

Material Safety Data Sheet

Conforms to OSHA Hazard Communication Standard (HCS) (29 CFR 1910.1200 / revised 2024)

ZChek-F18

Section 1: Product and Company identification

1.1 Product Name: ZChek- F18**1.2 Product Use:** Magnetic Particle Inspection Process.**1.3 Manufacturer Information:** ZChem Specialities Private Limited.

Sy No11/2/6, Puradapalya village, Tavarekere Hobli Bangalore, Karnataka-562130, India

1.4 Supplier : ZChem Specialities USA LLC

1115 E cottonwood Ln, Suite 150, Casa Grande, AZ 85122

1.5 Emergency Telephone Number: +91-9959963334

Section 2: Hazards Identification

2.1. CLASSIFICATION OF THE SUBSTANCE OR MIXTURE

GHS classification

Comb. Dust

This classification is based on the product as sold (in powder form). This classification is not applicable after the product is mixed with a liquid.

2.2. Label Elements

GHS labelling

Signal word (GHS) : Warning

Hazard statement (GHS) : May form combustible dust concentrations in air

2.3. OTHER HAZARDS

No additional information available

2.3. UNKNOWN ACUTE TOXICITY (GHS)

Not applicable

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Section 3: Information and Ingredients

3.1. SUBSTANCES

Not applicable.

3.2. MIXTURES

Name	Product identifier	%
Fatty acids, C18-unsaturated, dimers, polymers with ethylenediamine and tall-oil fatty acids	(CAS No) 68139-80-0	11.43

Section 4: First Aid Measures

4.1. DESCRIPTION OF FIRST AID MEASURES

First-aid measures after inhalation	: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical advice/attention if you feel unwell.
First-aid measures after skin contact	: If irritation occurs, flush skin with plenty of water. Get medical attention if irritation persists.
First-aid measures after eye contact	: In case of contact, immediately flush eyes with plenty of water. Remove contact lenses, if worn. If irritation persists, get medical attention.
First-aid measures after ingestion	: If swallowed, do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical advice/attention if you feel unwell

4.2. MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED

Symptoms/injuries after inhalation	: May cause respiratory tract irritation.
Symptoms/injuries after skin contact	: May cause skin irritation. Symptoms may include redness, drying, defatting and cracking of the skin.
Symptoms/injuries after eye contact	: May cause eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with possible redness and swelling.
Symptoms/injuries after ingestion	: May be harmful if swallowed. May cause stomach distress, nausea or vomiting.

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4.2. INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED

Symptoms may not appear immediately. In case of accident or if you feel unwell, seek medical advice immediately (show the label or SDS where possible).

Section 5: Fire Fighting Measures

5.1. EXTINGUISHING MEDIA

- Suitable extinguishing media : Treat for surrounding material.
- Unsuitable extinguishing media : Do not use a water jet since it may cause the fire to spread.

5.2. SPECIAL HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE

- Fire hazard : Combustible dust. Products of combustion may include, and are not limited to: oxides of carbon, oxides of nitrogen, low molecular weight hydrocarbons, metal oxides.
- Explosion hazard : Avoid generating dust. Airborne dust in sufficient concentrations when confined and exposed to a sufficient ignition source can explode

5.3. ADVICE FOR FIREFIGHTERS

- Protection during firefighting : Keep upwind of fire. Wear full fire fighting turn-out gear (full Bunker gear) and respiratory protection (SCBA).

Section 6: Accidental Release Measures

6.1 PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES

- General measures : Remove all sources of ignition. Use personal protection recommended in Section 8. Isolate the hazard area and deny entry to unnecessary and unprotected personnel. Dust deposits should not be allowed to accumulate on surfaces, as these may form an explosive mixture if they are released into the atmosphere in sufficient concentration. Avoid dispersal of dust in the air (ie, clearing dust surfaces with compressed air). Use only non-sparking tools.

