



SAFETY DATA SHEET

Revision Date 19-May-2015

Version 2

1. IDENTIFICATION

Product identifier

Product Name Endura-Zinc 700 Met. Zinc Dust Primer L/F

Other means of identification

Product Code PB-0411

SKU(s) None

Recommended use of the chemical and restrictions on use

Recommended Use No information available.

Uses advised against No information available

Details of the supplier of the safety data sheet

Manufacturer Address

Diamond Vogel Paint
1020 Albany Place SE
Orange City, IA 51041
Phone: 712-737-4993
Fax: 712-737-4997

Emergency telephone number

Emergency Telephone Chemtrec 1-800-424-9300

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

| | |
|--|-------------|
| Skin sensitization | Category 1 |
| Germ cell mutagenicity | Category 1B |
| Carcinogenicity | Category 1B |
| Specific target organ toxicity (repeated exposure) | Category 1 |
| Aspiration toxicity | Category 1 |
| Flammable liquids | Category 3 |

Emergency Overview

Danger

Hazard statements

May cause an allergic skin reaction
May cause genetic defects
May cause cancer
Causes damage to organs through prolonged or repeated exposure
May be fatal if swallowed and enters airways
Flammable liquid and vapor

**Appearance** No information available**Physical state** liquid**Odor** No information available**Precautionary Statements - Prevention**

Obtain special instructions before use
 Do not handle until all safety precautions have been read and understood
 Use personal protective equipment as required
 Contaminated work clothing should not be allowed out of the workplace
 Wear protective gloves
 Do not breathe dust/fume/gas/mist/vapors/spray
 Wash face, hands and any exposed skin thoroughly after handling
 Do not eat, drink or smoke when using this product
 Keep away from heat/sparks/open flames/hot surfaces. - No smoking
 Keep container tightly closed
 Ground/bond container and receiving equipment
 Use only non-sparking tools
 Take precautionary measures against static discharge
 Use explosion-proof electrical/ ventilating/ lighting/ equipment

Precautionary Statements - Response

IF exposed or concerned: Get medical advice/attention
 If skin irritation or rash occurs: Get medical advice/attention
 Wash contaminated clothing before reuse
 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician
 Do NOT induce vomiting
 In case of fire: Use CO₂, dry chemical, or foam for extinction

Precautionary Statements - Storage

Store locked up
 Store in a well-ventilated place. Keep cool

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)**Other Information**

Unknown acute toxicity 0.66% of the mixture consists of ingredient(s) of unknown toxicity

3. COMPOSITION/INFORMATION ON INGREDIENTS

| Chemical Name | CAS No. | Weight-% | Trade Secret |
|-----------------------------------|------------|----------|--------------|
| Zinc | 7440-66-6 | 30 - 60 | * |
| Zinc oxide, as Zn (fume) | 1314-13-2 | 10 - 30 | * |
| Solvent Naphtha, Medium Aliphatic | 64742-88-7 | 7 - 13 | * |
| Mineral Spirits | 64742-48-9 | 5 - 10 | * |
| Methyl Ethyl Ketoxime | 96-29-7 | 0.1 - 1 | * |
| Ethyl Benzene | 100-41-4 | 0.1 - 1 | * |
| Stoddard Solvent | 8052-41-3 | 0.1 - 1 | * |

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

4. FIRST AID MEASURES

Description of first aid measures

| | |
|---|--|
| General advice | If symptoms persist, call a physician. Do not breathe dust/fume/gas/mist/vapors/spray. Do not get in eyes, on skin, or on clothing. |
| Eye contact | Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Keep eye wide open while rinsing. If symptoms persist, call a physician. Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician. |
| Skin Contact | Consult a physician if necessary. Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Call a physician immediately. |
| Inhalation | Remove to fresh air. Call a physician. If breathing is irregular or stopped, administer artificial respiration. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. Move victim to fresh air. If not breathing, give artificial respiration. Call a physician immediately. |
| Ingestion | Do NOT induce vomiting. Rinse mouth. Drink plenty of water. If symptoms persist, call a physician. Drink 1 or 2 glasses of water. Never give anything by mouth to an unconscious person. Get medical attention. |
| Self-protection of the first aider | Use personal protective equipment as required. |

Most important symptoms and effects, both acute and delayed

Symptoms No information available.

