

**FIVE STAR 4-2.2LB**

Version 4.0

Revision Date 05/05/2018

Print Date 03/16/2020

**SECTION 1. PRODUCT AND COMPANY IDENTIFICATION**

Material name : FIVE STAR 4-2.2LB  
 Material number : 000000000000139604

**Manufacturer or supplier's details**

Company : Zep Inc.  
 Address : 350 Joe Frank Harris Parkway, SE  
 Emerson, GA 30137  
 Telephone : 404-352-1680

**Emergency telephone numbers**

<b>For SDS Information</b>	: Compliance Services 1-877-428-9937
<b>For a Medical Emergency</b>	: 877-541-2016 Toll Free - All Calls Recorded
<b>For a Transportation Emergency</b>	: CHEMTREC: 800-424-9300 - All Calls Recorded. In the District of Columbia 202-483-7616

**Recommended use of the chemical and restrictions on use**

Recommended use : Specialty Cleaner and Remover


**SECTION 2. HAZARDS IDENTIFICATION****Emergency Overview**

Appearance	paste
Colour	pink
Odour	slight

**GHS Classification**

Skin irritation : Category 2  
 Eye irritation : Category 2A  
 Aspiration hazard : Category 1

**GHS label elements**

Hazard pictograms : 

Signal word : Danger

Hazard statements : H304 May be fatal if swallowed and enters airways.  
 H315 Causes skin irritation.  
 H319 Causes serious eye irritation.

Precautionary statements : **Prevention:**  
 P264 Wash skin thoroughly after handling.  
 P280 Wear protective gloves/ eye protection/ face protection.  
**Response:**

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P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor.

P302 + P352 IF ON SKIN: Wash with plenty of soap and water.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P331 Do NOT induce vomiting.

P332 + P313 If skin irritation occurs: Get medical advice/attention.

P337 + P313 If eye irritation persists: Get medical advice/attention.

P362 + P364 Take off contaminated clothing and wash it before reuse.

**Disposal:**

P501 Dispose of contents/container in accordance with local regulation.

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**SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**

Substance / Mixture : Mixture

**Hazardous components**

Chemical name	CAS-No.	Concentration [%]
aluminium oxide	1344-28-1	>= 20 - < 30
alkanes, C13-16-iso-	68551-20-2	>= 20 - < 30
oleic acid	112-80-1	>= 5 - < 10
ammonia, aqueous solution	1336-21-6	>= 1 - < 5

The exact percentages of disclosed substances are withheld as trade secrets.

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**SECTION 4. FIRST AID MEASURES**

- General advice : Move out of dangerous area.  
 Show this safety data sheet to the doctor in attendance.  
 Symptoms of poisoning may appear several hours later.  
 Do not leave the victim unattended.  
 Get medical attention.
- If inhaled : If unconscious, place in recovery position and seek medical advice.  
 If symptoms persist, call a physician.
- In case of skin contact : If skin irritation persists, call a physician.  
 Wash off immediately with plenty of water for at least 15 minutes.  
 Remove contaminated clothing and shoes.  
 Wash contaminated clothing before reuse.
- In case of eye contact : Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.  
 Remove contact lenses.  
 Protect unharmed eye.

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- Keep eye wide open while rinsing.  
If eye irritation persists, consult a specialist.
- If swallowed : Keep respiratory tract clear.  
Never give anything by mouth to an unconscious person.  
If symptoms persist, call a physician.  
DO NOT induce vomiting unless directed to do so by a physician or poison control center.  
Take victim immediately to hospital.
- Most important symptoms and effects, both acute and delayed : Effects are immediate and delayed.  
Effects are dependent on exposure (dose, concentration, contact time).  
Symptoms may include irritation, redness, pain, and rash.  
Aspiration may cause pulmonary oedema and pneumonitis.  
Symptoms may include shortness of breath, dry cough, and irritation of the nose, eyes, lips, mouth, and throat.  
Causes skin irritation.  
Causes serious eye irritation.  
Review section 2 of SDS to see all potential hazards.
- Notes to physician : Treat symptomatically. Symptoms may be delayed.