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6.2. METHODS AND MATERIAL FOR CONTAINMENT AND CLEANING UP

- For containment : Contain spill, then place in a suitable container. Minimize dust generation. Do not flush to sewer or allow to enter waterways. Use appropriate Personal Protective Equipment (PPE).
- Methods for cleaning up : Vacuum or sweep material and place in a disposal container. Provide ventilation.

6.3. REFERENCE TO OTHER SECTIONS

See section 8 for further information on protective clothing and equipment and section 13 for advice on waste disposal

Section 7: Handling and Storage

7.1 PRECAUTIONS FOR SAFE HANDLING

- Precautions for safe handling : Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Avoid contact with skin and eyes. Do not swallow. Handle and open container with care. When using do not eat, drink or smoke. Avoid generating and breathing dust. Good housekeeping is important to prevent accumulation of dust. The use of compressed air for cleaning clothing, equipment, etc, is not recommended. Use only in well-ventilated areas. Handling this product may result in electrostatic accumulation. Use proper grounding procedures. After product is mixed with a liquid, combustible dust hazard no longer applies.
- Hygiene measures : Launder contaminated clothing before reuse. Wash hands before eating, drinking, or smoking.

7.2. CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES

- Storage conditions : Keep out of the reach of children. Keep container tightly closed. Store in dust-tight, dry, labelled containers. Avoid any dust buildup by frequent cleaning and suitable construction of the storage area. Keep away from sources of ignition.

7.3. SPECIFIC END USE(S)

Not available.

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Section 8: Exposure Control

8.1. CONTROL PARAMETERS

Fatty acids, C18- unsaturated, dimers, polymers with ethylenediamine and tall-oil fatty acids (68139-80-0)		
ACGIH	ACGIH TWA (mg/m ³)	10 mg/m ³ (inhalable particles) (PNOR/PNOC) 3 mg/m ³ (respirable particles) (PNOR/PNOC)
OSHA	OSHA PEL (TWA) (mg/m ³)	15 mg/m ³ (total dust) (PNOR/PNOC) 5 mg/m ³ (respirable fraction) (PNOR/PNOC)

8.2. EXPOSURE CONTROLS

Appropriate engineering controls	: Use ventilation adequate to keep exposures (airborne levels of dust, fume, vapor, etc.) below recommended exposure limits. It is recommended that all dust control equipment such as local exhaust ventilation and material transport systems involved in handling of this product contain explosion relief vents or an explosion suppression system or an oxygen-deficient environment. Ensure that dust-handling systems (such as exhaust ducts, dust collectors, vessels, and processing equipment) are designed in a manner to prevent the escape of dust into the work area (i.e, there is not leakage from the equipment). Use only appropriately classified electrical equipment and powered industrial trucks.
Hand protection	: Wear suitable gloves.
Eye protection	: Safety glasses or goggles are recommended when using product.
Skin and body protection	: Wear suitable protective clothing.
Respiratory protection	: In case of insufficient ventilation, wear suitable respiratory equipment. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.
Environmental exposure controls	: Maintain levels below Community environmental protection thresholds.
Other information	: Do not eat, smoke or drink where material is handled, processed or stored. Wash hands carefully before eating or smoking. Handle according to established industrial hygiene and safety practices.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES

Physical state	: Solid
Appearance	: Powder
Color	: Brown

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Odor	: No data available
Odor threshold (ppm)	: No data available
pH	: Neutral
Melting point	: No data available
Freezing point	: No data available
Boiling point	: No data available
Flash point	: No data available
Relative evaporation rate (butylacetate=1)	: No data available
Flammability (solid, gas)	: Combustible Dust
Explosive limits	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Vapour pressure	: No data available
Relative density	: No data available
Relative vapour density at 20 °C	: No data available
Density	: 35 lb/ft ³ (561 kg/m ³)
Solubility	: No data available
Partition coefficient n- octanol/water	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available

9.2. OTHER INFORMATION

No additional information available

SECTION 10: STABILITY AND REACTIVITY

10.1. REACTIVITY

No dangerous reaction known under conditions of normal use.

