

MATERIAL SAFETY DATA SHEET

PHYSAN 20™

SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Trade Name:	PHYSAN 20
EPA Number:	55364-5
Product Class:	Quaternary Ammonium Compound
Product Use:	Disinfectant/Sanitizer
Manufacturer:	Maril Products, Inc. 15421 Red Hill Avenue, Tustin, CA 92780
Telephone Numbers:	24 Hour Emergency Assistance: Chemtrec 1-800-424-9300 or Company office 1-800-546-7711 M-Th 8 am – 4 pm and F 8am-12pm

SECTION 2 — COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Ingredients (<i>specific</i>)	Wt. %	CAS Number
Alkyl dimethyl benzyl ammonium chloride (C12-18)	9.0-11.0	68391-01-5
Alkyl dimethyl ethyl benzyl ammonium chloride (C12-14)	9.0-11.0	85409-23-0
Ethanol	<1	64-17-5

SECTION 3 – HAZARDS IDENTIFICATION

Emergency Overview:	<i>Clear, colorless to straw-colored liquid. Corrosive to the eyes, skin, gastrointestinal tract, and respiratory system.</i>
Potential Health Effects:	
Skin:	Causes corrosive burns. Brief exposures may cause irritation and defatting of the skin.
Eyes:	Causes burns and may result in permanent injury to eyes including blindness.
Inhalation:	Mists and vapors can irritate the throat and respiratory tract. High vapor concentrations may cause central nervous system effects. May be fatal if inhaled. Symptoms may include headaches, dizziness, and drowsiness.
Ingestion:	Ingestion can cause gastrointestinal irritation, nausea, vomiting and diarrhea.
Chronic:	Ingestion of ethanol by pregnant women can cause reproductive toxicity to the fetus.

SECTION 4 — FIRST AID MEASURES

Eyes:	Immediately flush eyes with water for at least 15 minutes, while holding eyelid open. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Seek medical attention at once.
Skin or Clothing:	Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.
Inhalation:	If symptoms are experienced, move victim to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. Call a poison control center or doctor for further treatment advice.
Ingestion:	Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to so by a poison control center or doctor. Do not give anything by mouth to an unconscious person.
Physician:	Probable mucosal damage may contraindicate the use of gastric lavage.

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SECTION 5 – FIRE FIGHTING MEASURES

Flash Point:	>200°F (>94°C) – Pensky Martin Closed Cup
Upper/Lower Flame Limits:	Not determined
Extinguishing Media:	Dry chemical foam, carbon dioxide or water fog. Solid water streams may spread burning liquid.
Equipment and Instructions:	Firefighters should wear full protective clothing including self-contained breathing apparatus. Cool fire exposed containers with spray.
Hazardous Combustion Products:	Irritating toxic gasses or fumes may be released during a fire.
Unusual Fire/Explosion Hazards:	Explosive mixtures can form with air. Combustion products are toxic. Solvent vapors can travel to an ignition source and flash back.

SECTION 6 – ACCIDENTAL RELEASE MEASURES

Emergency Action:	Isolate spill or leak area immediately. Keep unauthorized personnel away. Stay upwind. Keep out of low areas where vapors may accumulate. Eliminate all ignition sources (no smoking, flares, sparks or flames in immediate area.
Spill Cleanup:	Ventilate closed spaces before entering. All equipment used when handling the product must be grounded. Floor will be slippery. Do not touch or walk through spilled material. Stop leak if you can do it without risk. A vapor suppressing foam may be used to reduce vapors. Prevent entry into waterways, sewers, basements or confined areas. Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers. Use clean non-sparking tools to collect absorbed materials.
Large Spills:	Dike far ahead of liquid spill. Water spray may reduce vapor but increase foaming.

SECTION 7 — HANDLING AND STORAGE

Handling Procedures:	Avoid contact with skin and eyes. Use good personal hygiene practices. Wash hands before eating, drinking, smoking, or using toilet facilities. Wash thoroughly after work using soap and water.
Storage Procedures:	Keep the container tightly closed and in a cool, well ventilated place. Keep from freezing. Do not handle or store near an open flame, heat, or other sources of ignition. Prevent electrostatic charge buildup by using common bonding and grounding techniques.

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SECTION 8 – EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls:	Provide adequate local exhaust ventilation (explosion-proof) to maintain worker exposure below exposure limits.
Personal Protective Equipment	
Eyes/Face:	Wear chemical goggles. Use a face shield if splashing is possible.
Skin:	Use impervious gloves (rubber or neoprene). Wear suitable protective clothing.
Respiratory:	If exposure limits are exceeded or if irritation is experienced, NIOSH approved respiratory protection should be worn. Ventilation and other forms of engineering controls are often the preferred means for controlling chemical exposures. Respiratory protection may be needed for non-routine or emergency situations.
General:	Eye wash fountain and emergency showers recommended.

