

Safety data sheet
according to 1907/2006/EC, Article 31

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

1.1. Product identifier

Microtracers FSS-Lake

(Blue, Red, Brown, Yellow, Green, Orange, Violet, etc.)

1.2. Relevant identified uses of the substance or mixture:

ADDITIVE FOR USE IN ANIMAL FEED

Uses advised against:

No information available at present

1.3 Details of the supplier of the safety data sheet

Micro-Tracers, Inc – 1375 Van Dyke Ave., San Francisco, CA, 94124, USA

Phone: 1-415-822-1100

Fax: 1-415-822-6615

info@microtracers.com

1.4. Further information obtainable from: david@microtracers.com

Emergency telephone number: 1-800-359-0920 or 415-664-2891 (24 hours/day)

2 Hazards identification

2.1. Classification of the substance or mixture

2.1.1. Classification according to Directive 67/548/EEC or Directive 1999/45/EC Not applicable.

2.1.2. Information concerning particular hazards for human and environment:

The product does not have to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

2.1.3 Classification system:

The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

2.2. Label elements

2.2.1 Labelling according to EU guidelines:

Observe the general safety regulations when handling chemicals.

The product is not subject to identification regulations under EU Directives and the Ordinance on Hazardous Materials (German GefStoffV).

2.2.2. Other hazards

Results of PBT and vPvB assessment

PBT: Not applicable.

vPvB: Not applicable.

3 Composition/information on ingredients

3.1. Chemical characterization: Mixtures

Description: Principal ingredients (min 95%): Stainless Steel Grit (Iron-minimum 80%, Chromium-maximum 20%, no other element exceed 1%). Minor components (max 5%): FD&C Lake Food Coloring, and Food Grade Coating.

3.2. Dangerous components: none

3.3. Additional information: For the wording of the listed risk phrases refer to section 16.

4 First aid measures

4.1 Description of first aid measures

General information: No special measures required.

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After inhalation: Supply fresh air; consult doctor in case of complaints.

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After skin contact: Generally the product does not irritate the skin.

After eye contact: Rinse opened eye for several minutes under running water.

After swallowing: If symptoms persist consult doctor.

4.2. Most important symptoms and effects, both acute and delayed: food coloring may cause minor nasal irritation and production of colored mucous. A dusk mask can be worn when working with Microtracers to avoid this problem.

4.3. Indication of any immediate medical attention and special treatment needed

No further relevant information available.

5 Firefighting measures

5.1. Extinguishing media

Suitable extinguishing agents:

CO₂, powder or water spray.

5.2. Special hazards arising from the substance or mixture No further relevant information available.

5.3. Advice for firefighters: No special advice required.

6 Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures Avoid contact with eyes, use protective respirator

6.2. Environmental precautions: No special measures required.

6.3. Methods and material for containment and cleaning up: Pick up mechanically.

6.4. Reference to other sections

No dangerous substances are released.

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

7.1. Precautions for safe handling Sweep up and dispose of as non-hazardous waste. Cleanup personnel can wear dusk mask. Mop area of spill with water and soap. A 10% Bleach solution can clean up coloring

7.2 Information about fire - and explosion protection: No special measures required.

7.3. Conditions for safe storage, including any incompatibilities: Stability should be determined for any premix in which Microtracers will be included.

7.4. Requirements to be met by storerooms and receptacles: No special requirements.

7.5. Information about storage in one common storage facility: Not required.

7.6. Further information about storage conditions: None.

7.7 Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

8.1. Additional information about design of technical facilities: No further data; see item 7.

8.2. 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.

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Exposure controls

8.3.: General protective and hygienic measures:

The usual precautionary measures are to be adhered to when handling chemicals.

8.4 Respiratory protection: a dusk mask can be worn.

8.5. Protection of hands: use protective gloves (rubber or cotton) to avoid skin coloring

8.6. Eye protection: Safety Glasses or equivalent can be worn.

9 Physical and chemical properties

Information on basic physical and chemical properties

General Information

9.1. Appearance:

Form:

Fine Granular

Color:

Generally the product will be tinted the color of the dye or it will appear charcoal in color.