Indication of any immediate medical attention and special treatment needed

Note to physicians Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media CAUTION: Use of water spray when fighting fire may be inefficient.

Specific hazards arising from the chemical

Flammable.

Explosion data

Sensitivity to Mechanical Impact None.

Sensitivity to Static Discharge None.

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions Use personal protective equipment as required. Remove all sources of ignition.

Environmental precautions

Environmental precautions Prevent entry into waterways, sewers, basements or confined areas. Do not flush into surface water or sanitary sewer system. See Section 12 for additional ecological information.

Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Pick up and transfer to properly labeled containers. Cover liquid spill with sand, earth or other non-combustible absorbent material. Cover powder spill with plastic sheet or tarp to minimize spreading. Soak up with inert absorbent material.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling Use personal protective equipment as required. Avoid contact with skin, eyes or clothing. Wash contaminated clothing before reuse. Do not breathe dust/fume/gas/mist/vapors/spray. Do not eat, drink or smoke when using this product.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep container tightly closed in a dry and well-ventilated place. Keep out of the reach of children. Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity).

Incompatible materials Chlorinated compounds.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines

| Chemical Name | ACGIH TLV | OSHA PEL | NIOSH IDLH |
|---------------------------------------|--|---|--|
| Zinc oxide, as Zn (fume) 1314-13-2 | STEL: 10 mg/m ³ respirable fraction TWA: 2 mg/m ³ respirable fraction | TWA: 5 mg/m ³ fume TWA: 15 mg/m ³ total dust TWA: 5 mg/m ³ respirable fraction (vacated) TWA: 5 mg/m ³ fume (vacated) TWA: 10 mg/m ³ total dust (vacated) TWA: 5 mg/m ³ respirable fraction (vacated) STEL: 10 mg/m ³ fume | IDLH: 500 mg/m ³ Ceiling: 15 mg/m ³ dust TWA: 5 mg/m ³ dust and fume STEL: 10 mg/m ³ fume |
| Ethyl Benzene 100-41-4 | TWA: 20 ppm | TWA: 100 ppm TWA: 435 mg/m ³ (vacated) TWA: 100 ppm (vacated) TWA: 435 mg/m ³ (vacated) STEL: 125 ppm (vacated) STEL: 545 mg/m ³ | IDLH: 800 ppm TWA: 100 ppm TWA: 435 mg/m ³ STEL: 125 ppm STEL: 545 mg/m ³ |
| Stoddard Solvent 8052-41-3 | TWA: 100 ppm | TWA: 500 ppm TWA: 2900 mg/m ³ (vacated) TWA: 100 ppm (vacated) TWA: 525 mg/m ³ | IDLH: 20000 mg/m ³ Ceiling: 1800 mg/m ³ 15 min TWA: 350 mg/m ³ |

NIOSH IDLH *Immediately Dangerous to Life or Health*

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

Appropriate engineering controls

Engineering Controls Showers
Eyewash stations
Ventilation systems.

Individual protection measures, such as personal protective equipment

| | |
|---------------------------------|---|
| Eye/face protection | Tight sealing safety goggles. |
| Skin and body protection | No special technical protective measures are necessary. |
| 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. |

General Hygiene Considerations When using do not eat, drink or smoke. Wash contaminated clothing before reuse.

9. PHYSICAL AND CHEMICAL PROPERTIES**Information on basic physical and chemical properties**

| | | | |
|-----------------------|--------------------------|-----------------------|--------------------------|
| Physical state | liquid | Odor | No information available |
| Appearance | No information available | Odor threshold | No information available |
| Color | No information available | | |

| <u>Property</u> | <u>Values</u> | <u>Remarks • Method</u> |
|--------------------------------------|--------------------------|-------------------------|
| pH | No information available | |
| Melting point/freezing point | No information available | |
| Boiling point / boiling range | >= 136 °C / 276 °F | |
| Flash point | 39 °C / 102 °F | |
| Evaporation rate | No information available | |
| Flammability (solid, gas) | No information available | |
| Flammability Limit in Air | | |
| Upper flammability limit: | No information available | |
| Lower flammability limit: | No information available | |
| Vapor pressure | No information available | |
| Vapor density | No information available | |
| Specific Gravity | 1.85 | |
| Water solubility | No information available | |
| Solubility in other solvents | No information available | |
| Partition coefficient | No information available | |
| Autoignition temperature | No information available | |
| Decomposition temperature | No information available | |
| Kinematic viscosity | No information available | |
| Dynamic viscosity | No information available | |
| Explosive properties | No information available | |
| Oxidizing properties | No information available | |