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

Flash Point:	>200°F (>94°C) – Pensky Martin Closed Cup
Specific Gravity:	0.988 (8.2 lbs/gal)
Percent Volatiles:	Not determined
Vapor Pressure:	Not determined
VOC Content:	Not determined
Vapor Density:	Not determined
Viscosity:	Not determined
Evaporation Rate:	Not determined
Pour Point:	25°F
pH:	6.5 – 8.5 for 10% Aqueous Solution
Appearance and Odor:	Clear, colorless to straw liquid with benzaldehyde odor

SECTION 10 - STABILITY AND REACTIVITY

Chemical Stability:	Material is stable.
Conditions to Avoid:	Keep away from heat and strong oxidizing agents.
Incompatibilities:	Strong oxidizing agents (may result in fire), reducing agents.
Hazardous Decomposition:	Carbon monoxide, carbon dioxide, toxic hydrogen chloride vapors.
Hazardous Polymerization:	Will not occur.

SECTION 11 – TOXICOLOGICAL INFORMATION

Carcinogenicity:	No carcinogenic data available.
Acute Oral LD50:	507 mg/kg for males and females combined.
Acute Dermal:	Greater than 2000 mg/kg rats.
Primary Skin:	Corrosive.
Primary Eye:	Corrosive.

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SECTION 12 – ECOLOGICAL INFORMATION

Ecotoxicity: Very toxic to aquatic organisms.
Environmental Fate: This product is biodegradable.

SECTION 13 – DISPOSAL CONSIDERATIONS

Disposal Instructions: Although not considered a hazardous waste, the discarding or disposal of this material should be done at a properly permitted facility in accordance with the regulations of 40 CFR 262,263,264, and 268. Additionally, the discarding or disposal of this material may be further regulated by state, regional, or local regulations. Chemical additions, processing or otherwise altering this material may make the waste management information presented in the MSDS incomplete, inaccurate or otherwise inappropriate. The transportation, storage, treatment, and disposal of this waste material must be conducted in compliance with all applicable Federal, state, and local regulations.

SECTION 14 – TRANSPORT INFORMATION

DOT Hazard Class	8 Corrosive.
DOT Proper Shipping Name	Disinfectants Liquid Corrosive, NOS (Quaternary Ammonium Compound), 8, UN1903, PG III.
49 CFR§173.154 (Exemption)	This product can ship as a “Consumer Commodity” and re-classed as ORM-D if packaged in <1.3 gallons (5.0 Liter) containers. (Non-Hazardous).

SECTION 15 – REGULATORY INFORMATION

TSCA Status: While three of four ingredients are listed on the TSCA Chemical Inventory, this product is regulated as a pesticide under the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) and not subject to the TSCA Inventory rules for FIFRA uses. Other Chemical Inventories: All components of this product are listed on the following inventories: European Union, China. One or more ingredients not found on inventories of Australia, Canada (DSL), Japan and Korea, and Philippines. CERCL/SARA: SARA Title III, Sections 311/312 – This act requires reporting under the Community Right-to-Know provisions due to the inclusion of the following components of this material in one or more of the five hazard categories listed in the 40 CFR 370: Classification of this product: Immediate, Fire. SARA Title 313 – This act requires submission of annual reports of releases of the following components of this material if the threshold reporting quantities, as listed in 40 CFR 372, are met or exceeded: None listed. Reportable Quantities/Threshold Planning Quantities: CERCLA requires notification of the National Response Center (Telephone: 1-800-424-8802) in the event of a release of quantities of the following hazardous materials contained in this product, if the release is equal to or
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greater than the Reportable Quantities (RQs). SARA 302/304 requires emergency planning, including agency notification, for possible release of the following components of this material, based upon the Threshold Planning Quantities (TPQs) and/or release of Reportable Quantities: None listed.

STATE & PROVINCIAL RIGHT TO KNOW & SELECTED REGULATORY LISTS:

The following ingredients appear on various state right-to-know lists and/or California's Proposition 65 List.

Chemical Name	State List
Benzyl Chloride (trace < 10 ppm)	AZ, CA, CAP65C, CT, FL, ID, MA, MN, NJ, PA, RI
Ethanol	AZ, CA, CT, FL, ID, MA, MN, NJ, PA, RI

AZ – Arizona Ambient Air Quality Guidelines

CT – Connecticut Hazardous Air Pollutants

CA – California Director's List of Hazardous Substances

CAP65C – California Prop 65 Carcinogen

FL – Florida Substances List

ID – Idaho Non-carcinogen Toxic Air Pollutants

IL – Illinois Toxic Air Contaminant – Carcinogenic

MA – Massachusetts Right-to-Know List

MN – Minnesota Hazardous Substances List

NJ – New Jersey Right-to-Know List

PA – Pennsylvania Right-to-Know List

RI – Rhode Island Hazardous Substances List

WHMIS Classification: B3, D1B, E. This product has been classified in accordance with hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

SECTION 16 – OTHER INFORMATION

Current Issue Date: January 1, 2015
Previous Issue Date: September 1, 2011
Changes from Previous Issue Date: Update Information and revise format.

Hazard Ratings	HMIS (II)	NFPA
Health	3	3
Flammability	0	0
Reactivity	0	0
PPE	B	

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