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**SECTION 5. FIREFIGHTING MEASURES**

- Suitable extinguishing media : Dry chemical  
Water spray  
Carbon dioxide (CO<sub>2</sub>)
- Unsuitable extinguishing media : High volume water jet
- Specific hazards during firefighting : Do not allow run-off from fire fighting to enter drains or water courses.
- Hazardous combustion products : Carbon dioxide (CO<sub>2</sub>)  
Carbon monoxide  
Smoke  
Nitrogen oxides (NO<sub>x</sub>)
- Specific extinguishing methods : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
- Further information : Collect contaminated fire extinguishing water separately. This must not be discharged into drains.  
Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.  
Standard procedure for chemical fires.
- Special protective equipment for firefighters : Wear self-contained breathing apparatus for firefighting if necessary.

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**SECTION 6. ACCIDENTAL RELEASE MEASURES**

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- Personal precautions, protective equipment and emergency procedures : Use personal protective equipment.  
Ensure adequate ventilation.  
Evacuate personnel to safe areas.
- Environmental precautions : Prevent product from entering drains.  
Prevent further leakage or spillage if safe to do so.  
If the product contaminates rivers and lakes or drains inform respective authorities.
- Methods and materials for containment and cleaning up : Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).  
Sweep up or vacuum up spillage and collect in suitable container for disposal.

**SECTION 7. HANDLING AND STORAGE**

- Advice on safe handling : Avoid exposure - obtain special instructions before use.  
Avoid contact with skin and eyes.  
For personal protection see section 8.  
Smoking, eating and drinking should be prohibited in the application area.  
Do not breathe vapours or spray mist.  
Provide sufficient air exchange and/or exhaust in work rooms.  
Dispose of rinse water in accordance with local and national regulations.  
Always replace cap after use.
- Conditions for safe storage : No smoking.  
Keep in a dry, cool and well-ventilated place.  
Observe label precautions.  
Electrical installations / working materials must comply with the technological safety standards.
- Materials to avoid : Store and keep away from bases and alkalies.

**SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION**
**Components with workplace control parameters**

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
		TWA (total dust)	15 mg/m <sup>3</sup>	OSHA Z-1
		TWA (respirable fraction)	5 mg/m <sup>3</sup>	OSHA Z-1
		TWA (Total dust)	10 mg/m <sup>3</sup>	OSHA P0
		TWA (respirable dust fraction)	5 mg/m <sup>3</sup>	OSHA P0

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		PEL (Total dust)	10 mg/m <sup>3</sup>	CAL PEL
		PEL (respirable dust fraction)	5 mg/m <sup>3</sup>	CAL PEL
		TWA (total dust)	15 mg/m <sup>3</sup>	OSHA Z-1
		TWA (respirable fraction)	5 mg/m <sup>3</sup>	OSHA Z-1
		TWA (Total dust)	10 mg/m <sup>3</sup>	OSHA P0
		TWA (respirable dust fraction)	5 mg/m <sup>3</sup>	OSHA P0
		PEL (Total dust)	10 mg/m <sup>3</sup>	CAL PEL
		PEL (respirable dust fraction)	5 mg/m <sup>3</sup>	CAL PEL

**Engineering measures** : effective ventilation in all processing areas

**Personal protective equipment**

Respiratory protection : Use respiratory protection unless adequate local exhaust ventilation is provided or exposure assessment demonstrates that exposures are within recommended exposure guidelines.

Hand protection

Material

Remarks

: Protective gloves

: The suitability for a specific workplace should be discussed with the producers of the protective gloves.

Eye protection

: Access to clean water to rinse eyes must be available, options include: eye wash stations or showers, or eye wash bottles with pure water.

Safety glasses

Skin and body protection

: Impervious clothing

Choose body protection according to the amount and concentration of the dangerous substance at the work place.

Hygiene measures

: When using do not eat or drink.