Other Information

| | |
|-----------------------------------|--------------------------|
| Softening point | No information available |
| Molecular weight | No information available |
| VOC Content (%) | No information available |
| Density | 15.40 lbs/gal |
| Bulk density | No information available |
| Percent solids by weight | 77.8% |
| Percent volatile by weight | 21.9% |
| Percent solids by volume | 48.0% |
| Actual VOC (lbs/gal) | 3.4 |
| Actual VOC (grams/liter) | 404 |
| EPA VOC (lbs/gal) | 3.4 |
| EPA VOC (grams/liter) | 405.8 |
| EPA VOC (lb/gal solids) | 7 |

10. STABILITY AND REACTIVITY

Reactivity

No data available

Chemical stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

None under normal processing.

Conditions to avoid

Heat, flames and sparks.

Incompatible materials

Chlorinated compounds.

Hazardous Decomposition Products

Carbon oxides.

11. TOXICOLOGICAL INFORMATION**Information on likely routes of exposure**

| | |
|----------------------------|--------------------|
| Product Information | No data available |
| Inhalation | No data available. |
| Eye contact | No data available. |
| Skin Contact | No data available. |
| Ingestion | No data available. |

| Chemical Name | Oral LD50 | Dermal LD50 | Inhalation LC50 |
|---|----------------------|--------------------------|-------------------------|
| Zinc oxide, as Zn (fume) 1314-13-2 | > 5000 mg/kg (Rat) | - | - |
| Solvent Naphtha, Medium Aliphatic 64742-88-7 | > 5000 mg/kg (Rat) | = 3000 mg/kg (Rabbit) | > 5.28 mg/L (Rat) 4 h |
| Mineral Spirits 64742-48-9 | > 5000 mg/kg (Rat) | > 3160 mg/kg (Rabbit) | - |
| Methyl Ethyl Ketoxime 96-29-7 | = 930 mg/kg (Rat) | = 0.2 mg/kg (Rabbit) | = 20 mg/L (Rat) 4 h |
| Ethyl Benzene 100-41-4 | = 3500 mg/kg (Rat) | = 15400 mg/kg (Rabbit) | = 17.2 mg/L (Rat) 4 h |

Information on toxicological effects**Symptoms** No information available.**Delayed and immediate effects as well as chronic effects from short and long-term exposure****Sensitization** No information available.**Germ cell mutagenicity** No information available.**Carcinogenicity** No information available.

| Chemical Name | ACGIH | IARC | NTP | OSHA |
|---------------------------|-------|----------|-----|------|
| Ethyl Benzene 100-41-4 | A3 | Group 2B | - | X |

ACGIH (American Conference of Governmental Industrial Hygienists)

A3 - Animal Carcinogen

IARC (International Agency for Research on Cancer)

Group 2B - Possibly Carcinogenic to Humans

Group 3 - Not classifiable as a human carcinogen

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

X - Present

| | |
|---------------------------------|---|
| Reproductive toxicity | No information available. |
| STOT - single exposure | No information available. |
| STOT - repeated exposure | No information available. |
| Chronic toxicity | Ethylbenzene has been classified by the International Agency for Research on Cancer (IARC) as possibly carcinogenic to humans (Group 2B). Prolonged or repeated overexposure to ethylbenzene may result in adverse effects to the kidneys, liver, respiratory system, thyroid, testicles, and pituitary glands. |
| Target Organ Effects | Respiratory system. |
| Aspiration hazard | No information available. |

Numerical measures of toxicity - Product Information

The following values are calculated based on chapter 3.1 of the GHS document mg/kg

12. ECOLOGICAL INFORMATION

This product contains a chemical which is listed as a marine pollutant according to DOT.

