Issuing date 17-Oct-2018

Revision Date 17-Oct-2018

Version 1

SAFETY DATA SHEET.

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product identifier Product name

Z-122 ZINC STEARATE MOLD RELEASE

<u>Recommended use of the chemical</u> and restrictions on use

Product code

F03912

Product Type Synonyms Extremely Flammable Aerosol None

Supplier's details

Recommended Use Uses advised against Dry Spray Mold Release. No information available

Manufacturer:

Plastic Process Equipment,Inc. 8303 Corporate Park Dr. Macedonia, Ohio 44056 Phone: 800-321-0562

Emergency telephone number Chemical Emergency Phone Number

CHEMTREC: 1-800-262-8200 ID 1195 (UNITED STATES)

2. HAZARDS IDENTIFICATION

Classification

| Skin corrosion/irritation | Category 2 |
|--|----------------|
| Reproductive Toxicity | Category 2 |
| Specific target organ toxicity (single exposure) | Category 3 |
| Specific target organ toxicity (repeated exposure) | Category 2 |
| Aspiration toxicity | Category 1 |
| Flammable Aerosols | Category 1 |
| Gases under pressure | Compressed Gas |

<u>GHS Label elements, including</u> precautionary statements

Emergency Overview

DANGER

Hazard Statements

Causes skin irritation.

Suspected of damaging fertility or the unborn child

May cause respiratory irritation. May cause drowsiness or dizziness.

May cause damage to organs (Eyes, Skin, Respiratory System, Central Nervous System, and Peripheral Nervous System) through prolonged and repeated exposure.

May be fatal if swallowed and enters airways.

Extremely Flammable Aerosol

Contains gas under pressure; may explode if heated



Appearance Hazy

Physical state Aerosol

Odor Solvent

Precautionary Statements - Prevention

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves, protective clothing,eye protection,face protection. Wash face, hands and any exposed skin thoroughly after handling. Do not breathe dust, fume, gas, mist, vapors, spray. Use only outdoors or in a well-ventilated area. Keep away from heat, sparks, open flames, hot surfaces - No smoking. Do not spray on an open flame or other ignition source. Pressurized container: Do not pierce or burn, even after use.

Precautionary Statements - Response

If exposed or concerned: Get medical advice, attention. Specific treatment (see first aid on this label). IF ON SKIN: Wash with plenty of soap and water. If skin irritation occurs: Get medical advice, attention. Take off contaminated clothing and wash it before reuse. IF INHALED : Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor, physician if you feel unwell. IF SWALLOWED: Immediately call a POISON CENTER, doctor, physician. Do NOT induce vomiting.

Precautionary Statements - Storage

Store locked up. Store in a well-ventilated place. Keep container tightly closed. Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F

Precautionary Statements - Disposal

Dispose of contents, container to an approved waste disposal plant.

Hazards not otherwise classified (HNOC)

None

Other information

0% of the mixture consists of ingredient(s) of unknown toxicity.

3. COMPOSITION/INFORMATION ON INGREDIENTS

| Chemical Name | CAS-No | Weight %* |
|--------------------|------------|-----------|
| 1,1-DIFLUOROETHANE | 75-37-6 | 50-60 |
| DIMETHYLETHER | 115-10-6 | 30-40 |
| HEXANE | 110-54-3 | 10-20 |
| ZINC STEARATE | 67762-34-9 | 1-10 |

*The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

First aid measures for different exposure routes

| General advice | Avoid contact with eyes, skin, and clothing. Avoid breathing vapors, mist, or gas. | |
|--|---|--|
| Eye contact | Immediately flush with plenty of water for at least 15 minutes. After initial flushing, remove any contact lenses and continue flushing. If symptoms persist, call a physician. | |
| Skin contact | Wash off immediately with soap and plenty of water for at least 15 minutes. Get medical attention immediately if symptoms occur. | |
| Inhalation | Move to fresh air. If not breathing, give artificial respiration. If breathing has stopped, contact emergency medical services immediately. | |
| Ingestion | Do NOT induce vomiting. Call a physician immediately. Never give anything by mouth to unconscious person. Risk of product entering the lungs on vomiting after ingestion. | |
| Most important symptoms/effects, | acute and delayed | |
| Main Symptoms | Causes skin irritation. May cause respiratory irritation. May cause drowsiness or dizziness. May be fatal if swallowed and enters airways. | |
| Indication of immediate medical attention and special treatment needed, if necessary | | |
| Notes to physician | Treat symptomatically. | |
| 5. FIRE-FIGHTING MEASURES | | |

Suitable Extinguishing Media

Water fog. Dry chemical. Carbon dioxide (CO2). Cool containers / tanks with water spray.

