CAS-No.	Revision Date
Hydrogen peroxide	7722-84-1	1993-04-24

New Jersey Right To Know Components:	CAS-No.	Revision Date
Hydrogen peroxide	7722-84-1	1993-04-24

California Prop. 65 Components: This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

SECTION 16	OTHER INFORMATION
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No representations or warranties, either expressed or implied, of merchant ability, fitness for a particular purpose or any other nature are made hereunder with respect to information or the product to which information refers.

Date: 7/21/2015
Phoenix Products Company