

Safety Data Sheet

Acc. to OSHA HCS (29 CFR 1910.1200)

Printing date: April 23, 2018

Revision: April 23, 2018

1 Identification

- **Product identifier**
- **Trade name:** SWX-262 Gamma Putty
- **Product code:** SWX-262
- **Recommended use and restriction on use**
- **Recommended use:** Gamma-shielding material.
- **Restrictions on use:** Contact manufacturer/supplier
- **Details of the supplier of the Safety Data Sheet**
- **Manufacturer/Supplier:**
Shieldwerx, a Division of Bladewerx, LLC
4529 Arrowhead Ridge Drive
Rio Rancho, NM 87124
(505) 892-5144
info@shieldwerx.com
- **Emergency telephone number:** (505) 892-5144

2 Hazard(s) identification

- **Classification of the substance or mixture**
The product is not classified as hazardous according to the Globally Harmonized System (GHS).
- **Label elements**
- **GHS label elements:** None.
- **Hazard pictograms:** None.
- **Signal word:** None
- **Hazard statements:** None
- **Other hazards** There are no other hazards not otherwise classified that have been identified.

3 Composition/information on ingredients

- **Chemical characterization:** Mixtures

- **Components:**

7440-69-9	bismuth	85-95%
9002-88-4	Polyethylene low density	5-15%

- **Additional information:**
For the listed ingredient(s), the identity and/or exact percentage(s) are being withheld as a trade secret.

4 First-aid measures

- **Description of first aid measures**
- **After inhalation:**
Unlikely route of exposure.
Supply fresh air; consult doctor in case of complaints.
- **After skin contact:**
Generally the product does not irritate the skin.
Wash with soap and water.

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Seek medical treatment in case of complaints.

- **After eye contact:**

Remove contact lenses if worn.

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

- **After swallowing:**

Unlikely route of exposure.

Do not induce vomiting; immediately call for medical help.

- **Most important symptoms and effects, both acute and delayed:** No relevant information available.

- **Indication of any immediate medical attention and special treatment needed:**

No relevant information available.

5 Fire-fighting measures

- **Extinguishing media**

- **Suitable extinguishing agents:**

CO₂, extinguishing powder or water spray. Fight larger fires with water spray.

- **For safety reasons unsuitable extinguishing agents:** None.

- **Special hazards arising from the substance or mixture**

Formation of toxic gases is possible during heating or in case of fire.

- **Advice for firefighters**

- **Protective equipment:**

Wear self-contained respiratory protective device.

Wear fully protective suit.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**

Ensure adequate ventilation.

Use personal protective equipment as required.

- **Environmental precautions** No special measures required.

- **Methods and material for containment and cleaning up** Pick up mechanically.

- **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:**

Prevent formation of dust.

Any deposit of dust which cannot be avoided must be regularly removed.

- **Information about protection against explosions and fires:** No special measures required.

- **Conditions for safe storage, including any incompatibilities**

- **Requirements to be met by storerooms and receptacles:**

Storage area should be dry and well-ventilated.

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Store at <110 °F / <45 °C.

· **Information about storage in one common storage facility:** No relevant information available.· **Specific end use(s)** No relevant information available.

8 Exposure controls/personal protection

· **Control parameters**· **Components with limit values that require monitoring at the workplace:**

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

· **Exposure controls**· **General protective and hygienic measures:** Avoid contact with the eyes.· **Engineering controls:** No relevant information available.· **Breathing equipment:**

NIOSH or EU approved dust respirator should be used for operations generating dust.

· **Protection of hands:**

Wear gloves for the protection against mechanical hazards according to OSHA and NIOSH rules.

· **Eye protection:** Follow relevant national guidelines concerning the use of protective eyewear.· **Body protection:** Not required under normal conditions of use.· **Limitation and supervision of exposure into the environment** No special requirements.· **Risk management measures** No special requirements.

9 Physical and chemical properties

· **Information on basic physical and chemical properties**· **Appearance:**

Form: Putty

Color: Gray

· **Odor:** Nearly odorless· **Odor threshold:** Not determined.· **pH-value:** Not applicable.· **Melting point/Melting range:** Not determined.· **Boiling point/Boiling range:** Not determined.· **Flash point:** 218.3 °C (424.9 °F)· **Flammability (solid, gaseous):** Not determined.· **Auto-ignition temperature:** Not determined.· **Decomposition temperature:** Not determined.· **Danger of explosion:** Product does not present an explosion hazard.· **Explosion limits**

Lower: Not determined.

Upper: Not determined.

· **Oxidizing properties:** Non-oxidizing.

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- | | |
|---|------------------------------------|
| · Vapor pressure: | Not applicable. |
| · Density: | |
| Relative density: | 3.81 |
| Vapor density: | Not applicable. |
| Evaporation rate: | Not applicable. |
| · Solubility in / Miscibility with Water: | Insoluble. |
| · Partition coefficient (n-octanol/water): | Not determined. |
| · Viscosity | |
| Dynamic: | Not applicable. |
| Kinematic: | Not applicable. |
| · Other information | No relevant information available. |

10 Stability and reactivity

- **Reactivity:** No relevant information available.
- **Chemical stability:** Stable under normal temperatures and pressures.
- **Thermal decomposition / conditions to be avoided:**
No decomposition if used and stored according to specifications.
- **Possibility of hazardous reactions**
Reacts with strong oxidizing agents.
Reacts with strong acids.
- **Conditions to avoid** Excessive heat.
- **Incompatible materials** Oxidizing agents
- **Hazardous decomposition products** Possible in traces.