10.2. CHEMICAL STABILITY

Stable under normal storage conditions. May form combustible dust concentrations in air.

10.3. POSSIBILITY OF HAZARDOUS REACTIONS

No dangerous reaction known under conditions of normal use.

10.4. CONDITIONS TO AVOID

Heat. Incompatible materials. Sources of ignition. Avoid dust formation.

10.5. INCOMPATIBLE MATERIALS

Acids. Strong oxidizers.

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10.6. HAZARDOUS DECOMPOSITION PRODUCTS

May include, and are not limited to: oxides of carbon, oxides of nitrogen, low molecular weight hydrocarbons, metal oxides.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. INFORMATION ON TOXICOLOGICAL EFFECTS

Acute toxicity : Not classified.

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LD50 oral rat	:	> 2000 mg/kg (Calculated acute toxicity estimate)
LD50 dermal rabbit	:	No data available
LC50 inhalation rat	:	No data available

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
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
Specific target organ toxicity (single exposure)	:	Based on available data, the classification criteria are not met
Specific target organ toxicity (repeated exposure)	:	Based on available data, the classification criteria are not met
Aspiration hazard	:	Based on available data, the classification criteria are not met
Symptoms/injuries after inhalation	:	May cause respiratory tract irritation.
Symptoms/injuries after skin contact	:	May cause skin irritation. Symptoms may include redness, drying, defatting and cracking of the skin.
Symptoms/injuries after eye contact	:	May cause eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with possible redness and swelling.
Symptoms/injuries after ingestion	:	May be harmful if swallowed. May cause stomach distress, nausea or vomiting.

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SECTION 12: ECOLOGICAL INFORMATION

12.1. TOXICITY

Ecology - general : May cause long-term adverse effects in the aquatic environment.

12.2. PERSISTENCE AND DEGRADABILITY

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Persistence and degradability	:	Not established.
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12.3. BIOACCUMULATIVE POTENTIAL

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Bioaccumulative potential	:	Not established.
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12.4. MOBILITY IN SOIL

No additional information available

12.5. OTHER ADVERSE EFFECTS

Effect on the global warming : No known effects from this product.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. WASTE TREATMENT METHODS

Waste disposal recommendations : This material must be disposed of in accordance with all local, state, provincial, and federal regulations. The generation of waste should be avoided or minimized wherever possible.

SECTION 14: TRANSPORT INFORMATION

In accordance with DOT/TDG/IATA/IMDG

DOT (bulk)	:	Not regulated for transport
DOT (non-bulk)	:	Not regulated for transport
TDG	:	Not regulated for transport
IATA	:	Not regulated for transport
IMDG	:	Not regulated for transport

ADDITIONAL INFORMATION

Other information	:	No supplementary information available.
Special transport precautions	:	Do not handle until all safety precautions have been read and understood.

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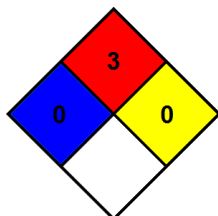
SECTION 15: REGULATORY INFORMATION

15.1. FEDERAL REGULATIONS

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory.

All components of this product are listed, or excluded from listing, on the Canadian DSL (Domestic Substances List) and NDSL (Non-Domestic Substances List) inventories.

NFPA health hazard : 0
NFPA fire hazard : 3
NFPA reactivity : 0



15.2. U.S. FEDERAL REGULATIONS

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State or local regulations	:	This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.
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SECTION 16: OTHER INFORMATION

FULL TEXT OF H-PHRASES AS MENTIONED IN SECTION 3

H232 – May form combustible dust concentrations in air.

Disclaimer

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier nor any of its subsidiaries assumes any liability whatsoever for completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

ZCUS/016, Issued on: 01-07-2026