

Materials Safety Data Sheet ActivInk™ N1100

Section 1 - Chemical Product and Company Identification

Product/Chemical Name: ActivInk™ N1100

General Use: In solution

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Section 2 - Composition / Information on Ingredients

Component	CAS Number	Exposure Limits ACGIH TLV	Exposure Limits OSHA PEL	Weight Percent (%)
Small Molecule— RESEARCH MATERIAL	N/A	None Established	None Established	100

Section 3 - Hazards Identification

Emergency Overview

Not a fire or spill hazard.

Potential Health Effect

Inhalation: Particulates may cause irritation of the respiratory tract, with coughing and chest discomfort.

Eye: Causes irritation, experienced as stinging and discomfort or pain. Corneal injury may occur.

Skin: May cause minor irritation with itching and possible slight local redness. Prolonged or repeated contact may cause defatting and drying of the skin.

Ingestion: Ingestion is an unlikely route of exposure. May cause abdominal discomfort, nausea, vomiting and diarrhea. Drowsiness or loss of consciousness may occur.

Carcinogenicity: Not established

Medical Conditions Aggravated by Long-Term Exposure: Skin contact may aggravate an existing dermatitis.

Chronic Effects: No chronic health effects known.

RESEARCH MATERIAL – FOR INVESTIGATIONAL USE ONLY. Investigation of this substance is ongoing. Information is based upon preliminary data and analogy to known substances. Any adverse effects or new information should be reported to Polyera Corporation

Section 4 - First Aid Measures

Inhalation: Remove source(s) of contamination and move victim to fresh air. If breathing has stopped, give artificial respiration, then oxygen if needed. Contact physician immediately.

Eye Contact: Flush eyes with plenty of water. If irritation persists, seek medical attention.

Skin Contact: In case of skin contact, wash thoroughly with soap and water.

Ingestion: Ingestion is unlikely route of exposure. Do not induce vomiting unless instructed by a physician.

RESEARCH MATERIAL – FOR INVESTIGATIONAL USE ONLY. After first aid, get appropriate in-plant, paramedic, or community medical support.

Section 5 - Fire-Fighting Measures

Extinguishing Media: Use extinguishing media appropriate for any combustible in the surrounding area

Unusual Fire or Explosion Hazards: Particulates from this product and may travel or be moved by air currents and ignited by pilot lights, other flames, smoking, sparks, heaters, electrical equipment, static discharges or other ignition sources at locations distant from product handling point. Vapors from this material may settle in low or confined areas or travel a long distance to an ignition source and flash back explosively.

Fire-Fighting Instructions: Wet material should be kept out of eyes and skin.

As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Extinguishing Media: Do NOT get water inside containers. Use water spray, dry chemical, carbon dioxide, or appropriate foam.

Section 6 - Accidental Release Measures

Spill /Leak Procedures: Avoid breathing particulates. Evacuate area until dust has been dispersed. Remove all sources of ignition. Stop or reduce discharge if it can be done safely.

Section 7 - Handling and Storage

Handling Precautions: Minimize breathing of vapors and avoid prolonged or repeated contact with skin. Wear proper protective equipment. If ventilation is not sufficient, wear proper respiratory equipment. Do not use near ignition sources.

Storage Requirements: Store in cool dry, well-ventilated area away from all sources of ignition. “Empty” containers retain product residue (liquid and/or vapor) and can be dangerous. Do not Pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, static electricity, or other sources of ignition; They may explode and cause injury or death. Empty drums should be completely drained, properly bunged and promptly returned to a drum reconitioner, or properly disposed of.

Section 8 - Exposure Controls / Personal Protection

Engineering Controls: If user operators generate dust, fume, or mist, use ventilation.

Ventilation: Provide general or local exhaust ventilation systems to maintain airborne concentrations below OSHA PELs (Sec. 2). Local exhaust ventilation is preferred because it prevents contaminant dispersion into the work area by controlling it at its source.