Unsuitable Extinguishing Media Do not use a solid water stream as it may scatter and spread fire.

Specific hazards arising from the chemical

Extremely Flammable / Flammable. Keep product and empty container away from heat and sources of ignition.

Explosion Data Sensitivity to Mechanical Impact none. Sensitivity to Static Discharge Yes.

Protective Equipment and Precautions for Firefighters

In the event of fire and/or explosion do not breathe fumes. As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Use shielding to protect fire-fighters from bursting containers.

6. ACCIDENTAL RELEASE MEASURES

| Personal precautions, protective equipment and emergency procedures | | |
|---|--|--|
| Personal precautions | Use with adequate ventiliation to keep the exposure levels below the OELS. | |
| Environmental precautions | | |
| Environmental precautions | Vapors can accumulate in low areas. Prevent further leakage or spillage if safe to do so. Do not allow material to contaminate ground water system. Prevent product from entering drains. Report spills as required by local and federal regulations. | |
| Methods and materials for containn | nent and cleaning up | |
| Methods for Containment | Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers Prevent further leakage or spillage if safe to do so. | |
| Methods for cleaning up | Soak up with inert absorbent material. Contain liquid and collect with an inter, non-combustible material. Pick up and transfer to properly labeled containers. Clean contaminated surface thoroughly. After cleaning, flush away traces with water. Prevent product from entering drains. Take precautionary measures against static discharges. | |

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling Avoid contact with eyes. Avoid breathing vapors or mists. Contents under pressure. Do not puncture or incinerate cans. Do not stick pin or any other sharp object into opening on top of can. Avoid skin contact. Use with adequate ventilation. Keep container away from heat, flames, and all other sources of ignition. Keep can away from all sources of electricity such as electric motors and batteries. Do not spray on hot surfaces.

Conditions for safe storage, including any incompatibilities

Technical measures/Storage
conditionsKeep container tightly closed in a cool, well-ventilated place. Keep away from open flames,
hot surfaces and sources of ignition. Keep in properly labeled containers. Keep out of the
reach of children. Store locked up.

Incompatible products Strong acids, alkalis, oxidizing agents.

1

Aerosol Level

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines

Revision Date 17-Oct-2018

| Chemical Name | ACGIH TLV | OSHA PEL | NIOSH IDLH |
|--------------------|----------------------------------|--------------------------------------|----------------------------|
| 1,1-DIFLUOROETHANE | TWA 1000 PPM 8 hours | - | - |
| 75-37-6 | | | |
| DIMETHYLETHER | STEL: 500 PPM | TWX: 400 PPM | IDLH: 1900 PPM (10 % LEL) |
| 115-10-6 | TWA: 400PPM | TWA: 1200 mg/m ³ | |
| HEXANE | TWA: 50 ppm | TWA: 500 ppm | IDLH: 1100 ppm |
| 110-54-3 | Skin - potential significant | TWA: 1800 mg/m ³ | TWA: 50 ppm |
| | contribution to overall exposure | (vacated) TWA: 50 ppm | TWA: 180 mg/m ³ |
| | by the cutaneous route | (vacated) TWA: 180 mg/m ³ | _ |

ACGIH: (American Conference of Governmental Industrial Hygienists) OSHA: (Occupational Safety & Health Administration) NIOSH IDLH: Immediately Dangerous to Life or Health

| Other Exposure Guidelines | Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 |
|---------------------------|--|
| | (11th Cir., 1992). |

Exposure controls

| Engineering Measures | Showers | |
|----------------------|----------------------|--|
| | Eyewash stations | |
| | Ventilation systems. | |

Individual protection measures, such as personal protective equipment

| Eye/Face Protection | Tightly fitting safety goggles. |
|--------------------------|---|
| Skin and body protection | Chemical resistant apron. Protective gloves. |
| Respiratory protection | If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations. |
| Hygiene measures | Handle in accordance with good industrial hygiene and safety practice. |

