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

- 1.1 Product identifier
Product name: Discharge Agent

Product Code: Discharge Agent

- 1.2 Details of the supplier of the Safety Data Sheet

Manufacturer/Supplier:
Image Technology
1380 N. Knollwood Circle
Anaheim, CA 92801
Phone: 714-252-0160

- 1.3 Emergency telephone number:

Infotrac
(800) 535-5053

## 2. Hazard Identification

- 2.1 Classification of the substance or mixture
- GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Specific target organ toxicity.
Skin Irrit.
Eye Irrit.

GHS Label elements, including precautionary statements
Pictogram


Signal word Warning

## Hazard statement(s)

Causes slight skin irritation.
Causes slight eye irritation and/or dehydration of the eyes and eyelids.
Fumes from this product can cause irritation of the nose, nasal passages and lungs.
When concentrate solutions of this product are swallowed, it will cause chemical burn of the mucous membranes in the mouth, esophagus, stomach, and intestinal tract.
Precautionary statement(s)
Keep away from heat.
Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.
Wash skin thoroughly after handling.
Do not eat, drink or smoke when using this product.
Wear protective gloves/ protective clothing/ eye protection/ face protection.


HMIS-rating (scale 0-4)

| HEALTH |  |
| :--- | :--- | :--- |
| FIRE |  |
| REACTIVITY |  |

Health $=1$
Fire $=0$
Reactivity $=0$

- HMIS Long Term Health Hazard Substances Substances is not listed.
- 2.3 Other hazards
- Results of PBT and vPvB assessment
- PBT : Not applicable
- vPVB: Not applicable

3. Composition/information on ingredients
3.1 Substances

Substance/mixture : Mixture
Chemical name : Zinc formaldehyde

CAS number/other identifiers

| Ingredient name | $\%$ | CAS number |
| :--- | :--- | :--- |
| Zinc, bis(hydroxymethanesulfinato-OS,O1) - (T-4) | $<88 \%$ | $24887-060-7$ |

## 4. First aid measures

- 4.1 Description of first aid measures
- General information:

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident. Do not leave affected persons unattended.

- After inhalation:

Remove from contaminated area promptly. Supply fresh air. If required, provide artificial respiration. Consult physician promptly.

- After skin contact:

Flush with large amounts of water. Get medical attention if irritation persists.

- After eye contact:

Rinse opened eye for 15 to 30 minutes under running water. Remove contact lenses if worn. Consult physician immediately.

- After swallowing:

Induce vomiting. Have patient drink large amounts of milk or water. Consult a physician immediately.

## 5. Firefighting measures

- 5.1 Extinguishing media
- Suitable extinguishing agents:

Water, Dry Chemical, Foam.

- For safety reasons unsuitable extinguishing agents: None
- 5.2 Advice for firefighters
- Protective equipment:

Self contained breathing apparatuses are recommended for fire fighters. This material readily ignites if near a high temperature source or open flame.

- Additional information No data available


## 6. Accidental release measures

- 6.1 Personal precautions, protective equipment and emergency procedures

Wear protective equipment
Keep unprotected persons away
Ensure adequate ventilation

## - 6.2 Environmental precautions:

Do not allow to enter sewers/ surface or ground water.

- 6.3 Methods and material for containment and cleaning up:

Small spill: Flush to waste with large quantities of water. Mop with water soaked towels, dry paper towels may smolder and Ignite. Avoid raising dust.
Large spill: Absorb spill with inert material (e.g., dry sand or earth). Flush area with water to minimize residue. Avoid raising dust.
Contain spill with dikes of absorbent materials such as clay, sand, or vermiculite.

- 6.4 Reference to other sections

See Section 7 for information on safe handling
See Section 8 for more information on personal protection equipment
See Section 13 for disposal information

## 7. Handling and Storage

- 7.1 Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace.

- Information about fire - and explosion protection:

Empty containers may contain a flammable/explosive vapour. Always ensure that containers are tightly sealed unless in use. Never cut, drill, weld or grind on or near container.

- 7.2 Conditions for safe storage, including any incompatibilities
- Storage:
- Requirements to be met by storerooms and receptacles:

Store in a cool location, away from sources of ignition, heat and oxidizing agents
Store only in the original receptacle.

- Information about storage in one common storage facility:

Store away from flammable substances
Store away from food stuffs

- Further information about storage conditions:

Store in cool, dry conditions in well sealed receptacles

- 7.3 Specific end use(s) No further relevant information available


## 8. Exposure controls/personal protection

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

Ingredients with limit values that require monitoring at the workplace: No required.
DNELs No further relevant information available.
PNECs No further relevant information available.
Additional information: The lists valid during the marketing were used as basis.

- 8.2 Exposure controls
- Personal protective equipment:

Keep away from foodstuffs, beverages and feed.
Wash hands before breaks and at the end of work.
Avoid contact with the eyes and skin.

- Respiratory protection:

Use suitable respiratory protective device in case of insufficient ventilation.
Use suitable respiratory protective device when high concentrations are present.

- Protection on hands:


Protective gloves
to avoid possible defatting of the skin or tissue damage, it is recommended that Butyl, plastic or Vitron gloves be worn.

- Material of gloves

Rubber or Plastic

The Selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

- Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

- Not suitable are gloves made of the following materials: Leather gloves
- Eye protection:



## Safety glasses

When handling this product and there is the possibility of splashing it is recommended that proper protection for the eyes by worn. This consists of goggles and/or face shield Safety glasses with side shields- always protect the eyes.

