



IMMUNACOAT 4K

SAFETY DATA SHEET PART A

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SECTION 1: Identification

Product name:

Immunacoat 4K Aliphatic Polyurethane

Manufacturer: Provecta Coatings
Customer Service (800) 242-7615
1541 W Coles St, Long Beach, CA 90813

CHEMTREC (EMERGENCY ONLY): (800) 424-9300
POISON CENTER: (800) 562-8236

Relevant Identified Uses: Polyurethane Resin, Polyurethane Topcoat, Antimicrobial Coating EPA
Registration # 73148-388510

SECTION 2: Hazards Identification

EMERGENCY OVERVIEW:

OSHA Hazards: No known OSHA hazards. Skin sensitization, Category 1, H317 GHS hazard.

Hazards not otherwise classified (HNOC) or not covered by GHS - None
GHS Classification in accordance with 29 CFR 1910.1200

SYMBOLS

SIGNAL WORD Warning

HAZARD STATEMENT H317 - May cause an allergic skin reaction.

PRECAUTIONARY P261 -Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray.
STATEMENT P272 - Contaminated work clothing should not be allowed out of the workplace.
(PREVENTION) P280 - Wear protective gloves.

PRECAUTIONARY P302 + P352 - If on skin: Wash with plenty of water/ soap.
STATEMENT P333 + P313 - If skin irritation or rash occurs: Get medical advice/
Attention.

(RESPONSE) P363 - Wash contaminated clothing before reuse.

PRECAUTIONARY P501 - Dispose of contents/ container to an approved waste disposal plant.
STATEMENT (DISPOSAL)

ADDITIONAL LABELING The following percentage of the mixture consists of ingredient(s) with
unknown acute CODES toxicity: 3.92 %

APPEARANCE: Milky white

EYE CONTACT: May cause eye irritation. Prolonged exposure may cause eye damage.

SKIN CONTACT: May be harmful if absorbed through skin. May cause skin irritation.

INHALATION: May be harmful if inhaled. May cause respiratory tract irritation.

INGESTION: May be harmful if ingested.

ACUTE HEALTH EFFECTS: May be irritating to skin, eyes, and digestive tract.

CHRONIC HEALTH EFFECTS: Repeated and prolonged exposures have not been studied.

AGGRAVATION of PRE-EXISTING CONDITIONS: Persons with preexisting conditions may be
more susceptible.

SECTION 3: Composition and Information on Ingredients

CHEMICAL FAMILY: Aqueous Polyacrylic Polyester Diol Dispersion

HAZARDOUS COMPONENTS

Chemical Name	CAS#	% by Mass	Classification
Oxirane, 2,2'-bis(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bis-, homopolymer	25085-99-8	50-60	H315, 2, Skin Irrit. H319, 2A, Eye Irrit. H317, 1, Skin Sens.
OTHER INGREDIENTS	CAS#	o/e by Mass	Hazardous
Water	7732-18-5	40-50%	No

This product contains an amine neutralizing agent which is bound in the matrix of this product as a salt. This amine salt is considered unreacted at room temperature. Generation of amine vapors is expected when this product is processed (heated) during the drying/hardening of the coating.

SECTION 4: First Aid Measures

PRIMARY ROUTES OF EXPOSURE: Ingestion, dermal contact.

EYE EXPOSURE: Remove contacts if present. Immediately flush the eyes with water for at least 10-15 minutes. Seek medical attention if irritation persists.

SKIN EXPOSURE: Wash the affected area with soap and water. Remove contaminated clothes if necessary. Seek medical assistance if irritation persists.

INHALATION: If breathed in, move person to fresh air. If not breathing, give artificial respiration.

INGESTION: If the person is conscious, rinse their mouth out with water. Never give anything by mouth to an unconscious person. If ingested, do not induce vomiting unless directed to do so by medical personnel. Seek medical attention.

MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED: Not expected to cause adverse acute health effects. The most important known symptoms and effects are described in section 2 and/or in section 11.

SECTION 5: Fire Fighting Measures

EXTINGUISHING MEDIUM: Use water spray, alcohol-resistant foam, dry chemical, carbon dioxide or dry sand.

SPECIAL FIRE FIGHTING PROCEDURES: Wear self-contained breathing apparatus for firefighting if necessary.

