3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Synonyms</th>
<th>Magnetic iron oxide nanoparticles</th>
</tr>
</thead>
<tbody>
<tr>
<td>Formula</td>
<td>Fe₃O₄</td>
</tr>
<tr>
<td>Molecular Weight</td>
<td>231.53 g/mol</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Component</th>
<th>Classification</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Triton tetracide</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CAS-No.</td>
<td>1317-61-9</td>
<td></td>
</tr>
<tr>
<td>EC-No.</td>
<td>216-277-5</td>
<td></td>
</tr>
<tr>
<td>Skin Irrit. 2; Eye Irrit. 2; STOT SE 3; H315, H319, H336</td>
<td>1 - 5 %</td>
<td></td>
</tr>
</tbody>
</table>

For the full text of the H-Statements and R-Phrases mentioned in this Section, see Section 16.

4. FIRST AID MEASURES

**General advice:**
Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

**If Inhaled:**
If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

**In case of skin contact:**
Wash off with soap and plenty of water. Consult a physician.

**In case of eye contact:**
Flush eyes with water as a precaution.

**If swallowed:**
Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

5. FIREFIGHTING MEASURES

**Conditions of flammability:**
Not flammable or combustible.

**Suitable extinguishing media:**
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

**Special protective equipment for fire fighters:**
Wear self-contained breathing apparatus for fire fighting if necessary.

**Hazardous combustion products:**
Hazardous decomposition products formed under fire conditions. - Iron oxides.

6. ACCIDENTAL RELEASE MEASURES

**Personal precautions:**
Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation.

**Environmental precautions:**
Do not let product enter drains.

**Methods and materials for containment and cleaning up:**
Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.

7. HANDLING AND STORAGE

**Conditions for safe storage:**
Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.
6. EXPOSURE CONTROLS: PERSONAL PROTECTION

Contains no substances with occupational exposure limit values.

Personal protective equipment

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as MOSH (US) or CEN (EU).

Hand protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Eye protection

Safety glasses with side-shields conforming to EN 166. Use equipment for eye protection tested and approved under appropriate government standards such as MOSH (US) or EN 166(EU).

Skin and body protection

Impervious clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Hygiene measures

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Form: liquid
Colour: no data available

Safety data

pH: no data available
Melting point/freezing point: no data available
Boiling point: no data available
Flash point: no data available
Ignition temperature: no data available
Autoignition temperature: no data available
Lower explosion limit: no data available
Upper explosion limit: no data available
Vapour pressure: no data available
Density: no data available
Water solubility: no data available
Partition coefficient: n-octanol/water: no data available
Relative vapour density: no data available
Odour: no data available
Odour Threshold: no data available

10. STABILITY AND REACTIVITY

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

no data available

Conditions to avoid

no data available

Materials to avoid

no data available

Hazardous decomposition products

Hazardous decomposition products formed under fire conditions: Iron oxides

Other decomposition products: no data available

11. TOXICOLOGICAL INFORMATION

Acute toxicity

Oral LD₅₀: no data available
Inhalation LC₅₀: no data available
Dermal LD₅₀: no data available

Other information on acute toxicity

no data available

Skin corrosion/irritation

no data available

Serious eye damage/eye irritation

no data available

Respiratory or skin sensitisation

no data available

Germ cell mutagenicity

no data available

Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive toxicity

no data available

Teratogenicity

no data available
12. ECOLOGICAL INFORMATION

Toxicity
no data available

Persistence and degradability
no data available

Bioaccumulative potential
no data available

Mobility in soil
no data available

PBT and vPvB assessment
no data available

Other adverse effects
no data available

13. DISPOSAL CONSIDERATIONS

Product
Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

Contaminated packaging
Dispose of as unused product.

14. TRANSPORT INFORMATION

DOT (US)
Not dangerous goods

IMDG
Not dangerous goods

IATA
Not dangerous goods

15. REGULATORY INFORMATION

OSHA Hazards
Target Organ Effect, Irritant

Ainalz - 725305
Delivery 04009-7662-000090 Purchase Order CC 913119/SCH-RANK

SARA 302 Components
SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components
SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

SARA 311/312 Hazards
Acute Health Hazard, Chronic Health Hazard

Massachusetts Right To Know Components
No components are subject to the Massachusetts Right to Know Act.

Pennsylvania Right To Know Components

<table>
<thead>
<tr>
<th>CAS-No.</th>
<th>Revision Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>7732-18-5</td>
<td>1317-61-9</td>
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</table>

New Jersey Right To Know Components

<table>
<thead>
<tr>
<th>CAS No.</th>
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<tbody>
<tr>
<td>7732-18-5</td>
<td>1317-61-9</td>
</tr>
</tbody>
</table>

Polyethylene glycol (PEG) ligands

California Prop. 65 Components
This product does not contain any chemicals known to States of California to cause cancer, birth defects, or any other reproductive harm.

16. OTHER INFORMATION

Text of H-code(s) and P-phrase(s) mentioned in Sectbn 3

Eye Irrit.  Eye irritation

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H335 May cause respiratory irritation.

Skin Irrit.  Skin irritation

STOT SE Specific target organ toxicity - single exposure

Further Information

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