

SECTION 1: Identification of the substance/mixture and of the company/undertaking

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1.1 Product ide	ntifier
	FSH 3 Bounce Di / ZnSe Top Plate Assy
Article number	
	entified uses of the substance or mixture and uses advised against
	ant information available. T <b>he substance / the mixture</b> Laboratory chemicals
	ne supplier of the safety data sheet
Manufacturer/	Supplier:
PerkinElmer, In	С.
710 Bridgeport	Avenue
	cticut 06484 USA
	JS@perkinelmer.com
203-925-4600	
PerkinElmer, Ir	<i>C</i> .
Chalfont Road	Buckinghamshire
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United Kingdor	
P: 0800 896 04	
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PerkinElmer, Ir	
	ic. iness Park, Unit A
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United Kingdor	
cc.uk@perkinel	
P: 44 1443 234	
	telephone number:
	vithin US) 800-424-9300
	rom outside US) +1 703-527-3887 (call collect)
	vithin AU) +(61)-290372994
SECTION 2	Hazards identification
2 1 Classificati	on of the substance or mixture
	cording to Regulation (EC) No 1272/2008
$\mathbf{\wedge}$	
🄇 🎎 🕻 GHS	06 skull and crossbones
$\checkmark$	
Acute Tox. 3	H331 Toxic if inhaled.
GHS	08 health hazard
STOT RE 2	H373 May cause damage to organs through prolonged or repeated exposure.
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(Contd. of page 1) GHS09 environment H400 Very toxic to aquatic life. Aquatic Acute 1 Aquatic Chronic 1 H410 Very toxic to aquatic life with long lasting effects. · 2.2 Label elements · Labelling according to Regulation (EC) No 1272/2008 The product is classified and labelled according to the CLP regulation. · Hazard pictograms GHS06, GHS08, GHS09 · Signal word Danger · Hazard-determining components of labelling: selenium · Hazard statements H331 Toxic if inhaled. H373 May cause damage to organs through prolonged or repeated exposure. H410 Very toxic to aquatic life with long lasting effects. Precautionary statements P260 Do not breathe dust/fume/gas/mist/vapours/spray. P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing. P311 Call a POISON CENTER/doctor. P321 Specific treatment (see on this label). P403+P233 Store in a well-ventilated place. Keep container tightly closed. Dispose of contents/container in accordance with local/regional/national/international regulations. P501 · 2.3 Other hazards The product does not contain any organic halogen compounds (AOX), nitrates, heavy metal compounds or formaldehydes. · Results of PBT and vPvB assessment · **PBT:** Not applicable. · vPvB: Not applicable.

## SECTION 3: Composition/information on ingredients

· 3.2 Chemical characterisation: Mixtures

· Description: Mixture of substances listed below with nonhazardous additions.

• Dangerous compone	ents:	
	zinc	50.0%
EINECS: 231-175-3	Pyr. Sol. 1, H250; Water-react. 1, H260 Aquatic Acute 1, H400; Aquatic Chronic 1, H410	
CAS: 7782-49-2	selenium	50.0%
EINECS: 231-957-4	<ul> <li>Acute Tox. 3, H301; Acute Tox. 3, H331</li> <li>STOT RE 2, H373</li> <li>Aquatic Chronic 4, H413</li> </ul>	
• Additional informati	ion: For the wording of the listed hazard phrases refer to section 16.	

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## SECTION 4: First aid measures

• 4.1 Description of first aid measures

• General information:

Immediately remove any clothing soiled by the product.

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

Remove breathing equipment only after contaminated clothing have been completely removed.

In case of irregular breathing or respiratory arrest provide artificial respiration.

• After inhalation:

Supply fresh air or oxygen; call for doctor.

In case of unconsciousness place patient stably in side position for transportation.

- After skin contact: Immediately wash with water and soap and rinse thoroughly.
- After eye contact: Rinse opened eye for several minutes under running water. Then consult a doctor.
- · After swallowing: Do not induce vomiting; call for medical help immediately.
- 4.2 Most important symptoms and effects, both acute and delayed No further relevant information available.
- 4.3 Indication of any immediate medical attention and special treatment needed

No further relevant information available.

## **SECTION 5: Firefighting measures**

- 5.1 Extinguishing media
- Suitable extinguishing agents: Use fire extinguishing methods suitable to surrounding conditions.
- 5.2 Special hazards arising from the substance or mixture
- During heating or in case of fire poisonous gases are produced.