Ecotoxicity

0.98% of the mixture consists of component(s) of unknown hazards to the aquatic environment

| Chemical Name | Algae/aquatic plants | Fish | Crustacea |
|---|---|---|---|
| Zinc 7440-66-6 | 0.11 - 0.271: 96 h Pseudokirchneriella subcapitata mg/L EC50 static 0.09 - 0.125: 72 h Pseudokirchneriella subcapitata mg/L EC50 static | 2.16 - 3.05: 96 h Pimephales promelas mg/L LC50 flow-through 0.211 - 0.269: 96 h Pimephales promelas mg/L LC50 semi-static 2.66: 96 h Pimephales promelas mg/L LC50 static 30: 96 h Cyprinus carpio mg/L LC50 0.45: 96 h Cyprinus carpio mg/L LC50 semi-static 7.8: 96 h Cyprinus carpio mg/L LC50 static 3.5: 96 h Lepomis macrochirus mg/L LC50 static 0.24: 96 h Oncorhynchus mykiss mg/L LC50 flow-through 0.59: 96 h Oncorhynchus mykiss mg/L LC50 semi-static 0.41: 96 h Oncorhynchus mykiss mg/L LC50 static | 0.139 - 0.908: 48 h Daphnia magna mg/L EC50 Static |
| Solvent Naphtha, Medium Aliphatic 64742-88-7 | 450: 96 h Pseudokirchneriella subcapitata mg/L EC50 | 800: 96 h Pimephales promelas mg/L LC50 static | 100: 48 h Daphnia magna mg/L EC50 |
| Mineral Spirits 64742-48-9 | - | 2200: 96 h Pimephales promelas mg/L LC50 | 2.6: 96 h Chaetogammarus marinus mg/L LC50 |
| Methyl Ethyl Ketoxime 96-29-7 | 83: 72 h Desmodosmus subspicatus mg/L EC50 | 777 - 914: 96 h Pimephales promelas mg/L LC50 flow-through 760: 96 h Poecilia reticulata mg/L LC50 static 320 - 1000: 96 h Leuciscus idus mg/L LC50 static | 750: 48 h Daphnia magna mg/L EC50 |
| Ethyl Benzene 100-41-4 | 4.6: 72 h Pseudokirchneriella subcapitata mg/L EC50 438: 96 h Pseudokirchneriella subcapitata mg/L EC50 2.6 - 11.3: 72 h Pseudokirchneriella subcapitata mg/L EC50 static 1.7 - 7.6: 96 h Pseudokirchneriella subcapitata mg/L EC50 static | 11.0 - 18.0: 96 h Oncorhynchus mykiss mg/L LC50 static 4.2: 96 h Oncorhynchus mykiss mg/L LC50 semi-static 7.55 - 11: 96 h Pimephales promelas mg/L LC50 flow-through 32: 96 h Lepomis macrochirus mg/L LC50 static 9.1 - 15.6: 96 h Pimephales promelas mg/L LC50 static 9.6: 96 h Poecilia reticulata mg/L LC50 static | 1.8 - 2.4: 48 h Daphnia magna mg/L EC50 |

Persistence and degradability

No information available.

Bioaccumulation

No information available.

| Chemical Name | Partition coefficient |
|---------------|-----------------------|
|---------------|-----------------------|

| | |
|----------------------------------|-------|
| Methyl Ethyl Ketoxime 96-29-7 | 0.65 |
| Ethyl Benzene 100-41-4 | 3.118 |

Other adverse effects No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal of wastes Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated packaging Do not reuse container.

US EPA Waste Number D001 U239

| Chemical Name | RCRA | RCRA - Basis for Listing | RCRA - D Series Wastes | RCRA - U Series Wastes |
|---------------------------|------|-----------------------------------|------------------------|------------------------|
| Ethyl Benzene 100-41-4 | - | Included in waste stream: F039 | - | - |

This product contains one or more substances that are listed with the State of California as a hazardous waste.

| Chemical Name | California Hazardous Waste Status |
|---------------------------------------|-----------------------------------|
| Zinc 7440-66-6 | Ignitable powder Toxic |
| Zinc oxide, as Zn (fume) 1314-13-2 | Toxic |
| Ethyl Benzene 100-41-4 | Toxic Ignitable |

14. TRANSPORT INFORMATION

DOT Not regulated
Marine pollutant This product contains a chemical which is listed as a marine pollutant according to DOT.

