

Material Safety Data Sheet (MSDS)

(compliance with OSHA)

1. **Chemical Product:** Volta synthetic belts

Family type: L, O, P, M, Z, G, H, K, MD, LT, HDR.

2. **Composition / Information on Ingredients:**

Thermoplastic elastomers in a range of (shore-) hardness's may include additives e.g., stabilizers, plasticizers.

Hazardous Ingredients: None.

3. **Possible Risks:**

Not Applicable.

4. **First Aid Procedures:**

Melt burns should receive hospital treatment.

5. **Firefighting Procedures:**

All standard extinguishing agents, e.g. water spray, CO₂, foam, or dry powder can be used. In the case of fire or smoldering, fire-fighters should wear breathing apparatus. Contaminated extinguishing water should be disposed of, according to regulations.

6. **Measures in Case of Accidental Spillage:**

Not Applicable.

7. **Storage and Handling:**

Storage Conditions: Protect against moisture, sunlight, and heat source.

Work Conditions: Avoid breathing of melt fumes during welding operation.

Weld in well ventilated area.

Personal Hygiene: Wash thoroughly after welding.

8. Exposure Controls and Personal Protective Equipment:

Acute Effects of Exposure: Material is a non-reactive solid.

Chronic Effects of Exposure: Not known.

Limits of Exposure: During welding, certain belt families, where a decomposition is suspected, MDI (Diphenylmethane Diisocyanate) could be liberated in small amounts.

OSHA PEL for MDI is 0.02 ppm (which is ceiling value not to be exceeded).

ACGIH TLV for MDI is 0.005 ppm.

Personal Protective Equipment:

Eye Protection - Wear goggles when welding.

Skin Protection - As necessary to prevent contact under hot melt condition.

Respiratory Protection - Avoid breathing fumes. The welding area should be well ventilated.

9. Physical and Chemical Properties:

Shape: Solid Conveyer Belt.

Colour: According to Belt Family.

Odour: None.

Melt Temperature: Above 120 °C

Specific Gravity: ~ 1.2

Flash Point: >200 °C

Ignition Temperature: >400 °C

Solubility in Water: Insoluble.

10. Stability and Reactivity:

Thermal Decomposition: at 230°C.

Hazardous decomposition can occur in case of fire, smouldering or overheating during welding: The released toxic gases have not been fully determined. They consist mainly of CO and CO₂ and may include one or more of the following: nitric oxides, amines, nitriles, hydrocarbons, isocyanates, hydrogen cyanide, aldehydes.

Hazardous Reactions: None.

11. **Toxicological Information:** When welding the belt, slight quantities of toxic fumes may evolve. Generation of fumes increases, if the recommended processing temperature is exceeded.

Higher concentrations can cause breathing difficulty. Sensitisation may occur. MDI could be liberated in small amounts; adequate ventilation should be used to maintain the limit values permitted under 0.005 ppm.

12. **Ecological Information:**

In general, not hazardous to water.

13. **Disposal Considerations:**

Material may be incinerated or landfilled in compliance with federal and local environmental control regulation Disposal Code No.: for unused product: 57110 (Germany).

14. **Transport Information:**

Classified as non-dangerous goods, in accordance with transport regulations.

15. **Regulatory Information:**

OSHA STATUS - This product is not hazardous under the OSHA Hazard Communication Standard (29 CFR 1910.1200). However, fumes from thermal processing may be hazardous as noted in section 8.

SARA TITEL III - Section 302 EXTREMELY HAZARDOUS SUBSTANCES – None.

- **Section 311/312 HAZARD CATEGORIES** - Non hazardous under section 311/312.

- **Section 313 TOXIC CHEMICALS** - None.

- **EU Directive** - No identification according to the 4th amendment of the regulation concerning dangerous substances (October 26, 1993).

- **Technical Regulations for Dangerous Products 900:** Limit value for MDI in air: 0,005 ppm (0,05 mg/m³).

- **Technical Regulations for Dangerous Products 500:** Appendix 3 as classifies gaseous MDI TLV- list category IIIB. Provided the recommended processing conditions are observed, the limits will not be exceeded.

16. **Other Information:**

User Responsibility: The information submitted in this bulletin is based on our current knowledge and belief. However, it cannot cover all possible individual situations. All chemicals may present unknown health hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards which exist. As the user has the responsibility to provide a safe work area, all aspects of an individual operation should be examined to determine if or where, precautions, in addition to those described herein, are required. It is the responsibility of those to whom we supply our products to ensure that any proprietary rights and existing laws and legislation are observed.