



SAFETY DATA SHEET

U.S. Department of Labor
Occupational Safety & Health Administration

Polaroof SP

SECTION 1 - IDENTIFICATION

MANUFACTURER: Andek Corporation
ADDRESS: 850 Glen Avenue, Moorestown, NJ 08057
TELEPHONE: 1-856-786-6900
In an emergency, contact CHEMTREC 1-800- 424-9300;
Outside the United States call +1-703-527-3887
PRODUCT IDENTIFIER: Polaroof SP
RECOMMENDED USE: Roof Coating

SECTION 2 – HAZARD IDENTIFICATION

Skin: No irritation hazard in normal industrial use.

Eyes: No irritation hazard in normal industrial use.

Inhalation: No irritation hazard in normal industrial use.

Ingestion: Ingestion of large amounts may cause nausea and/or constipation

Sensitization: Does not cause sensitization

SIGNAL WORD: Warning - No hazard in normal industrial use.

HAZARD STATEMENTS:

- Titanium dioxide has been characterized by IARC as possibly carcinogenic to humans (Group 2B) through inhalation of dust (not ingestion). This classification is based upon animal inhalation studies.
- Epidemiology studies do not suggest an increased risk of cancer in humans from occupational exposure to titanium dioxide.
- Not considered to be harmful to aquatic life.

PICTOGRAMS: None Necessary

PRECAUTIONARY STATEMENTS:

Prevention:

- **Do Not** handle until all safety precautions have been read and understood
- **Do Not** breathe dust or spray.
- **Do Not** get in eyes, on skin, or on clothing.
- Wash thoroughly after handling.
- **Do Not** eat, drink or smoke when using this product

Response:

- **Skin:** Wash affected areas thoroughly with soap and water. Wash contaminated clothing before reuse.
- **Eyes:** Use an eyewash to remove substance from eyes. Get medical advice if irritation develops.
- **Inhalation:** Call a POISON CENTER/ doctor if spray or dust is inhaled
- **Ingestion:** **Do Not** induce vomiting. Get Medical advice/attention if you feel unwell ; Rinse mouth.

Storage:

- Store in a cool dry place
- **Do Not** allow this material to freeze

Disposal:

- Waste disposal should be in accordance with existing federal, state and local environmental control laws.

SECTION 3 – COMPOSITION

<u>CHEMICAL NAME</u>	<u>CAS #</u>	<u>APPROX %</u>
Polyvinyl Diene Chloride/Ethylene Acetate	25085-46-5	26.0
Magnesium Silicate	14807-96-6	4.8
Titanium Dioxide	13463-67-7	5.3
Barium Sulfate	7727-43-7	32.3
Methyl Cellulose	9004-62-0	0.2
Fungicides	1897-45-6	0.5
Magnesite	13983-17-0	3.2
Aluminum Silicate	1332-58-7	0.2
Water	7732-18-5	27.0
Vinyl Acetate	108-05-4	0.4
Petroleum Distillate	64741-89-5	0.1

SECTION 4 – FIRST AID MEASURES

Skin: Wash with soap and water

Eyes: Flush with plenty of water to remove any substance in the eyes. Remove contact lenses if present. Seek medical advice if irritation develops.

Inhalation: If mist (over spray) or dust (from sanding) is inhaled, move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration. Call for medical attention.

Ingestion: **Do Not** induce vomiting. Seek medical attention if symptoms develop.

SECTION 5 – FIRE-FIGHTING MEASURES

Flash point: Non Flammable

Flammable limits: None Established

Extinguishing media: Water spray, foam dry chemical or carbon dioxide. Use whatever media deemed appropriate for surrounding fire.

Special fire fighting procedures: Persons exposed to products of combustion should wear self-contained breathing apparatus and full protective equipment.

Unusual fire & explosion hazards: There may be a possibility of pressure buildup in closed containers when heated. Water spray may be used to cool the containers.

Decomposition products: Carbon dioxide, Carbon monoxide, Phosphorous compounds.

SECTION 6 – ACCIDENTAL RELEASE MEASURES

Personal precautions:

- Wear safety glasses when handling this product.
- No adverse health effects expected from the clean-up of spilled material.

Cleanup procedures:

- Dike if necessary, contain spill with inert absorbent and transfer to containers for disposal.
- Keep spilled product out of sewers, watersheds, or water systems.