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical and chemical properties

| Physical state Appearance Color | Aerosol Hazy hazy white | Odor Odor Threshold | Solvent |
|---|---|------------------------|---------|
| <u>Property</u> pH Melting/freezing point Boiling point/boiling range | <u>Values</u> No information available No information available | Remarks • Methods | |
| Flash Point Evaporation rate Flammability (solid, gas) Flammability Limits in Air upper flammability limit lower flammability limit | -50 °C / -58 °F No information available No information available | Based on propellant | |
| Vapor pressure Vapor density Specific Gravity Water solubility Partition coefficient: n-octanol/wate Autoignition temperature Decomposition temperature | 0.935 None er No information available | Not applicable | |
| Viscosity Explosive properties | No information available | | |

Other information

VOC Content(%)

44.71

10. STABILITY AND REACTIVITY

Reactivity

Stable under recommended storage conditions

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

None under normal processing.

Conditions to Avoid

Heat, flames and sparks.

Incompatible Materials

Strong acids, alkalis, oxidizing agents.

Hazardous Decomposition Products

Carbon oxides , Hydrocarbons, Fumes.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

| Inhalation | Avoid inhaling vapors or mists. Harmful if inhaled. May cause irritation to respiratory system. |
|--------------|---|
| Eye contact | May cause eye irritation. |
| Skin contact | Causes skin irritation. |
| Ingestion | Harmful and may be fatal if swallowed and enters airways and lungs. |

Component Information

| Chemical Name | LD50 Oral | LD50 Dermal | LC50 Inhalation |
|---------------|--------------------|-----------------------|------------------------|
| DIMETHYLETHER | - | - | = 164000 ppm (Rat) 4 h |
| 115-10-6 | | | |
| HEXANE | = 25 g/kg (Rat) | = 3000 mg/kg (Rabbit) | = 48000 ppm (Rat) 4 h |
| 110-54-3 | | | |
| ZINC STEARATE | >5,000 mg/kg (Rat) | >2,000 mg/kg (Rat) | - |
| 67762-34-9 | | | |

Information on toxicological effects

Symptoms

Causes skin irritation. May cause eye and respiratory irritation. Harmful and may be fatal if swallowed and enters airways.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

| Skin corrosion/irritation | Causes skin irritation. |
|---------------------------|--|
| Eye damage/irritation | May cause eye irritation. |
| Irritation | Causes eye irritation. My cause skin and respiratory irritation. |
| Sensitization | No information available. |
| Germ cell mutagenicity | Not a germ cell mutagen. |
| Carcinogenicity | There are no carcinogenic chemicals in this product. |

| Reproductive toxicity Specific target organ systemic | This product contains a chemical(s) which is a known or suspected reproductive hazard . May cause respiratory irritation. May cause drowsiness or dizziness. |
|--|--|
| toxicity (single exposure) | |
| Specific target organ systemic toxicity (repeated exposure) | May cause damage to target organs listed below through prolonged and repeated exposure. |
| Chronic toxicity | Intentional misuse by deliberately concentrating and inhaling contents may be harmful or fatal. Chronic hydrocarbon abuse has been associated with irregular heart rhythms and potential cardiac arrest. |
| Target Organ Effects | Eyes, Skin, Respiratory System, Central Nervous System, and Peripherall Nervous System. |
| Aspiration hazard | May be fatal if swallowed and enters airways. |

Numerical measures of toxicity - Product Information

| Unknown Acute Toxicity | 0% of the mixture consists of ingredient(s) of unknown toxicity. |
|-------------------------------------|--|
| The following values are calculated | based on chapter 3.1 of the GHS document |
| ATEmix (oral) | 70052 mg/kg |
| ATEmix (dermal) | 15690 mg/kg |
| ATEmix (inhalation-gas) | 68457 mg/l |
| ATEmix (inhalation-dust/mist) | 274.4 mg/l |
| ATEmix (inhalation-vapor) | 420.6 mg/l |

12. ECOLOGICAL INFORMATION

Ecotoxicity

| Chemical Name | Toxicity to algae | Toxicity to fish | Toxicity to microorganisms | Toxicity to daphnia and other aquatic invertebrates |
|---------------|-------------------|-------------------------|-------------------------------|--|
| HEXANE | - | 2.1 - 2.98 mg/L LC50 | - | - |
| 110-54-3 | | Pimephales promelas 96h | | |
| | | flow-through | | |

Persistence and degradability

Bioaccumulation

| Chemical Name | log Pow |
|---------------|---------|
| DIMETHYLETHER | -0.18 |
| 115-10-6 | |

Other adverse effects

No information available

13. DISPOSAL CONSIDERATIONS

| Waste treatment | |
|------------------------|--|
| Waste Disposal Methods | This material, as supplied, is a hazardous waste according to federal regulations (40 CFR 261). Dispose of in accordance with federal, state, and local regulations. |
| Contaminated packaging | Do not re-use empty containers. |

14. TRANSPORT INFORMATION

DOT Ground

CONSUMER COMMODITY ORM-D or LIMITED QUANTITY

IATA UN1950, AEROSOLS, FLAMMABLE, 2.1, LTD.QTY.