11 Toxicological information

· Information on toxicological effects

· Acute toxicity:

· LD/LC50 values that are relevant for classification:

SWX-217 Poly-Biz

Oral LD50 >5000 mg/kg (rat)

· Primary irritant effect:

- **On the skin:** Based on available data, the classification criteria are not met.
- **On the eye:** Based on available data, the classification criteria are not met.
- **Sensitization:** Based on available data, the classification criteria are not met.

· Carcinogenic categories

· IARC (International Agency for Research on Cancer):

None of the ingredients are listed.

· NTP (National Toxicology Program):

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None of the ingredients are listed.

· OSHA-Ca (Occupational Safety & Health Administration):

None of the ingredients are listed.

· Probable route(s) of exposure:

Eye contact.

Skin contact.

· Germ cell mutagenicity: Based on available data, the classification criteria are not met.**· Carcinogenicity:** Based on available data, the classification criteria are not met.**· Reproductive toxicity:** Based on available data, the classification criteria are not met.**· STOT-single exposure:** Based on available data, the classification criteria are not met.**· STOT-repeated exposure:** Based on available data, the classification criteria are not met.**· Aspiration hazard:** Based on available data, the classification criteria are not met.

12 Ecological information

· Toxicity**· Aquatic toxicity** No relevant information available.**· Persistence and degradability** No relevant information available.**· Bioaccumulative potential:** No relevant information available.**· Mobility in soil:** No relevant information available.**· Additional ecological information****· General notes:** Avoid release to the environment.**· Other adverse effects** No relevant information available.

13 Disposal considerations

· Waste treatment methods**· Recommendation:**

Smaller quantities can be disposed of with household waste.

The user of this material has the responsibility to dispose of unused material, residues and containers in compliance with all relevant local, state and federal laws and regulations regarding treatment, storage and disposal for hazardous and nonhazardous wastes.

· Uncleaned packagings**· Recommendation:** Disposal must be made according to official regulations.**· Recommended cleansing agent:** Water, if necessary with cleansing agents.

14 Transport information

· UN-Number

DOT, ADR, IMDG, IATA

Not regulated.

· UN proper shipping name

DOT, ADR, IMDG, IATA

Not regulated.

· Transport hazard class(es)

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- | | |
|---|-----------------|
| · DOT, ADR, IMDG, IATA | |
| · Class | Not regulated. |
| · Packing group | |
| · DOT, ADR, IMDG, IATA | Not regulated. |
| · Environmental hazards | |
| · Marine pollutant: | No |
| · Special precautions for user | Not applicable. |
| · Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code | Not applicable. |

15 Regulatory information

- Safety, health and environmental regulations/legislation specific for the substance or mixture
- United States (USA)
- SARA

· Section 302 (extremely hazardous substances):

None of the ingredients are listed.

· Section 355 (extremely hazardous substances):

None of the ingredients are listed.

· Section 313 (Specific toxic chemical listings):

None of the ingredients are listed.

· TSCA (Toxic Substances Control Act)

All ingredients are listed.

· Proposition 65 (California)

· Chemicals known to cause cancer:

None of the ingredients are listed.

· Chemicals known to cause developmental toxicity for females:

None of the ingredients are listed.

· Chemicals known to cause developmental toxicity for males:

None of the ingredients are listed.

· Chemicals known to cause developmental toxicity:

None of the ingredients are listed.

· EPA (Environmental Protection Agency):

None of the ingredients are listed.

· IARC (International Agency for Research on Cancer):

None of the ingredients are listed.

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16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Date of preparation / last revision** April 23, 2018 / -

· **Abbreviations and acronyms:**

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road
IMDG: International Maritime Code for Dangerous Goods
DOT: US Department of Transportation
IATA: International Air Transport Association
CAS: Chemical Abstracts Service (division of the American Chemical Society)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
NIOSH: National Institute for Occupational Safety and Health
OSHA: Occupational Safety & Health Administration
TLV: Threshold Limit Value
PEL: Permissible Exposure Limit
REL: Recommended Exposure Limit

· **Sources**

Website, European Chemicals Agency (echa.europa.eu)
Website, US EPA Substance Registry Services (ofmpub.epa.gov/sorinternet/registry/substreg/home/overview/home.do)
Website, Chemical Abstracts Registry, American Chemical Society (www.cas.org)
Patty's Industrial Hygiene, 6th ed., Rose, Vernon, ed. ISBN: 978-0-470-07488-6
Casarett and Doull's Toxicology: The Basic Science of Poisons, 8th Ed., Klaasen, Curtis D., ed., ISBN: 978-0-07-176923-5.
Safety Data Sheets, Individual Manufacturers

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