SECTION 7 – HANDLING & STORAGE

Precautions for safe handling:

- No special handling instructions due to toxicity.
- This product contains limited amounts of residual monomer. Under normal handling and use conditions the residual monomer should not present a hazard.
- In storage the monomer will migrate from the emulsion and establish an equilibrium between the headspace in the storage container and the liquid emulsion.
- Levels in excess of acceptable exposures can accumulate in non-vented headspaces above the emulsion.

Recommendations on the conditions for safe storage: Store in a cool, dry place.

SECTION 8 – EXPOSURE CONTROLS/PERSONAL PROTECTION:

Exposure limits:

CHEMICAL NAME	PEL	TLV
Vinyl Acetate	N/A	ACGIH TWA 10.0 ppm
Titanium Dioxide	15 mg/m ³ (8 hr. TWA)	10 mg/m ³ (8 hr. TWA)
Aluminum Silicate	15 mg/m ³	10 mg/m ³

Engineering controls:

- No exposure limits exist for the constituents of this product.
- No engineering controls are likely to be required to maintain operator comfort under normal conditions of use.

Inhalation protection:

- No respiratory protection required under normal conditions of use.
- Respirators should be selected by and used following requirements found in OSHA's respirator standard (29 CFR 1910.134).

Eye protection: Wear safety glasses when handling this product.

Skin and body protections:

- Not normally considered a skin hazard.
- Where use can result in skin contact, practice good personal hygiene.
- Wash hands and other exposed areas with mild soap and water before eating, drinking, and when leaving work.

Other hygienic practices and protective equipment: Use nitrile gloves if conditions warrant.

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES:

Appearance: Fully Thixotropic liquid

Physical state: Liquid

Color: From white and pastels to black and deep tone colors

Odor: Slight ammonia odor

Odor threshold: None established

pH: 8.5

Melting point/freezing point: 32°F Freezing point

Initial boiling point and boiling range: 212°F Boiling point

Flash point: Non flammable

Evaporation rate: 1.0 (water =1)

Flammability: Non flammable

Upper/lower flammability or explosive limits: None established

Vapor pressure: 23 hPa (17 mmHg) @ 20°C (68°F)

Vapor density: 1.24 g/cm³ @ 20°C (68°F)

Relative density: 1.58 kg/Lt

Solubility: Soluble with water and alcohol

Partition coefficient: n-octanol/water: None established

Auto-ignition temperature: None established

Decomposition temperature: 200°C (392°F)

Viscosity: 120 kreb units @ 20°C (68°F)

SECTION 10 – STABILITY AND REACTIVITY

Reactivity: Will not occur.

Chemical stability: Stable under normal conditions.

Incompatibility: Not established

Hazardous decomposition products: Phosphorus compounds Carbon monoxide, carbon dioxide

SECTION 11 – TOXICOLOGICAL INFORMATION

The following information regarding health hazards is based upon third-party research studies.

Effects of Acute Exposure:

Inhalation: Inhalation of dust or mist can cause irritation of the eyes, nose, throat, and lungs.

Eye Contact: Like any foreign body, particles can cause mechanical irritation.

Skin Contact: This material can cause irritation if not promptly washed from the skin. This product is not expected to be absorbed through intact skin.

Ingestion: This material is not expected to produce adverse effects.

Effects of Chronic Exposure:

Titanium Dioxide:

- In lifetime inhalation studies of rats, airborne respirable-size titanium dioxide particles have been shown to cause an increase in lung tumors at concentrations associated with substantial particle lung burdens and consequential pulmonary overload and inflammation. The potential for these adverse health effects appears to be closely related to the particle size and the amount of the exposed surface area that comes into contact with the lung. However, tests with other laboratory animals, such as mice and hamsters, indicate that rats are significantly more susceptible to the pulmonary overload and inflammation that causes lung cancer.
- Epidemiology studies do not suggest an increased risk of cancer in humans from occupational exposure to titanium dioxide.
- Titanium dioxide has been characterized by IARC as possibly carcinogenic to humans (Group 2B) through inhalation (not ingestion).
- It has not been characterized as a potential carcinogen by either NTP or OSHA.