HAZARDOUS COMBUSTION AND DECOMPOSITION PRODUCTS: By fire and thermal decomposition: Carbon dioxide (CO₂), carbon monoxide (CO), oxides of nitrogen (NO_x), dense black smoke, undetermined compounds.

UNUSUAL FIRE OR EXPLOSION HAZARDS: None.

SECTION 6: Accidental Release Measures

GENERAL PROTECTION: See Section 8 for personal protection. Avoid breathing vapors, mist, or gas.

ENVIRONMENTAL PRECAUTIONS: Construct a dike to prevent spreading.

METHODS AND MATERIALS FOR CONTAINMENT AND CLEAN UP: Cover spill with inert material (e.g., dry sand or earth) and collect for proper disposal. Dike or dam spilled material and control further spillage, if possible. Prevent from entering open drains and waterways. Wash spill area with soap and water. Ventilate area to remove vapors or dust.

SECTION 7: Handling and Storage

PRECAUTIONS FOR SAFE HANDLING: Handle in accordance with good industrial hygiene and safety practices. Wear personal protective equipment. Wash thoroughly after handling. Keep closed when not in use. Avoid breathing dust, vapor, or

mist. Avoid contact with eyes. Avoid contact with skin or clothing. Spraying increases the risk of hazardous exposure.

RECOMMENDED STORAGE: Store up to 6 months after receipt of material by customer. Store in closed container at 7 - 25

• c, separate from food products. DO NOT FREEZE. Storage class (TRGS 510):

Non-Combustible Liquids

SUBSTANCES TO AVOID: Oxidizers and water reactive substances.

SECTION 8: Exposure Controls and Personal Protection

The recommendations in this section should not be a substitute for a personal protective equipment (PPE) assessment

performed by the employer as required by 29 CFR 1910 Subpart I.

CONTROL PARAMETERS:

Any component which is listed in section 3 and is not listed in this section does not have a known ACGIH TLV, OSHA PEL or supplier recommended occupational exposure limit.

EXPOSURE CONTROLS:

APPROPRIATE ENGINEERING CONTROLS: General industrial hygiene practice. Access to eyewash stations and safety showers.

PERSONAL PROTECTIVE EQUIPMENT:

EYE PROTECTION: Use equipment for eye protection tested and approved under appropriate government

standards such as NIOSH (US) or EN 166(EU).

SKIN PROTECTION: Wear protective clothing and gloves.

VENTILATION: General dilution and local exhaust as necessary to control airborne vapors, mists, dusts,

and thermal decomposition products below appropriate airborne concentration standards/guidelines.

Thermal processing operations should be ventilated to control gasses and fumes given off during processing.

Curing ovens must be ventilated to prevent the buildup of explosive atmospheres and to prevent off gasses

from entering the workplace.

RESPIRATOR: Respiratory protection not required. For nuisance exposures use type OV/AG (US) or type

ABEK (EU EN 14387) respirator cartridges. Use respirators and components tested and approved under

appropriate government standards such as NIOSH (US) or CEN (EU) during high temperature processing or

when thermal decomposition is suspected.

ADDITIONAL PROTECTION: Employees should wash their hands and face before eating, drinking, or using the toilet. Educate and train employees in the safe use and handling of this product. Store separate from food products.

SECTION 9: Physical and Chemical Properties

FORM: Liquid

APPEARANCE/COLOR: Milky white

UPPER/LOWER FLAMMABILITY LIMIT: No data available.

ODOR: Mild, characteristic

VAPOR PRESSURE: No data available.

ODOR THRESHOLD: No data available.

VAPOR DENSITY: No data available.

pH: No data available.

RELATIVE DENSITY: No data available.

MELTING/FREEZING POINT (°C): 0 ·c (32 °F) similar to water

SOLUBILITY: Miscible in water

BOILING POINT (°C): 100 ·c (212 °F) similar to water

FLASH POINT (°C): No data available.

EVAPORATION RATE: No data available.

FLAMMABILITY: No data available.

PARTITION COEFFICIENT: No data available.

AUTO-IGNITION TEMPERATURE (°C): No data available.

DECOMPOSITION TEMPERATURE (°C): No data available.

MOLECULAR WEIGHT: No data available.

DYNAMIC VISCOSITY: 1,000 - 3,500 mPa.s@ 23 ·c (73.4 °F) (DIN 53019)

KINEMATIC VISCOSITY: No data available.

SPECIFIC GRAVITY: No data available.

BULK DENSITY: No data available.