When using do not smoke.

Wash hands before breaks and at the end of workday.

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**SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

Appearance : paste

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Colour	: pink
Odour	: slight
Odour Threshold	: No data available
pH	: 8.5 - 9.5
Melting point/freezing point	: 0 °C
Boiling point	: not determined
Flash point	: > 104.44 °C Method: closed cup
Evaporation rate	: Not applicable
Upper explosion limit	: Not applicable
Lower explosion limit	: Not applicable
Vapour pressure	: Not applicable
Relative vapour density	: No data available
Density	: No data available
Bulk density	: No data available
Solubility(ies)	
Water solubility	: negligible
Solubility in other solvents	: not determined
Partition coefficient: n-octanol/water	: No data available
Auto-ignition temperature	: not determined
Thermal decomposition	: No data available
Viscosity	
Viscosity, dynamic	: No data available
Viscosity, kinematic	: No data available

**SECTION 10. STABILITY AND REACTIVITY**

Reactivity	: Stable
Chemical stability	: Stable under normal conditions.
Possibility of hazardous reactions	: No decomposition if stored and applied as directed.
Conditions to avoid	: Heat, flames and sparks.
Incompatible materials	: Bases
Hazardous decomposition products	: Carbon oxides

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**SECTION 11. TOXICOLOGICAL INFORMATION****Potential Health Effects**

Aggravated Medical Condition : None known.

Symptoms of Overexposure : Effects are immediate and delayed. Effects are dependent on exposure (dose, concentration, contact time). Symptoms may include irritation, redness, pain, and rash. Aspiration may cause pulmonary oedema and pneumonitis. Symptoms may include shortness of breath, dry cough, and irritation of the nose, eyes, lips, mouth, and throat.

**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.

**OSHA** No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.

**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.

**Acute toxicity****Product:**

Acute oral toxicity : Acute toxicity estimate : > 5,000 mg/kg  
Method: Calculation method

Acute dermal toxicity : Acute toxicity estimate : > 5,000 mg/kg  
Method: Calculation method

**Components:****alkanes, C13-16-iso-:**

Acute oral toxicity : LD50 Oral Rat: > 10,000 mg/kg

Acute inhalation toxicity : Acute toxicity estimate Rat: > 5.2 mg/l  
Exposure time: 4 h

Acute dermal toxicity : LD50 Dermal Rabbit: > 2,000 mg/kg

**ammonia, aqueous solution:**

Acute oral toxicity : LD50 Oral Rat: 350 mg/kg

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**Skin corrosion/irritation**

**Product:**

Remarks: Irritating to skin.

**Components:**

**oleic acid:**

Species: human skin

Exposure time: 72 h

Result: Mild skin irritation

**Serious eye damage/eye irritation**

**Product:**

Remarks: Irritating to eyes.

**Respiratory or skin sensitisation**

No data available

**Germ cell mutagenicity**

No data available

**Carcinogenicity**

No data available

**Reproductive toxicity**

No data available

**STOT - single exposure**

No data available

**STOT - repeated exposure**

No data available

**Aspiration toxicity**

No data available

**Further information**

**Product:**

Remarks: Solvents may degrease the skin.

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**SECTION 12. ECOLOGICAL INFORMATION**

**Ecotoxicity**

**Product:**

Ecotoxicology Assessment



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Acute aquatic toxicity : Toxic to aquatic organisms.