Numerical measures of toxicity:

CHEMICAL NAME	Oral LD50 (rat)	Dermal LD50 (rabbit)	Inhalation LC50
Titanium Dioxide	10,000 mg/kg	10,000 mg/kg	6.8 mg/l (4 hr. rat)
Vinyl Acetate	2,000 mg/kg	Not irritating	Not irritating to rabbit

SECTION 12 – ECOLOGICAL INFORMATION

Data from toxicity test (aquatic and/or terrestrial organism where available):

CHEMICAL NAME	Algae/Aquatic Plants EC50	Fish LC50	Toxicity to Microorganism EC10	Crustacea (Aquatic Invertebrates)
Chlorothalonil (ISO)	120 h - 0.21 mg/l (Selenastrum capricornufum)	96 h - 62 mg/l (Bluegill sunfish)	N/A	N/A
Vinyl Acetate	N/A	96 h - >100 mg/l (Rainbow trout)	0.5 h >1000 mg/l (sludge)	N/A

Biodegradation:

- Chlorothalonil (ISO) is not readily biodegradable
- Polymer component is not readily biodegradable. Elimination by absorption to activated sludge. Separation by flocculation is possible

Bioaccumulation potential:

- No adverse effects expected

Mobility in soil:

- No adverse effects expected

Other adverse effects:

Amount of Chlorothalonil (ISO) present in product is below the level considered to constitute as aquatic environmental hazard.

SECTION 13 – DISPOSAL CONSIDERATIONS

To the best of our knowledge, this product does not meet the definition of hazardous waste under the U.S. EPA Hazardous Waste Regulations 40 CFR 261. Solidify and dispose of in an approved landfill. Consult state, local or provincial authorities for more restrictive requirements.

SECTION 14 – TRANSPORT INFORMATION

UN #	N/A
UN PROPER SHIPPING NAME:	Paint
HAZARD CLASS:	N/A
PACKING GROUP:	N/A
ENVIRONMENTAL HAZARDS:	N/A
GUIDANCE ON TRANSPORT IN BULK:	N/A

Transport labels required: This product is not regulated by the D.O.T.

SECTION 15 – REGULATORY INFORMATION**US Federal Regulation:****SARA 311/312 Hazard Categories:**

CHEMICAL NAME	CAS #	Hazard	Upper limit %	Hazardous Substances RQs	CERCLA/SARA RQ	TPQ
Vinyl Acetate	108-05-4	Delayed Chronic Health Hazard	<0.5	1,000 lbs	5,000 lbs	5,000 lbs

SARA 313:

CHEMICAL NAME	CAS #
Chlorothalonil (ISO)	1897-45-6

US State Right to Know Regulations: New Jersey, Massachusetts, Pennsylvania, Rhode Island

CHEMICAL NAME	CAS #
Vinyl Acetate	108-05-4
Chlorothalonil (ISO)	1897-45-6
Titanium Dioxide	13463-67-7

CA Prop 65

CHEMICAL NAME	CAS #	
Chlorothalonil (ISO)	1897-45-6	Although present, is at a level below that which requires a proposition 65 warning.
Titanium Dioxide	13463-67-7	Although present, is bound within the matrix of the product and is not considered to be within the hazard criteria.
Acetaldehyde	75--07-0	Less than 0.001% of the total volume
1,4-Dioxane	123-91-1	Less than 0.001% of the total volume
Ethylene oxide	75-21-8	Less than 0.001% of the total volume

Canada

CHEMICAL NAME	CAS#
Titanium Dioxide	13463-67-7
Vinyl Acetate	108-05-4

SECTION 16 – OTHER INFORMATION (HMIS RATING)

Health	1
Flammability	0
Physical Hazard	0
Personal Protection	B

Disclaimer: Andek Corporation believes, to the best of its knowledge, information and belief, the information contained herein to be accurate and reliable as of the issue date of this Safety Data Sheet (SDS). However, because the conditions of handling, use, and storage of these materials are beyond Andek Corporation's control, we assume no responsibility or liability for personal injury or property damage incurred by the use of these materials and make no warranty, expressed or implied, regarding the accuracy or reliability of the data or results obtained from their use. All materials may present unknown hazards and should be used with caution. The information and recommendations contained in the SDS are offered for the users' consideration and examination. It is the responsibility of the user to determine the final suitability of this information and data and to comply with all applicable international, federal, state and local laws and regulations.