

**G&H® Wire Company**2165 Earlywood Drive
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MATERIAL SAFETY DATA SHEET DIRECTIVE 91/155/EEC

1. SUBSTANCE/PREPARATION AND COMPANY IDENTIFICATION

Product Name: Versa-Tie and Bambino Ligatures
 Chemical Family: Texin 285 Natural (Pellets) Thermoplastic Polyurethane
 Formula: Not Applicable — Polymeric Material

Company Identification:
 G&H Wire Company
 P.O. Box 248
 Greenwood, Indiana 46142
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2. COMPOSITION / INFORMATION ON INGREDIENTS

Type	Composition/CAS #	Product Code
Versa-tie & Bambino	Polyurethane Polyester Elastomer 26375-23-5	TT-2,TTM-2,JT-2
Versa-tie Plus	UHMW Siloxane 26375-23-5	TTUS-2

3. HAZARDOUS INGREDIENTS

This product contains no hazardous ingredients as defined under the criteria of the Federal OSHA Hazard Communication Standard 29 CFR 1910.1200.

4. PHYSICAL PROPERTIES

Physical Form: Pellets
 Color: Natural
 Odor: Odorless/Slight
 pH: Not Established
 Boiling Point: Not Applicable
 Melting/Freezing Point: 390-440°F
 Solubility in Water: Insoluble
 Specific Gravity: Approximately 1.2 g/cm³ at 77°F (25°C)
 Bulk Density: Approximately 10.01 lbs/gal
 % Volatile by Volume: Negligible
 Vapor Pressure: Negligible

5. FIRE AND EXPLOSION DATA

Flash Point	Not Applicable
Flammable Limits:	
Upper Explosive Limit (UEL) (%):	Not Established
Lower Explosive Limit (LEL) (%):	Not Established
Extinguishing Media:	Water, Dry Chemical, Carbon Dioxide, Foam
Special Fire Fighting Procedures:	Full emergency equipment with self-contained breathing apparatus should be worn by firefighters. During a fire irritating and toxic gases and aerosols may be generated by thermal decomposition and combustion. See Section 9.

6. HUMAN HEALTH DATA

Route(s) of Entry:	Eye contact with fines (dust). Inhalation of fumes such as those evolved in the molding process.
Human Effects and Symptoms of Overexposure:	
Acute Effects of Exposure:	Material is non-reactive solid pellet. Mechanical irritation (i.e. abrasion) to the eyes may occur due to exposure to fines. Eyes may become red, feel scratchy and may tear. NOTE: Gases and fumes evolved during the thermal processing or decomposition of this material may irritate the eyes, skin or respiratory tract.
Chronic Effects of Exposure:	None Known
Carcinogenicity:	The components of this product are not listed by NTP, IARC or regulated as a carcinogen by OSHA.
Medical Conditions Aggravated by Exposure:	None Known
Exposure Limits:	Although no exposure limit has been established for this product, the OSHA PEL for nuisance dust of 15 mg/m ³ -total dust, 5 mg/m ³ -respirable dust is recommended. In addition, the ACGIH-TLV for nuisance dust of 10 mg/m ³ is recommended.

7.. EMERGENCY AND FIRST AID PROCEDURES

Product is non-hazardous in its finished form and no threat to the eyes, inhalation, ingestion or for skin absorption. This product does not contain any form of latex rubber.

8.. EMPLOYEE PROTECTION RECOMMENDATIONS

Product is non-hazardous in its finished form and no personal protection is required.

9. REACTIVITY DATA

Stability:	This is a stable material.
Hazardous Polymerization:	Will not occur.
Incompatibilities:	None known.
Instability Conditions:	None known.

Decomposition Products: By fire: CO₂, CO, aromatic or aliphatic fragments, traces of HGN, MDI.

10. SPILL AND LEAK PROCEDURES

Spill or Leak Procedures: Remove mechanically by method which minimizes generation of airborne dust.

Waste Disposal Method: Material may be incinerated or landfilled in compliance with Federal, State and local environmental control regulations.

11. SPECIAL PRECAUTIONS & STORAGE DATA

Storage Temperature (Min/Max): Ambient

Shelf Life: Not Applicable

Special Sensitivity: Moisture

Handling/Storage Precautions: Material should be stored in a clean, dry environment in sealed containers.

12. SHIPPING INFORMATION

D.O.T. Shipping Name: None

Technical Shipping Name: Polyurethane Polyester Elastomer

D.O.T. Hazard Class: Non-Regulated

U.N./N.A. Number: None

Product Rq (lbs.): None

D.O.T. Label: None

D.O.T. Placard: None

Freight Class Package: Plastic Materials, O/T Exp., Pellet

Product Label: Texin 480A Natural (Pellets)

13. ANIMAL TOXICITY DATA

No animal toxicity information available.

14. FEDERAL REGULATORY INFORMATION

OSHA Status: This product is not hazardous under the criteria of the Federal OSHA Hazard Communication Standard 29 CFR 1910.1200. However, thermal processing and decomposition fumes from this product may be hazardous as noted in Section V.

TSCA Status: On TSCA Inventory.

CERCLA Reportable Quantity: None

SARA Title III:

Section 302 Extremely Hazardous Substances: None

Section 311/312 Hazard Categories: Non-hazardous under Section 311/312.

Section 313 Toxic Chemicals:

None

SCRA Status:

If discarded in its purchased form, this product would not be a hazardous waste either by listing or characteristic. However, under RCRA, it is the responsibility of the product user to determine at the time of disposal, whether a material containing the product or derived from the product should be classified as a hazardous waste. (40 CFR 261.20-24)

15. OTHER REGULATORY INFORMATION

The following chemical are specifically listed by individual states; other product specific health and safety data in other sections of the MSDS may also be applicable for state requirements. For details on your regulatory requirements you should contact the appropriate agency in your state.

COMPONENT NAME

/CAS NUMBER	CONCENTRATION	STATE CODE
Polyurethane Polyester Elastomer 26375-23-5	> 99%	PA3, NJ4

NJ4 – New Jersey Other – included in 5 predominant ingredients > 1%
PA3 – Pennsylvania Non-hazardous present at 3% or greater.

California Proposition 65

To the best of our knowledge, this product contains no levels of listed substances, which the state of California has found to cause cancer, birth defects or other reproductive effects.

Massachusetts Substance List (MSL)

Hazardous Substances and Extraordinarily Hazardous Substances on the MSL must be identified when present in products. To the best of our knowledge, this product contains no substances at a level which could require reporting under the statute.

16. OTHER INFORMATION

The information contained herein is based on the present state of our knowledge and is intended to describe our products from the point of view of safety requirements. Therefore, it should not be construed as guaranteeing specific properties.

Revision Date: November 28, 2006