



G L A T F E L T E R

Material Safety Data Sheet

Section 1 - PRODUCT AND COMPANY IDENTIFICATION

MSDS Code: 3100-015W

Manufacturer Information

P. H. Glatfelter Company
Printing and Carbonless Papers Division
232 East 8th Street
Chillicothe, Ohio 45601

Phone: 740-772-3111

Emergency # : 800-424-9300 CHEMTREC®

Product Name: Fan-Apart Adhesive

Synonyms

Edge Padding Adhesive; Padding Compound; NEO-1

Product Use

Fan-Apart Adhesive for Carbonless Paper.

General Comments

NOTE: Emergency telephone numbers are to be used only in the event of chemical emergencies involving a spill, leak, fire, exposure, or accident involving chemicals. All non-emergency questions should be directed to customer service.

Section 2 - HAZARDS IDENTIFICATION

Emergency Overview

- * CAUTION
- * Product is a milky white liquid with a balsam odor.
- * May cause eye irritation and skin irritation.
- * Inhalation of mist may cause respiratory tract irritation.

Potential Health Effects

Inhalation

This product is not an inhalation hazard under normal conditions of use. Inhalation of high concentration of vapors or mists may cause mild to moderate respiratory tract irritation.

Skin

Not a primary skin irritant based on animal data. Skin absorption is not expected to be a significant route of entry for this product. Prolonged or repeated skin exposure may cause dryness or dermatitis. Does not cause allergic skin sensitization based on animal data.

Eye

Any foreign material in the eye may cause slight irritation (e.g., redness and tearing). Not a primary eye irritant based on animal data.

Ingestion

Exposure by ingestion is not expected to occur through normal industrial use. Product is not harmful by ingestion based on animal data.

Material Safety Data Sheet

Product Name: Fan-Apart Adhesive

MSDS ID: 3100-015W

Medical Conditions Aggravated by Exposure

Exposure may aggravate pre-existing skin, liver, and kidney disorders.

Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS

CAS	Component	Percent
Not Available	Synthetic Polymer Mixture	20-45
57-55-6	Propylene Glycol	15-25
64-17-5	Ethanol, denatured	2-10

Component Information/Information on Non-Hazardous Components

This material is a controlled product under Canadian WHMIS regulations.

Section 4 - FIRST AID MEASURES

Inhalation

If exposed to excessive levels of vapors or mists, remove to fresh air and get medical attention if other symptoms develop.

Skin

Wash skin with soap and flush thoroughly with plenty of water. Obtain medical attention if irritation develops, or other symptoms occur. Wash clothing before reuse.

Eyes

First check the victim for contact lenses and remove if present. Immediately flush eyes with plenty of water or normal saline for at least 15 minutes while holding eyelids open. If symptoms such as redness or irritation develop or persist, get immediate medical attention. Do not put any medication in the victim's eyes unless instructed by a physician.

Ingestion

If swallowed, do NOT induce vomiting. Call a physician or poison control center immediately. Never give anything by mouth to an unconscious person. If the victim is unconscious, keep airway open and lay the victim on his or her side with the head lower than the body.

Note to Physician

This product contains ingredients which may aggravate pre-existing skin, liver, and kidney disorders. The ethyl alcohol in this product has been denatured with methanol, treat affected person appropriately.

Section 5 - FIRE FIGHTING MEASURES

General Fire Hazards

Product will not sustain combustion if ignition source is removed, per ASTM D-4206 testing.

Hazardous Combustion Products

Hazardous combustion products include black smoke and toxic fumes of carbon dioxide and carbon monoxide.

Extinguishing Media

For fires involving this product, use an extinguisher which is appropriate for combustibles and surrounding classes of fires. Use carbon dioxide, dry chemical, alcohol foam, or waterspray when fighting fires involving this material. Water may be ineffective as an extinguishing agent, but water should be used to keep fire-exposed containers cool to prevent build-up and possible autoignition or explosion when exposed to extreme heat.

Fire Fighting Equipment/Instructions

Keep unnecessary people away; isolate hazard area and deny entry. Remove containers exposed to fire if possible, otherwise cool them from the side with water spray. Emergency equipment including self-contained breathing apparatus (SCBA) and full fire fighting turnout gear should be worn by fire fighters.

Material Safety Data Sheet

Product Name: Fan-Apart Adhesive

MSDS ID: 3100-015W

Section 6 - ACCIDENTAL RELEASE MEASURES

Evacuation Procedures

Close off area. Keep unnecessary personnel away.

Containment Procedures

Ventilate the contaminated area. Isolate the spill area.