- Body protection: When handling chemicals in 55 gallon drums, it is recommended that steel toed rubber boots and a splash apron be worn.
- Limitation and supervision of exposure into the environment

No further relevant information available.

- Risk management measures

See Section 7 for additional information.
No further relevant information available.

## 9. Physical and chemical properties

- 9.1 Information on basic physical and chemical properties


## General Information

## Appearance:

| Form: | Powder |
| :--- | :--- |
| Color: | White Crystalline |
| Odor: | Slight formaldehyde Odor |
| Odor threshold: | Not determined. |
| pH (Concentrate): | 4.2 |
| Change in condition |  |
| $\quad$ Freezing point/Freezing range: | Not determined. |
| $\quad$ Boiling point/Boiling range: | Not determined. |
| Flash point: | Non Flammable. |
| Flammability: | Not determined. |
| Auto-ignition temperature: | Not determined. |
| Specific Gravity (water =1) | 1.46 |
| Volatile Organic Compounds: | Not determined. |
| Explosion limits: |  |
| Lower: | Not determined. |
| $\quad$ Upper | Not determined. |
| Vapour pressure: | Not determined. |
| Conversion Factor: | Not determined. |
| Molecular Weight: | Not determined. |
| Vapour density | Not determined. |
| Evaporation rate (water=1) | Not determined. |
| Solubility in / Miscibility with | Partial Soluble in water |
| $\quad$ Water |  |
| Partition coefficient (n-octanol/water): | Not determined. |
| Decomposition hazard: | Sulphur dioxide and formaldehyde. |
| Viscosity: | Not determined. |


| Dynamic: | Not determined. |
| :--- | :---: |
| Kinematic: | Not determined. |
| 9.2 Other information | No further relevant information available. |

10. Stability and reactivity
-10.1 Reactivity
-10.2 Chemical stability:
Stable under recommended storage conditions.

- Thermal decomposition / conditions to be avoided:

No decomposition if used and stored according to specifications.

- 10.3 Possibility of hazardous reactions

No further relevant information available.

- As the product is supplied it is not capable of dust explosion; however enrichment with fine dust causes:

No further relevant information available.

- 10.4 Conditions to avoid:

Heat, Flame, Sparks, other ignition sources.
-10.5 Incompatible materials:
Strong oxidizing agents.
-10.6 Hazardous decomposition or Byproducts:
carbon monoxide, carbon dioxide, sulfur dioxide and other sulfur and zinc oxide. Sulfur dioxide evolves when product is heated and in the presence of acids. PEL and TLV for sulfur dioxide is 2 pm 8 hr . TWA ( 5 ppm STEL) Zinc oxide fume may cause "metal fume fever." PEL and TLV is 5 $\mathrm{mg} / \mathrm{m}^{3} 8 \mathrm{hr}$., TWA ( $10 \mathrm{mg} / \mathrm{m}^{3}$ STEL).

## 11. Toxicological information

-11.1 Information on toxicological effects
-Aquatic toxicity: No data available

- Primary irritant effect:
- On the skin: No data available
- On the eye: No data available
- Sensitization: No data available
- Additional toxicological information:

No further relevant information available.

## 12. Ecological information

## -12.1 Toxicity

- Aquatic toxicity:

No further relevant information available.

- 12.2 Persistence and degradability

No further relevant information available.

- 12.3 Bioaccumulative potential

No further relevant information available.
-12.4 Mobility in soil
No further relevant information available.

- Additional ecological information:
$\bullet$ 12.5 Results of PBT and vPvB assessment
-PBT: Not applicable
-vPvB: Not applicable
-12.6 Other adverse effects No further relevant information available.


## 13. Disposal considerations

## -13.1 Waste treatment methods

- Recommendation

All hazardous materials must be solidified and disposed of in an EPA approved class facility. When disposing of chemicals, contact local, state, and federal environmental agencies to fully understand the necessary regulations governing the disposal of chemical wastes.

- Uncleaned packaging: Do not reuse container.
-Recommendation: Disposal must be made according to official regulations.

| Ingredient name | California Hazardous Waste Status |
| :--- | :--- |
| Zinc, bis(hydroxymethanesulfinato-OS,O1) - (T-4) | Toxic |

14. Transport information
```
-14.1 Un-Number Not Regulated DOT, ADR , IMDG, IATA
```


## 15. Regulatory information

-15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

- United States (USA)
- SARA
- Section 302

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

- Section 313 (Specific toxic chemical listings):

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

| Chemical Name | SARA 313 - Threshold Values (\%) |
| :--- | :--- |
| Zinc, bis(hydroxymethanesulfinato-OS,O1) - (T-4) | 1.0 |

- Section 311/312 Hazard Categories
Reactivity Hazard No
Acute Health Hazard No

Chronic Health Hazard No
Fire Hazard No
Acute Health Hazard No
-

- Proposition 65 (California):

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

- Clean Water Act (CWA)

This product contains 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 - <br> Reportable <br> Quantities | CWA - Toxic <br> Pollutants | CWA - Priority <br> Pollutants | CWA - Hazardous <br> Substances |
| :---: | :---: | :---: | :---: | :---: |
| Zinc, <br> bis(hydroxymethanesulfinato- <br> OS,O1) $-(T-4)$ | - | X | - |  |

- US STATE RIGHT-TO-KNOW Regulations:

| Chemical Name | Pennsylvania | Massachusetts | New Jersey |
| :---: | :---: | :---: | :---: |
| Zinc, | X | - | X |
| bis(hydroxymethanesulfinato- |  |  |  |
| OS,O1) - (T-4) |  |  |  |

-15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

## 16. Other information

## Notice to reader

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