Respiratory Protection: Seek professional advice prior to respirator selection and use. Follow OSHA respirator regulations (29 CFR 1910.134) and, if necessary, wear an MSHA/NIOSH-approved respirator. Select respirator based on its suitability to provide adequate worker protection for given working conditions, level of airborne contamination, and presence of sufficient oxygen. For emergency or nonroutine operations (cleaning spills, reactor vessels, or storage tanks), wear an SCBA.

Warning! Air-purifying respirators do not protect workers in oxygen-deficient atmospheres. If respirators are used, OSHA requires a written respiratory protection program that includes at least: medical certification, training, fit testing, periodic environmental monitoring, maintenance, inspection, cleaning, and convenient, sanitary storage areas.

Protective Clothing/Equipment: Wear chemically protective gloves, boots, aprons, and gauntlets to prevent prolonged or repeated skin contact. Wear protective eyeglasses or chemical safety goggles, per OSHA eye- and face-protection regulations (29 CFR 1910.133). Contact lenses are not eye protective devices. Appropriate eye protection must be worn instead of, or in conjunction with contact lenses.

Safety Stations: Make emergency eyewash stations, safety/quick-drench showers, and washing facilities available in work area.

Contaminated Equipment: Separate contaminated work clothes from street clothes. Launder before reuse. Remove this material from your shoes and clean personal protective equipment.

Comments: Never eat, drink, or smoke in work areas. Practice good personal hygiene after using this material, especially before eating, drinking, smoking, using the toilet, or applying cosmetics.

Section 9 - Physical and Chemical Properties

Product Form:	Solid	Vapor Density (Air=1):	N/A
Appearance and Odor:	Red, crystalline	Water Solubility:	Insoluble
Vapor Pressure:	N/A	Boiling Point:	N/A
Specific Gravity:	N/A	Evaporation Rate:	Not Established

Section 10 - Stability and Reactivity

Stability: This product is stable at room temperature in closed containers under normal storage and handling conditions.

Polymerization: Hazardous polymerization cannot occur.

Hazardous Decomposition Products: Thermal oxidative decomposition can produce carbon monoxide and/or carbon dioxide.

Section 11- Toxicological Information

None established

Section 12 - Ecological Information

None Established.

Section 13 - Disposal Considerations

Disposal: Follow applicable Federal, state, and local regulations. A qualified environmental professional should determine waste characterization, disposal, and treatment methods.

Section 14 - Transport Information

USDOT Information: This product is not regulated by USDOT as a hazardous material (49 CFR part 172.101). No UN code assigned. No placard required for transportation.

LABEL:

CAUTION!

RESEARCH MATERIAL FOR USE BY QUALIFIED PERSONNEL ONLY

Avoid contact with eyes, skin, and clothing. Wash thoroughly after handling and use. Keep in a closer container in a well-ventilated area.

FIRST AID MEASURES:

Inhalation: Remove source(s) of contamination and move victim to fresh air. If breathing has stopped, give artificial respiration, then oxygen if needed. Contact physician immediately.

Eye Contact: Flush eyes with plenty of water. If irritation persists, seek medical attention.

Skin Contact: In case of skin contact, wash thoroughly with soap and water.

Ingestion: Ingestion is unlikely route of exposure. Do not induce vomiting unless instructed by a physician.

RESEARCH MATERIAL – FOR INVESTIGATIONAL USE ONLY. After first aid, get appropriate in-plant, paramedic, or community medical support.

Section 15 - Regulatory Information

EPA Regulations: Not regulated

Section 16 - Other Information

DISCLAIMER. The Materials are experimental in nature, may have hazardous properties, and are provided “as is.” The information contained in this **Statement of Risks** is considered accurate as of the version date. However, no warranty is expressed or implied regarding the accuracy of the data. Since the use of this product is not within the control of **Polyera Corporation**, it is the user’s obligation to determine the suitability of the product for its intended application and assumes all risk and liability for its safe use.