

## MATERIAL SAFETY DATA SHEET

# RESISTAWEAR

OSHA HazCom Standard 29 CFR 910.1200(g) and GHS Rev 03.

### 1 Identification

- **Product Identifier**
- **Trade Name:** Resistawear
- **Product Number:** BSR, ETA, 2001, 4001, E801, SW2001
- **CAS Number:** 9002-88-4
- **NPL Number:** 500-038-2
- **Relevant identified uses of the substance or mixture and uses advised against:** Use for this product are based on application consultation.
- **Product Description:** UHMW polyethylene
- **Application of the substance/ the mixture:** Industry Specific Application

### 2 Hazard(s) Identification

- **Classification of the substance or mixture:** Eye Irrit. 28 H320 Causes eye irritation.
- **Label elements:**
- **GHS label elements:** The substance is classified and labeled according to the Globally Harmonized System (GHS).
- **Hazard pictograms:** Non-Regulated Material
- **Signal word:** Warning
- **Hazard statements:** H320 Causes eye irritation.
- **Precautionary statements:**
- P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P337+P313: If eye irritation persists: Get medical advice/attention.
- **Information pertaining to particular dangers for man and environment:** Dangers are only present when polymer dust is created.
- **Classification system:**
- **NFPA ratings (scale 0 - 4)**  
Health = 1  
Fire = 0  
Reactivity = 0
- **HMIS-ratings (scale 0 - 4)**  
Health = 1  
Fire = 0  
Reactivity = 0
- **Hazard(s) not otherwise classified (HNOC):** None known

### 3 Composition/Information on Ingredients

- **Chemical characterisation:** Substance
- **CAS No. Description:** 9002-88-4 Polyethylene
- **Identification number(s)**
- **NLP Number:** 500-038-2



#### 4 First-Aid Measures

- **Description of first aid measures:**
- **General information:** First aid measures may be deemed necessary in cases of acute exposure to high concentrations of dust.
- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:** Generally the product does not irritate the skin.
- **After eye contact:** Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- **After swallowing:**
- Do not induce vomiting without medical advice. If swallowed and symptoms occur, consult a doctor.
- **Information for doctor:**
- **Most important symptoms and effects, both acute and delayed:** No further relevant information available.
- **Indication of any immediate medical attention and special treatment needed:** No further relevant information available.

#### 5 Fire-Fighting Measures

- **Extinguishing media:**
- **Suitable extinguishing agents:**  
Fire-extinguishing powder  
Foam  
Water
- **For safety reasons unsuitable extinguishing agents:**  
Carbon monoxide  
Carbon dioxide
- **Special hazards arising from the substance or mixture:** No further relevant information available.
- **Advice for firefighters:**
- **Protective equipment:** As in any fire, wear self-contained breathing apparatus pressure-demand (NIOSH approved or equivalent) and full protective gear to prevent contact with skin and eyes.

#### 6 Accidental Release Measures

- **Personal precautions, protective equipment and emergency procedures:** Avoid formation of dust.
- **Environmental precautions:** No special measures required.
- **Methods and material for containment and cleaning up:** Dispose of the collected material according to regulations.
- **Reference to other sections:**  
See Section 7 for information on safe handling.  
See Section 8 for information on personal protection equipment.  
See Section 13 for disposal information.

#### 7 Handling and Storage

- **Handling**
- **Precautions for safe handling:** Do not handle molten material without proper PPE.
- **Information about protection against explosions and fires:** No special measures required.
- **Conditions for safe storage, including any incompatibilities:** Halogen, strong oxidizing agent, aerobic solvents.
- **Storage**
- **Requirements to be met by storerooms and receptacles:** Store in a cool location.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** None.
- **Specific end use(s):** No further relevant information available.

#### 8 Exposure Controls/Personal Protection

- **Additional information about design of technical systems:** No further data; see section 7.
- **Control parameters:**
- **Components with occupational exposure limits:**
- **Additional information:** The lists that were valid during the creation of this SOS were used as basis.
- **Exposure controls:**
- **Personal protective equipment:**
- **General protective and hygienic measures:** Wash hands before breaks and at the end of work.
- **Breathing equipment:** Wearing protective breathing mask where dust present.
- **Protection of hands:** Not required. Wear protective gloves when thermal or melt processing.
- **Material of gloves:** The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.
- **Penetration time of glove material:** Not applicable.
- **Eye protection:** Wear protective eye wear when cutting material or when dust is present.



## 9 Physical and Chemical Properties

- **Information on basic physical and chemical properties**
- **General Information**
- **Appearance**
  - Form: Sheet
  - Colour: Clear
- **Odor:** Mild
- **Odor threshold:** Not determined
- **pH-value:** Not applicable
- **Change in condition**
  - Melting point/Melting range: 131 1 °C (268 °F)
  - Boiling point/Boiling range: Not determined
- **Flash point:** 353 °C (667 °F)
- **Flammability (solid, gaseous):** Product is not flammable.
- **Ignition temperature:** Not determined.
- **Decomposition temperature:** Not determined.
- **Auto igniting:** Not determined.
- **Danger of explosion:** Product does not present an explosion hazard.
- **Explosion limits**
  - Lower: Not determined.
  - Upper: Not determined.
- **Vapor pressure:** Not applicable.
- **Density @ 20 °C (68 °F):** 0.93 g/cm<sup>3</sup> (7.761 lbs/gal)
- **Relative density:** Not determined.
- **Vapor density:** Not applicable.
- **Evaporation rate:** Not applicable.
- **Solubility in / Miscibility with**
  - Water: Insoluble.
- **Partition coefficient (n-octanol/water):** Not determined.
- **Viscosity:** Not applicable.
  - Dynamic: Not applicable.
  - Kinematic: Not applicable.
  - Organic solvents: 0.0%
  - Solids content: 100.0%
- **Other information:** No further relevant information available.