· **Odour:**

Characteristic

· **Odour threshold:**

Not determined.

9.2. pH-value (100 g/l) at 20°C:

6.5-7.5

9.3. Change in condition

Melting point/Melting range:

Undetermined.

Boiling point/Boiling range:

Undetermined.

9.4. Flash point:

Undetermined.

9.5. Flammability (solid, gaseous):

Not determined.

9.6. Ignition temperature:

Not determined.

9.7. Decomposition temperature:

Coloring may decompose above 120 °C.

9.8. Self-igniting:

Product is not self-igniting.

9.9. Danger of explosion:

Product does not present an explosion hazard.

9.10. Explosion limits:

Lower:

Not determined.

Upper:

Not determined.

9.11. Vapour pressure:

Not applicable.

9.12. Bulk Density at 20°C:

2.4-2.7 g/cm³

· **Relative density**

Not determined.

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9.13. Vapour density	<i>Not applicable.</i>
9.14. Evaporation rate	<i>Not applicable.</i>
9.15. Solubility in / Miscibility with water:	<i>Insoluble.</i>
9.16. Segregation coefficient (n-octanol/water):	<i>Not determined.</i>
9.17. Viscosity:	
Dynamic:	<i>Not applicable.</i>
Kinematic:	<i>Not applicable.</i>
9.18. Solvent content:	
Organic solvents:	<i>0.0 %</i>
VOC (EC)	<i>0.01 %</i>
9.19. Solids content:	<i>100.0 %</i>
9.20. Other information	<i>No further relevant information available.</i>

10 Stability and reactivity

- 10.1. **Chemical stability:** *Stable*
- 10.2. **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** *Containers once opened must be securely sealed if a portion of the product is to be stored. The product is mildly hygroscopic.*
- 10.5. **Incompatible materials:** *No further relevant information available.*
- 10.6. **Hazardous decomposition products:** *No dangerous decomposition products known.*

11 Toxicological information

Information on toxicological effects

11.1. Acute toxicity:

11.2. Primary irritant effect:

- **on the skin:** *No irritant effect.*
- **on the eye:** *No irritating effect.*

11.3. Sensitization:

No sensitizing effects known.

11.4. Additional toxicological information:

The product is not subject to classification according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version.

When used and handled according to specifications, the product does not have any harmful effects. No health risk is expected due to the use of Microtracer in food applications according to the "Brief toxicological assessment of Microtracer particles" by Fraunhofer Institute of Toxicology and Experimental Medicine, 9/2010.

12 Ecological information

Toxicity

- 12.1. **Aquatic toxicity:** *No further relevant information available.*
- 12.2. **Persistence and degradability** *No further relevant information available.*
- 12.3. **Behaviour in environmental systems:**
- 12.4. **Bioaccumulative potential** *No further relevant information available.*
- 12.5. **Mobility in soil** *No further relevant information available.*
- 12.6. **General notes:** *Generally not hazardous for water*

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12.7. Results of PBT and vPvB assessment

- **PBT:** Not applicable.
- **vPvB:** Not applicable.

12.8. Other adverse effects No further relevant information available.

13 Disposal considerations

13.1. Waste treatment methods

- **Recommendation** Smaller quantities can be disposed of with household waste.

13.2. Uncleaned packaging:

- **Recommendation:** Disposal must be made according to official regulations.

14 Transport information

- **UN-Number**
- **ADR, ADN, IMDG, IATA** The cargo is not restricted by IATA
- **UN proper shipping name**
- **ADR, ADN, IMDG, IATA** The cargo is not restricted by IATA
- **Transport hazard class(es)**
- **ADR, ADN, IMDG, IATA**
- **Class** The cargo is not restricted by IATA
- **Packing group**
- **ADR, IMDG, IATA** The cargo is not restricted by IATA
- **Environmental hazards:**
- **Marine pollutant:** No
- **Special precautions for user** Not applicable.
- **Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** Not applicable.

15 Regulatory information

- **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

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.