Clean-up Procedures

Absorb small spills using inert material (e.g. paper towels, spill control pillows, absorbent particulate). Scoop up material for recovery or cover with inert absorbent material. Scoop up absorbed material and place in a container for disposal. In the event of a large spill, contain by diking with dry sand, sorbent booms, or other absorbent material. When cleaning spills, wear appropriate personal protective equipment including splash-proof safety goggles and chemical resistant gloves (see Section 8).

Special Procedures

None known.

Section 7 - HANDLING AND STORAGE

Handling Procedures

Use in a well-ventilated area Avoid breathing vapors or mists Avoid contact with eyes and prolonged contact with skin

Storage Procedures

Keep containers closed when not in use. Store in a cool, dry, well-ventilated area away from incompatible materials (see Section 10). Avoid freezing or high temperatures that degrade adhesive quality.

Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Guidelines

Neither the American Conference of Governmental Industrial Hygienists or the provinces of Canada have developed exposure limits for this product. However, the following exposure guidelines exist for product ingredients.

Component Exposure Limits

Propylene Glycol (57-55-6)

Ontario: 10 mg/m3 TWA (for assessing the visibility in a work environment where Propylene Glycol aerosol is present, aerosol only); 50 ppm TWA (aerosol and vapor); 155 mg/m3 TWA (aerosol and vapor)

Ethanol, denatured (64-17-5)

ACGIH: 1000 ppm STEL

NIOSH: 1000 ppm TWA; 1900 mg/m3 TWA

Alberta: 1000 ppm TWA; 1880 mg/m3 TWA

British Columbia: 1000 ppm STEL

Manitoba: 1000 ppm STEL

New Brunswick: 1000 ppm TWA; 1880 mg/m3 TWA

NW Territories: 1000 ppm TWA; 1884 mg/m3 TWA
1250 ppm STEL; 2355 mg/m3 STEL

Nova Scotia: 1000 ppm STEL

Material Safety Data Sheet

Product Name: Fan-Apart Adhesive

MSDS ID: 3100-015W

Nunavut: 1000 ppm TWA; 1884 mg/m³ TWA
1250 ppm STEL; 2355 mg/m³ STEL
Ontario: 1000 ppm STEL
Quebec: 1000 ppm TWAEV; 1880 mg/m³ TWAEV
Saskatchewan: 1000 ppm TWA
1250 ppm STEL
Yukon: 1000 ppm TWA; 1900 mg/m³ TWA
1000 ppm STEL; 1900 mg/m³ STEL

Engineering Controls

No special ventilation requirements. Good room ventilation should be sufficient to control airborne levels. If operations generate vapor or mist, use adequate general or local ventilation to keep airborne concentrations below exposure limits.

PERSONAL PROTECTIVE EQUIPMENT

Eye / Face Protection

Recommend use of safety glasses with side shields or goggles.

Skin Protection

Recommend the use of nitrile or rubber gloves to prevent skin contact. Customer is responsible for determining suitability of gloves for the work environment and other solvents or chemicals that the employee may normally be exposed to. Replace gloves at first signs of deterioration (hardening, cracking, softening or swelling). Depending on the operation, a labcoat, apron or other impermeable clothing may be appropriate. If adhesive contacts clothing, remove contaminated clothing and launder before reuse. (Dried latex is not easily removed from fabric. Immediate laundering is recommended before latex dries).

Respiratory Protection

Respiratory protection not normally required. If airborne contaminant levels may exceed recommended exposure limits, NIOSH approved respiratory protection appropriate for employee exposure levels is recommended. A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.1 requirements must be followed whenever workplace conditions warrant a respirator's use.

* * *Section 9 - PHYSICAL AND CHEMICAL PROPERTIES* * *

Physical State:	Liquid	Appearance:	milky white liquid
Color:	milky white	Physical Form:	liquid
Odor:	balsam odor	Odor Threshold:	Not available
pH:	7.3-7.8	Melting Point:	Not available
Boiling Point:	208 °F (98 °C)	Decomposition:	Not available
Flash Point:	>208 °F (>97.8 °C) (Pensky-Martens Closed Cup)	Evaporation Rate:	Not available
Flammability Class:	Not Classified	LEL:	Not available
UEL:	Not available	Vapor Pressure:	Not available
Vapor Density (air = 1):	Not available	Density:	Not available
Specific Gravity (water = 1):	>1.0	Water Solubility:	dispersible
Coeff. Water/Oil Dist:	Not available	Auto Ignition:	Not available
Viscosity:	Not available	Volatility:	80-90 %
Sens. To Mech. Impact:	Not available	Sens. To Static Discharge:	Not available
Rate of Burning:	Not available		

* * *Section 10 - STABILITY AND REACTIVITY* * *

Chemical Stability

Product is stable under normal conditions of use. However, it may decompose at elevated temperatures.