## 10 Stability and Reactivity

- **Reactivity:** No further relevant information available.
- **Chemical stability:** Stable under normal conditions.
- **Possibility of hazardous reactions:** No dangerous reactions known.
- **Conditions to avoid:** No further relevant information available.
- **Incompatible materials:** Halogens, strong oxidizing agents, aromatic solvents
- **Hazardous decomposition products:** No dangerous decomposition products known. Thermal decomposition products may include oxides of carbon.

## 11 Toxicological Information

- **Information on toxicological effects:**
- **Acute toxicity:**
- **LD/LC50 values that are relevant for classification:**
  - 9002-88-4 Polyethylene**
    - Oral LD50 Oral >5000 ml/kg (rat)
    - Dermal LD50 >2000 mg/kg (rabbit)
- **Primary irritant effect:**
  - On the skin: No irritating effect.
  - On the eye: Irritating effect.
- **Additional toxicological information:**
- **Carcinogenic categories:**
- **IARC (International Agency for Research on Cancer):** 9002-88-4 Polyethylene
- **NTP (National Toxicology Program):** Substance is not listed.
- **OSHA-Ca (Occupational Safety & Health Administration):** Substance is not listed.



## 12 Ecological Information

- **Toxicity:**
- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability:** No further relevant information available.
- **Behavior in environmental systems:**
- **Bioaccumulative potential:** No further relevant information available.
- **Mobility in soil:** No further relevant information available.
- **Additional ecological information:**
- **General notes:** Generally not hazardous for water.
- **Results of PBT and vPvB assessment:**  
**PBT:** Not applicable.  
**vPvB:** Not applicable.
- **Other adverse effects:** No further relevant information available.

## 13 Disposal Considerations

- **Waste treatment methods:**
- **Recommendation:** Observe all federal, state and local environmental regulations when disposing of this material.
- **Uncleaned packagings**
- **Recommendation:** Disposal must be made according to official regulations.

## 14 Transport Information

- **UN-Number:**
- **DOT, ADR, ADN, IMDG, IATA** Non-Regulated Material.
- **UN proper shipping name:**
- **DOT, ADR, ADN, IMDG, IATA** Non-Regulated Material.
- **Transport hazard class(es):**
- **DOT, ADR, ADN, IMDG, IATA**
- **Class:** Non-Regulated Material.
- **Packing group:**
- **DOT, ADR, IMDG, IATA** Non-Regulated Material.
- **Environmental hazards:** Not applicable.
- **Special precautions for user:** Not applicable.
- **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code:** Not applicable.
- **UN "Model Regulation":** Non-Regulated Material.
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## 15 Regulatory Information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture:**
- **SARA (Superfund Amendments and Reauthorization):**
- **Section 355 (extremely hazardous substances):** Substance is not listed.
- **Section 313 (Specific toxic chemical listings):** Substance is not listed.
- **TSCA (Toxic Substances Control Act):** Substance is listed.
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- **California Proposition 65:**
- **Chemicals known to cause cancer:** Substance is not listed.
- **Chemicals known to cause reproductive toxicity for females:** Substance is not listed.
- **Chemicals known to cause reproductive toxicity for males:** Substance is not listed.
- **Chemicals known to cause developmental toxicity:** Substance is not listed.
- **New Jersey Right-to-Know List:** Substance is not listed.
- **New Jersey Special Hazardous Substance List:** Substance is not listed.
- **Pennsylvania Special Hazardous Substance List:** Substance is not listed.
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- **Carcinogenic categories:**
- **EPA (Environmental Protection Agency):** Substance is not listed.
- **TLV (Threshold Limit Value established by ACGIH):** Substance is not listed.
- **NIOSH-Ca (National Institute for Occupational Safety and Health):** Substance is not listed.
- **GHS label elements:** The substance is classified and labeled according to the Globally Harmonized System (GHS).
- **Hazard pictograms:** Non-Regulated Material
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- **P337+P313:** If eye irritation persists: Get medical advice/attention.
- **National regulations:** Non-Regulated Material.



## 16 Other Information

The information and recommendations in this safety data sheet are, to the best of our knowledge, accurate as of the date of issue. Nothing herein shall be deemed to create warranty, expressed or implied, and shall not establish a legally valid contractual relationship. It is the responsibility of the user to determine applicability of this information and the suitability of the material or product for any particular purpose.

- **Date of preparation / last revision: 06/12/24/ -**
- **Abbreviations and acronyms:**

ADR: The European Agreement concerning the International Carriage of Dangerous Goods by Road  
ADN: The European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways  
IMDG: International Maritime Code for Dangerous Goods  
DOT: US Department of Transportation IATA: International Air Transport Association  
ACGIH: American Conference of Governmental Industrial Hygienists EINECS: European Inventory of Existing Commercial Chemical Substances CAS: Chemical Abstracts Service (division of the American Chemical Society) NFPA: National Fire Protection Association (USA)  
HMIS: Hazardous Materials Identification System (USA) LC50: Lethal concentration, 50 percent  
LD50: Lethal dose, 50 percent  
PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative NIOSH: National Institute for Occupational Safety OSHA: Occupational Safety & Health  
TLV: Threshold Limit Value  
PEL: Permissible Exposure Limit REL: Recommended Exposure Limit  
Eye Irrit. 2B: Serious eye damage/eye irritation, Hazard Category 2B

\*Data compared to the previous version altered.  
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