IMDG UN1950, AEROSOLS, 2.1, LTD.QTY

15. REGULATORY INFORMATION

International Inventories

| Chemical Name | TSCA | DSL/NDSL | EINECS/ELI NCS | ENCS | IECSC | KECL | PICCS | AICS |
|------------------------|------|----------|-------------------|------|-------|------|-------|------|
| 1,1-DIFLUOROETHA NE | Х | X | Х | Х | Х | Х | Х | Х |
| DIMETHYLETHER | Х | Х | Х | Х | Х | Х | Х | Х |
| HEXANE | Х | Х | Х | Х | Х | Х | Х | Х |
| ZINC STEARATE | Х | X | X | x | Х | Х | х | х |

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

CHINA - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

U.S. Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does contain a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372:

| Chemical Name | CAS-No | Weight %* | SARA 313 - Threshold Values % |
|----------------------------|------------|-----------|----------------------------------|
| HEXANE - 110-54-3 | 110-54-3 | 10-20 | 1.0 |
| ZINC STEARATE - 67762-34-9 | 67762-34-9 | 1-10 | 1.0 |

SARA 311/312 Hazard Categories

| Acute Health Hazard | Yes |
|-----------------------------------|-----|
| Chronic Health Star Hazard | Yes |
| Fire Hazard | Yes |
| Sudden Release of Pressure Hazard | Yes |
| Reactive Hazard | No |

Clean Water Act

This product does contain the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42):

| Chemical Name | CWA - Reportable Quantities | CWA - Toxic Pollutants | CWA - Priority Pollutants | CWA - Hazardous Substances |
|-----------------------------|--------------------------------|------------------------|---------------------------|-------------------------------|
| ZINC STEARATE 67762-34-9 | | Х | | |
| | | | | |

<u>CERCLA</u>

This material, as supplied, does contain substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302):

Revision Date 17-Oct-2018

| Chemical Name | Hazardous Substances RQs | Extremely Hazardous Substances RQs | RQ |
|--------------------|--------------------------|---------------------------------------|--|
| HEXANE 110-54-3 | 5000 lb | | RQ 5000 lb final RQ RQ 2270 kg final RQ |

U.S. State Regulations

California Proposition 65

This product contains the following Proposition 65 chemicals:



This product can expose you to chemicals including those listed below, which is [are] known to the State of California to cause cancer, birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov

| Chemical Name | California Prop. 65 | |
|-------------------|--------------------------|--|
| HEXANE - 110-54-3 | Male Development /10-20% | |

U.S. State Right-to-Know Regulations

| Chemical Name | New Jersey | Massachusetts | Pennsylvania |
|--------------------|------------|---------------|--------------|
| 1,1-DIFLUOROETHANE | Х | Х | |
| 75-37-6 | | | |
| DIMETHYLETHER | Х | Х | Х |
| 115-10-6 | | | |
| HEXANE | Х | Х | Х |
| 110-54-3 | | | |
| ZINC STEARATE | Х | | Х |
| 67762-34-9 | | | |

EPA Pesticide Registration Number Not applicable

<u>Canada</u>

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all the information required by the CPR.

16. OTHER INFORMATION

| NFPA | Health Hazard 2 | Flammability 4 | Instability 0 | Physical and chemical hazards - |
|--|------------------|---|-------------------|------------------------------------|
| HMIS | Health Hazard 2* | Flammability 4 | Physical Hazard 1 | Personal protection B |
| Chronic Hazard Star Legend Chronic Head damage | | Ith Star Hazard Repeated or prolonged exposure may cause central nervous system | | |

| Issuing date | 17-Oct-2018 |
|---------------|-------------|
| Revision Date | 17-Oct-2018 |
| Revision Note | |

Disclaimer

The information provided on this SDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage,

transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.