SECTION 10: Stability and Reactivity

REACTIVITY: No data available.

CHEMICAL STABILITY: Stable under recommended storage conditions. DO NOT FREEZE.

OTHER:

POSSIBILITY OF HAZARDOUS REACTIONS: Hazardous polymerization does not occur.

CONDITIONS TO AVOID: No data available.

MATERIALS TO AVOID: Oxidizers and water reactive materials.

HAZARDOUS DECOMPOSITION PRODUCTS: Hazardous decomposition products may be formed under fire and

thermal decomposition conditions - carbon dioxide, carbon monoxide, oxides of nitrogen, dense black smoke, other

undetermined compounds. See section 5 the event of fire.

SECTION 11: Toxicological Information

ACUTE TOXICITY: Polyester Diol Dispersion

Oral LD50:

Inhalation LD50:

Dermal LD50:

Other information on acute toxicity:

SKIN CORROSION/IRRITATION:

SERIOUS EYE DAMAGE/IRRITATION

RESPIRATORY OR SKIN SENSITIZATION

GERM CELL MUTAGENICITY

CARCINOGENICITY

> 5,000 mg/kg (Calculation method).

No data available.

No data available.

No data available.

No data available.

No data available.

No data available.

No data available.

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable,

possible or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as probable,

possible, or confirmed human carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as probable,

possible, or confirmed human carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as probable,

possible, or confirmed human carcinogen by OSHA.

REPRODUCTIVE TOXICITY:

TERATOGENICITY:

SPECIFIC TARGET ORGAN TOXICITY

ASPIRATION HAZARD

POTENTIAL HEALTH EFFECTS

Inhalation:

Ingestion:

Skin:

Eyes:

SYNERGISTIC EFFECTS:

ADDITIONAL INFORMATION:

May be harmful if inhaled. May cause respiratory tract irritation.

May be harmful if swallowed.

May be harmful if absorbed through skin. May cause skin irritation.

May cause eye irritation.

No data available.

RTECS not available.

SECTION 12: Ecological Information

AQUATIC/TERRESTRIAL ORGANISM TOXICITY: No data available.

ASPIRATION HAZARD No data available.

PERSISTANCE AND DEGRADABILITY: No data available.

BIOACCUMULATIVE POTENTIAL: No data available.

MOBILITY IN SOIL: No data available.

PBT AND vPvB ASSESSMENT: No data available.

OTHER ADVERSE EFFECTS: No data available.

SECTION 13: Disposal Considerations

DISPOSAL: Dispose of according to local, state, and federal regulations. (Refer to Section 8)

SECTION 14: Transportation Information

DOT (US): Not dangerous goods.

IMDG: Not dangerous goods.

IATA: Not dangerous goods.

SHIPPING NAME (CFR): SHIPPING NAME (IATA): Not dangerous goods.

SECTION 15: Regulatory Information

OSHA HAZARDS: No known OSHA hazards.

DSL STATUS: All components of this product are on the Canadian DSL list.

TSCA S(b) inventory: No substances are subject to TSCA 8(b) inventory notification requirements

TSCA 12(b) export: No substances are subject to TSCA 12(b) export notification requirements.

US. EPA CERCLA HAZARDOUS SUBSTANCES (40 CFR 302) COMPONENTS: None.

SARA 302 COMPONENTS: No chemicals in this material are subject the reporting requirements of SARA Section 302.

SARA 313 COMPONENTS: No chemicals in this material are subject to the reporting requirements of SARA Section 313.

SARA 311/312 HAZARDS: No SARA Hazards.

US EPA Resource Conservation and Recovery Act (RCRA) Composite List of Hazardous Wastes and Appendix VIII

Hazardous Constituents (40 CFR 261): Under RCRA, it is the responsibility of the person who generates a solid waste, as defined in 40 CFR 261.2, to determine if that waste is a hazardous waste.

CA PROP 65 COMPONENTS: This product does not contain any chemical(s) known to the State of California to cause cancer, birth defects, or any other reproductive harm.

CFATS (Chemical Facility Anti-Terrorism Standards) Chemicals

To the best of our knowledge, this product does not contain Appendix A Chemicals of Interest (COi), at or above the

Screening Threshold Quantity (STQ), as defined by the Department of Homeland Security Chemical Facility Anti-Terrorism Standard (CFATS, 6 CFR Pan 27).

SECTION 16: Other Information