Material Safety Data Sheet

Product Name: Fan-Apart Adhesive

MSDS ID: 3100-015W

Conditions to Avoid

Avoid heat, high temperatures, pressure, mechanical shock, incompatibles or other conditions that might result in a hazardous situation.

Incompatibilities

The ingredients of this product are incompatible with strong oxidizing agents. Ethyl alcohol is incompatible with peroxides, strong acids, acid chlorides, acid anhydrides, alkali metals, and ammonia.

Hazardous Decomposition

Hazardous decomposition products include black smoke and toxic fumes of carbon dioxide and carbon monoxide.

Hazardous Polymerization

Hazardous polymerization has not been reported to occur under normal temperatures and pressures.

Section 11 - TOXICOLOGICAL INFORMATION

Acute and Chronic Toxicity

Product Toxicity Data: >2 g/kg mg/kg dermal LD50 (rabbit)

Product Toxicity Data: >5 g/kg mg/kg oral LD50 (rat)

Component Analysis - LD50/LC50

The components of this material have been reviewed in various sources and the following selected endpoints are published:

Propylene Glycol (57-55-6)

Oral LD50 Rat 20000 mg/kg; Dermal LD50 Rabbit 20800 mg/kg

Ethanol, denatured (64-17-5)

Oral LD50 Rat 7060 mg/kg; Inhalation LC50 Rat 124.7 mg/L 4 h

Irritation / Corrosivity

Primary Skin Irritation Score: 0.17 (rabbit, maximum)

Primary Skin Irritation Index: 0.04

Based on test results this product would not be considered a dermal irritant.

Based on test results this product would not be considered an eye irritant.

Dermal Sensitizer

Based on a dermal sensitization study, this product was not found to be a dermal sensitizer.

Additional Information

This product contains ethyl alcohol that may be irritating to the eyes, nose, and respiratory system at very high vapor concentrations. Repeated ingestion of ethyl alcohol may result in liver damage. The ethyl alcohol in this product has been denatured with methyl alcohol. Methyl alcohol can be toxic by the oral, dermal or inhalation routes of exposure. Sub-lethal exposures have been shown to produce ocular damage that may result in blindness and central nervous system effects. Prolonged exposure to high levels of methyl alcohol vapor may cause burning of the eyes, gastrointestinal effects, vision failure, liver damage, dizziness, sleep disturbances, and death.

Carcinogenicity

No information available for the product.

Material Safety Data Sheet

Product Name: Fan-Apart Adhesive

MSDS ID: 3100-015W

Component Analysis

Ethanol, denatured (64-17-5)

IARC: Monograph 100E [in preparation] (in alcoholic beverages); Monograph 96 [2010] (in alcoholic beverages) (Group 1 (carcinogenic to humans))

ACGIH: A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans

Neurotoxicity

No information available for the product.

Mutagenicity

No information available for the product.

Teratogenicity

Ingestion of ethyl alcohol is responsible for fetal alcohol syndrome which includes a number of teratogenic results: spontaneous abortions, birth defects and developmental problems.

Section 12 - ECOLOGICAL INFORMATION

Ecotoxicity

No information is available on ecotoxicity of this product.

Component Analysis - Aquatic Toxicity

Propylene Glycol (57-55-6)

Fish: 96 Hr LC50 Oncorhynchus mykiss: 51600 mg/L [static]; 96 Hr LC50 Oncorhynchus mykiss: 41 - 47 mL/L [static]; 96 Hr LC50 Pimephales promelas: 51400 mg/L [static]; 96 Hr LC50 Pimephales promelas: 710 mg/L

Algae: 96 Hr EC50 Pseudokirchneriella subcapitata: 19000 mg/L

Invertebrate: 24 Hr EC50 Daphnia magna: >10000 mg/L; 48 Hr EC50 Daphnia magna: >1000 mg/L [Static]

Ethanol, denatured (64-17-5)

Fish: 96 Hr LC50 Oncorhynchus mykiss: 12.0 - 16.0 mL/L [static]; 96 Hr LC50 Pimephales promelas: >100 mg/L [static]; 96 Hr LC50 Pimephales promelas: 13400 - 15100 mg/L [flow-through]

Invertebrate: 48 Hr LC50 Daphnia magna: 9268 - 14221 mg/L; 24 Hr EC50 Daphnia magna: 10800 mg/L; 48 Hr EC50 Daphnia magna: 2 mg/L [Static]

Environmental Fate

No data available for this product.