• 5.3 Advice for firefighters

· Protective equipment: Mouth respiratory protective device.

## **SECTION 6:** Accidental release measures

• 6.1 Personal precautions, protective equipment and emergency procedures Mount respiratory protective device.

• 6.2 Environmental precautions:

Inform respective authorities in case of seepage into water course or sewage system.

• 6.3 Methods and material for containment and cleaning up:

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

- 6.4 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.

# SECTION 7: Handling and storage

· 7.1 Precautions for safe handling

Thorough dedusting.

Ensure good ventilation/exhaustion at the workplace.

Open and handle receptacle with care.



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· Information about fire - and explosion protection: Keep respiratory protective device available.

· 7.2 Conditions for safe storage, including any incompatibilities

· Storage:

- Requirements to be met by storerooms and receptacles: No special requirements.
- · Information about storage in one common storage facility: Not required.
- Further information about storage conditions: Keep container tightly sealed.
- 7.3 Specific end use(s) No further relevant information available.

### SECTION 8: Exposure controls/personal protection

- · 8.1 Control parameters
- Additional information about design of technical facilities: No further data; see item 7.
- · Ingredients 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.
- Additional information: The lists valid during the making were used as basis.
- · 8.2 Exposure controls
- · Personal protective equipment:
- General protective and hygienic measures: Keep away from foodstuffs, beverages and feed. Immediately remove all soiled and contaminated clothing Wash hands before breaks and at the end of work. Store protective clothing separately.
- · Respiratory protection:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

• Protection of hands:



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation · 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. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

## · Penetration time of glove material

The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

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• Eye protection:

Tightly sealed goggles

9.1 Information on basic physical and o	chemical properties	
· General Information		
· Appearance: Form:	Solid	
Form: Colour:	Dark brown	
· Odour:	Characteristic	
• Odour threshold:	Not determined.	
· pH-value:	Not applicable.	
· Change in condition		
Melting point/freezing point:	Undetermined.	
Initial boiling point and boiling range	2: 684 °C	
· Flash point:	Not applicable.	
· Flammability (solid, gas):	Not determined.	
Decomposition temperature:	Not determined.	
Auto-ignition temperature:	Product is not selfigniting.	
Explosive properties:	Product does not present an explosion hazard. Not determined.	
• Explosion limits:		
Lower:	Not determined.	
Upper:	Not determined.	
· Vapour pressure:	Not applicable.	
· Density at 20 •C:	5.965 g/cm <sup>3</sup>	
· Relative density	Not determined.	
· Vapour density	Not applicable.	
Evaporation rate	Not applicable.	
Solubility in / Miscibility with		
water:	Not miscible or difficult to mix.	
Partition coefficient: n-octanol/water:	Not determined.	
· Viscosity:		
Dynamic: Kinematic:	Not applicable. Not applicable.	



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· Solvent content:

100.0 %

• 9.2 Other information

Solids content:

No further relevant information available.

## SECTION 10: Stability and reactivity

· 10.1 Reactivity No further relevant information available.

· 10.2 Chemical stability

• Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.

• 10.3 Possibility of hazardous reactions No dangerous reactions known.

• 10.4 Conditions to avoid No further relevant information available.

- 10.5 Incompatible materials: No further relevant information available.
- 10.6 Hazardous decomposition products: No dangerous decomposition products known.

## **SECTION 11: Toxicological information**

- · 11.1 Information on toxicological effects
- Acute toxicity

Toxic if inhaled.

· LD/LC50 values relevant for classification:

7782-49-2 selenium

Oral LD50 6700 mg/kg (rat)

• Primary irritant effect:

- Skin corrosion/irritation Based on available data, the classification criteria are not met.
- Serious eye damage/irritation Based on available data, the classification criteria are not met.
- Respiratory or skin sensitisation Based on available data, the classification criteria are not met.
- Additional toxicological information:

· CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)

- 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

May cause damage to organs through prolonged or repeated exposure.

· Aspiration hazard Based on available data, the classification criteria are not met.

## **SECTION 12: Ecological information**

· 12.1 Toxicity

• Aquatic toxicity: No further relevant information available.