15. REGULATORY INFORMATION

International Inventories

| | |
|---------------|-------------------|
| TSCA | Complies |
| DSL/NDSL | Complies * |
| EINECS/ELINCS | Complies * |
| ENCS | Does not comply * |
| IECSC | Complies * |
| KECL | Complies * |
| PICCS | Does not comply * |
| AICS | Does not comply * |

* This product contains an unknown chemical, therefore, this product's compliance to the inventory list is NOT DETERMINED

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 Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECS - 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

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains 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 | SARA 313 - Threshold Values % |
|--------------------------------------|-------------------------------|
| Zinc - 7440-66-6 | 1.0 |
| Zinc oxide, as Zn (fume) - 1314-13-2 | 1.0 |
| Ethyl Benzene - 100-41-4 | 0.1 |

SARA 311/312 Hazard Categories

| | |
|-----------------------------------|-----|
| Acute health hazard | Yes |
| Chronic Health Hazard | Yes |
| Fire hazard | Yes |
| Sudden release of pressure hazard | No |
| Reactive Hazard | No |

CWA (Clean Water Act)

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 - Reportable Quantities | CWA - Toxic Pollutants | CWA - Priority Pollutants | CWA - Hazardous Substances |
|---------------------------------------|-----------------------------|------------------------|---------------------------|----------------------------|
| Zinc 7440-66-6 | - | X | X | - |
| Zinc oxide, as Zn (fume) 1314-13-2 | - | X | - | - |
| Ethyl Benzene 100-41-4 | 1000 lb | X | X | X |

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

| Chemical Name | Hazardous Substances RQs | CERCLA/SARA RQ | Reportable Quantity (RQ) |
|---------------------------|--------------------------|----------------|---|
| Zinc 7440-66-6 | 1000 lb | - | RQ 454 kg final RQ RQ 1000 lb final RQ |
| Ethyl Benzene 100-41-4 | 1000 lb | - | RQ 1000 lb final RQ RQ 454 kg final RQ |

US State Regulations

California Proposition 65

This product contains the following Proposition 65 chemicals

| Chemical Name | California Proposition 65 |
|---------------------------------|-----------------------------|
| Ethyl Benzene - 100-41-4 | Carcinogen |
| Crystalline Silica - 14808-60-7 | Carcinogen |
| Lead Oxide - 1317-36-8 | Carcinogen Developmental |

U.S. State Right-to-Know Regulations

| Chemical Name | New Jersey | Massachusetts | Pennsylvania |
|---------------------------------------|------------|---------------|--------------|
| Zinc 7440-66-6 | X | X | X |
| Zinc oxide, as Zn (fume) 1314-13-2 | X | X | X |

| | | | |
|---|---|---|---|
| Solvent Naphtha, Medium Aliphatic 64742-88-7 | X | - | - |
| Xylene 1330-20-7 | X | X | X |
| Ethyl Benzene 100-41-4 | X | X | X |
| Potassium oxide 12136-45-7 | X | - | - |
| Cobalt neodecanoate 27253-31-2 | X | - | X |
| Calcium oxide 1305-78-8 | X | X | X |
| Crystalline Silica 14808-60-7 | X | X | X |
| Lead Oxide 1317-36-8 | X | X | X |
| Diethylene Glycol Methyl Ether 111-77-3 | X | X | X |

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

Hazardous air pollutants (HAPS) content

This product contains no reportable Hazardous Air Pollutants

16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION

| | | | | |
|-------------|-------------------|----------------|--------------------|------------------------------------|
| NFPA | Health hazards 1 | Flammability 2 | Instability 0 | Physical and Chemical Properties - |
| HMIS | Health hazards 1* | Flammability 2 | Physical hazards 0 | Personal protection X |

Chronic Hazard Star Legend * = Chronic Health Hazard

Revision Date 19-May-2015

Revision Note
No information available

Disclaimer

The information provided in this Safety Data Sheet 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 guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered 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 materials or in any process, unless specified in the text. Shipping information may vary based upon container size and shipping destination. Each user of this material needs to evaluate the conditions of use and design the appropriate protective mechanisms to prevent employee exposures, property damage, or release to the environment. The manufacturer assumes no responsibility for injury to the recipient or third persons, or for any damages to any property resulting from misuse of the product.

End of Safety Data Sheet