**Persistence and degradability**

No data available

**Bioaccumulative potential****Product:**

Partition coefficient: n-octanol/water : Remarks: No data available

**Mobility in soil**

No data available

**Other adverse effects**

No data available

**Product:**

Regulation 40 CFR Protection of Environment; Part 82 Protection of Stratospheric Ozone - CAA Section 602 Class I Substances

Remarks This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

Additional ecological information : Not applicable

**SECTION 13. DISPOSAL CONSIDERATIONS****Disposal methods**Waste from residues : The product should not be allowed to enter drains, water courses or the soil.  
Do not contaminate ponds, waterways or ditches with chemical or used container.  
Dispose of in accordance with local regulations.Contaminated packaging : Empty remaining contents.  
Dispose of as unused product.  
Do not re-use empty containers.**SECTION 14. TRANSPORT INFORMATION**Transportation Regulation: 49 CFR (USA):  
NOT REGULATED AS DANGEROUS GOODS OR HAZARDOUS MATERIAL

Transportation Regulation: IMDG (Vessel):

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NOT REGULATED AS DANGEROUS GOODS OR HAZARDOUS MATERIAL

Transportation Regulation: IATA (Cargo Air):  
NOT REGULATED AS DANGEROUS GOODS OR HAZARDOUS MATERIAL

Transportation Regulation: IATA (Passenger Air):  
NOT REGULATED AS DANGEROUS GOODS OR HAZARDOUS MATERIAL

Transportation Regulation: TDG (Canada):  
NOT REGULATED AS DANGEROUS GOODS OR HAZARDOUS MATERIAL

The product as delivered to the customer conforms to packaging requirements for shipment by road under US Department of Transportation (DOT) regulations. Additional transportation classifications noted above are for reference only, and not a certification or warranty of the suitability of the packaging for shipment under these alternative transport regulations.

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**SECTION 15. REGULATORY INFORMATION**

**TSCA list** : No substances are subject to a Significant New Use Rule.

No substances are subject to TSCA 12(b) export notification requirements.

**EPCRA - Emergency Planning and Community Right-to-Know Act**
**CERCLA Reportable Quantity**

Components	CAS-No.	Component RQ (lbs)	Calculated product RQ (lbs)
ammonia, aqueous solution	1336-21-6	1000	*

\*: Calculated RQ exceeds reasonably attainable upper limit.

**SARA 304 Extremely Hazardous Substances Reportable Quantity**

This material does not contain any components with a section 304 EHS RQ.

**SARA 311/312 Hazards** : Skin corrosion or irritation  
Serious eye damage or eye irritation  
Aspiration hazard

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

**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.

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**California Prop. 65**

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

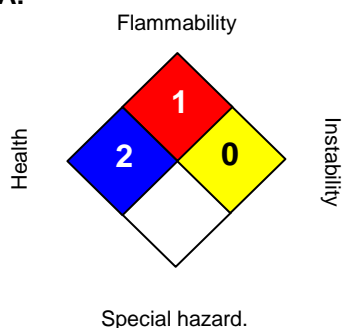
**The components of this product are reported in the following inventories:**

**TSCA** On TSCA Inventory  
**DSL** All components of this product are on the Canadian DSL

For information on the country notification status for other regions please contact the manufacturer's regulatory group.

**Inventory Acronym and Validity Area Legend:**

TSCA (USA), DSL (Canada), NDSL (Canada)

**SECTION 16. OTHER INFORMATION****Further information****NFPA:****HMIS III:**

<b>HEALTH</b>	<b>3</b>
<b>FLAMMABILITY</b>	<b>1</b>
<b>PHYSICAL HAZARD</b>	<b>0</b>

0 = not significant, 1 = Slight,  
 2 = Moderate, 3 = High  
 4 = Extreme, \* = Chronic

**OSHA - GHS Label Information:**

Hazard pictograms



Signal word

: **Danger:**

Hazard statements

: May be fatal if swallowed and enters airways. Causes skin irritation. Causes serious eye irritation.

Precautionary statements

:

**Prevention:** Wash skin thoroughly after handling. Wear protective gloves/ eye protection/ face protection.  
**Response:** IF SWALLOWED: Immediately call a POISON CENTER/doctor. IF ON SKIN: Wash with plenty of soap and water. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

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Do NOT induce vomiting. If skin irritation occurs: Get medical advice/ attention. If eye irritation persists: Get medical advice/ attention. Take off contaminated clothing and wash it before reuse.

**Disposal:** Dispose of contents/container in accordance with local regulation.

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