- 12.2 Persistence and degradability No further relevant information available.
- 12.3 Bioaccumulative potential No further relevant information available.
- 12.4 Mobility in soil No further relevant information available.

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- · Ecotoxical effects:
- **Remark:** Very toxic for fish
- Additional ecological information:
- · General notes:

Do not allow product to reach ground water, water course or sewage system. Danger to drinking water if even small quantities leak into the ground. Also poisonous for fish and plankton in water bodies. Very toxic for aquatic organisms

## · 12.5 Results of PBT and vPvB assessment

- · **PBT:** Not applicable.
- · vPvB: Not applicable.
- · 12.6 Other adverse effects No further relevant information available.

## **SECTION 13: Disposal considerations**

· 13.1 Waste treatment methods

· Recommendation

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

- · Uncleaned packaging:
- · Recommendation: Disposal must be made according to official regulations.

14.1 UN-Number	Void
ADR, ADN, IMDG, IATA	Voia
14.2 UN proper shipping name ADR, ADN, IMDG, IATA	Void
14.3 Transport hazard class(es)	
ADR, ADN, IMDG, IATA	
Class	Void
14.4 Packing group	
ADR, IMDG, IATA	Void
14.5 Environmental hazards:	
Marine pollutant:	Yes
14.6 Special precautions for user	Not applicable.
14.7 Transport in bulk according to Anna	ex II of
Marpol and the IBC Code	Not applicable.
UN ''Model Regulation'':	Non regulated according to above specifications.

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SECTION 15: R	egulatory information	
15.1 Safety, health a	and environmental regulations/legislation specific for the substance or mixture	
CAS: 7440-66-6 EINECS: 231-175-3		0.0%
CAS: 7782-49-2 EINECS: 231-957-4		0.0%
Seveso category H2 ACUTE TOXIC E1 Hazardous to the Qualifying quantity	U ubstances - ANNEX I None of the ingredients is listed. e Aquatic Environment (tonnes) for the application of lower-tier requirements 50 t (tonnes) for the application of upper-tier requirements 200 t	
electronic equipmen		l ar
None of the ingredie	nts is listed.	
National regulations	s:	
certain cases. Waterhazard class:	<b>imitation of use:</b> owed to be exposed to this hazardous material. Exceptions can be made by the authorit Water hazard class 2 (Self-assessment): hazardous for water. <b>y assessment:</b> A Chemical Safety Assessment has not been carried out.	ties
SECTION 16: O	ther information	
Disclaimer The information pro- and believed to be co concerning its accur considered a warran should be used with these are the only ha	ther information wided in this Material Safety Data Sheet is based on our present knowledge, porrect at the date of publication. However, no representation is made acy and completeness. It is intended as guidance only, and is not to be aty or quality specification. All materials may present unknown hazards, and caution. Although certain hazards are described, we cannot guarantee that tzards which exist. PerkinElmer Life and Analytical Sciences shall not be held are resulting from handling or from contact with the product.	

- H400 Very toxic to aquatic life.
- H410 Very toxic to aquatic life with long lasting effects.

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(Contd. of page 8) H413 May cause long lasting harmful effects to aquatic life. · Department issuing SDS: Environmental, Health and Safety PerkinElmer Chalfont Road **Buckinghamshire** Seer Green HP9 2FX United Kingdom Telephone : 0800-89 60 46 FAX: 0800-89 17 14 Contact: Within the USA: 1-(800)-762-4000 Outside the USA: 1-(203)-712-8488 · Abbreviations and acronyms ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road) IMDG: International Maritime Code for Dangerous Goods IATA: International Air Transport Association GHS: Globally Harmonised System of Classification and Labelling of Chemicals EINECS: European Inventory of Existing Commercial Chemical Substances ELINCS: European List of Notified Chemical Substances CAS: Chemical Abstracts Service (division of the American Chemical Society) LC50: Lethal concentration, 50 percent LD50: Lethal dose, 50 percent PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative Pyr. Sol. 1: Pyrophoric solids - Category 1 Water-react. 1: Substances and mixtures which in contact with water emit flammable gases - Category 1 Acute Tox. 3: Acute toxicity – Category 3 STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2 Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard - Category 1 Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard - Category 1 Aquatic Chronic 4: Hazardous to the aquatic environment - long-term aquatic hazard - Category 4 • \* Data compared to the previous version altered.