Section 13 - DISPOSAL CONSIDERATIONS

North American Waste Number and Descriptions

Provincial jurisdictions use various hazardous waste control regulations and the Transportation of Dangerous Goods Act to define hazardous waste and appropriate packaging, reporting, storage and transport. The use, mixing or processing of this material may alter this product. Contact federal, provincial/state and local authorities in order to generate or ship a waste material associated with this product to ensure materials are handled appropriately and meet all criteria for disposal of hazardous waste.

Component Waste Numbers

No waste numbers are applicable for this product's components.

Disposal Instructions

Dispose of waste material according to Local, State, Federal, and Provincial Environmental Regulations.

Material Safety Data Sheet

Product Name: Fan-Apart Adhesive

MSDS ID: 3100-015W

Section 14 - TRANSPORT INFORMATION

TDG Information

Not a regulated hazardous material.

US DOT Information

Not a regulated hazardous material.

IATA Information

Not a regulated hazardous material.

IMDG Information

Not a regulated hazardous material.

Section 15 - REGULATORY INFORMATION

General Product Information

This product has been classified in accordance with the criteria of the Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.

WHMIS Classification

Class D: Poisonous and Infectious Material
Division 2: Materials Causing Other Toxic Effects
Subdivision B: Toxic Materials

Component Analysis - Inventory

Component	CAS	CAN
Propylene Glycol	57-55-6	DSL
Ethanol, denatured	64-17-5	DSL

Component Analysis - WHMIS IDL

The following components are identified under the Canadian Hazardous Products Act Ingredient Disclosure List.

Propylene Glycol (57-55-6)

Minimum Concentration: 1 %

Ethanol, denatured (64-17-5)

Minimum Concentration: 0.1 %

Section 16 - OTHER INFORMATION

Hazard Ratings

[Refer to Section 2 for additional label information, including target organs.]

A hazard rating has not been developed by NFPA for this product. The hazard ratings included in this MSDS have been developed based on NFPA and HMIS criteria as well as professional judgment. This information is intended solely for the use of individuals trained in these hazard rating systems.

HMIS Ratings: Health: 1* Fire: 2 Reactivity: 0

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe * = Chronic hazard

NFPA Ratings: Health: 1 Fire: 2 Reactivity: 0

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

Label Information

CAUTION!

Material Safety Data Sheet

Product Name: Fan-Apart Adhesive

MSDS ID: 3100-015W

PROLONGED OR REPEATED CONTACT MAY CAUSE SKIN DRYNESS OR DERMATITIS.

Do not puncture or incinerate container.
Keep container closed.
Use only with adequate ventilation.
Avoid breathing vapors or mists
Avoid contact with eyes, skin and clothing.
Wash thoroughly after handling.

FIRST AID: If inhaled, remove the affected person to fresh air Give artificial respiration if not breathing. If breathing is difficult, oxygen should be administered by qualified personnel.

If swallowed, do NOT induce vomiting. Call a physician or poison control center immediately. Never give anything by mouth to an unconscious person. If the victim is unconscious, keep airway open and lay the victim on his or her side with the head lower than the body

In case of contact, immediately flush eyes or skin with plenty of water. If irritation develops, get medical attention. Clean contaminated clothing, before reuse, or dispose of properly.

For additional information, refer to the Material Safety Data Sheet (MSDS) for this product.

Key / Legend

ACGIH = American Conference of Governmental Industrial Hygienists. TLV = Threshold Limit Value. NIOSH = National Institute of Occupational Safety and Health. NTP = National Toxicology Program. OSHA = Occupational Safety and Health Administration. NFPA = National Fire Protection Association. HMIS = Hazardous Material Information System. CFR = Code of Federal Regulations. CERCLA = Comprehensive Environmental Response, Compensation and Liability Act. SARA = Superfund Amendments and Reauthorization Act. HEPA = High Efficiency Particulate Air.

Preparation and Revision Information

Prepared by P.H. Glatfelter (Glatfelter), Printing and Carbonless Papers Division, Product Stewardship Center, 232 East 8th Street, Chillicothe, OH 45601.

The information and recommendations presented in this MSDS are provided in good faith, and are based on sources believed to be accurate. NO WARRANTIES OF USE OR OTHERWISE ARE EXPRESSLY MADE OR IMPLIED FROM THIS INFORMATION. The information provide relates to this specific material, and may not be valid for this material if used in combination with any other materials or in any process. It is the user's responsibility to determine the suitability of this information for his/her own particular purposes.

This is the end of MSDS # 3100-015W