

SAFETY DATA SHEET

GHS

United States English

Section 1. Product and company identification

Product name OCTOATE Z® In case of emergency

Code 31352 1-203-853-1400

Supplier/Manufacturer Vanderbilt Chemicals, LLC Chemtrec: 1-800-424-9300

Outside U.S.

Vanderbilt Chemicals, LLC

30 Winfield Street

Norwalk, CT 06855

Outside US: +1-703-527-3887

Chemical name zinc carboxylate in process oil.

Synonym Not available.

Material uses Activator
Product type Liquid.

Section 2. Hazards identification

OSHA/HCS status This material is considered hazardous by the OSHA Hazard Communication Standard

(29 CFR 1910.1200).

Classification of the EYE IRRITATION - Category 2A

substance or mixture TOXIC TO REPRODUCTION - Category 1B

GHS label elements

Hazard pictograms





Signal word Danger

Hazard statements Causes serious eye irritation.

May damage fertility or the unborn child.

Precautionary statements

Prevention Obtain special instructions before use. Do not handle until all safety precautions have

been read and understood. Wear protective gloves. Wear protective clothing:

Recommended: lab coat. Wear eye or face protection: Recommended: splash goggles.

Wash thoroughly after handling.

Response IF exposed or concerned: Get medical advice or attention. IF IN EYES: Rinse

cautiously with water for several minutes. Remove contact lenses, if present and easy to

do. Continue rinsing. If eye irritation persists: Get medical advice or attention.

Storage Store locked up.

Dispose of contents and container in accordance with all local, regional, national and

international regulations.

Hazards not otherwise

classified

None known.

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Section 3. Composition/information on ingredients

Substance/mixture Mixture

Ingredient name	CAS number	% by weight
zinc carboxylate	- 64742 52 5	80
petroleum process oil, <3.0% DMSO extractable material	64742-52-5	20

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

Eye contact Immediately flush eyes with plenty of water, occasionally lifting the upper and lower

eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10

minutes. Get medical attention.

Inhalation Remove victim to fresh air and keep at rest in a position comfortable for breathing. If

not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway.

Loosen tight clothing such as a collar, tie, belt or waistband.

Skin contact Flush contaminated skin with plenty of water. Remove contaminated clothing and

shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. Wash clothing

before reuse. Clean shoes thoroughly before reuse.

Ingestion Wash out mouth with water. Remove dentures if any. If material has been swallowed

and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing

such as a collar, tie, belt or waistband.

Most important symptoms/effects, acute and delayed

Potential acute health effects

Eye contact Causes serious eye irritation.

InhalationNo known significant effects or critical hazards.Skin contactNo known significant effects or critical hazards.IngestionNo known significant effects or critical hazards.

Over-exposure signs/symptoms

Eye contact Adverse symptoms may include the following:

pain or irritation watering

redness

Inhalation Adverse symptoms may include the following:

reduced fetal weight increase in fetal deaths skeletal malformations

Skin contact Adverse symptoms may include the following:

reduced fetal weight increase in fetal deaths skeletal malformations

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Section 4. First aid measures

Ingestion Adverse symptoms may include the following:

> reduced fetal weight increase in fetal deaths skeletal malformations

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician Treat symptomatically. Contact poison treatment specialist immediately if large

quantities have been ingested or inhaled.

Specific treatments No specific treatment.

Protection of first-aiders No action shall be taken involving any personal risk or without suitable training. If it is

suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water

before removing it, or wear gloves.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing

media

Unsuitable extinguishing

media

Use an extinguishing agent suitable for the surrounding fire.

None known.

Specific hazards arising from the chemical

Hazardous thermal

decomposition products

In a fire or if heated, a pressure increase will occur and the container may burst.

Decomposition products may include the following materials:

carbon dioxide carbon monoxide metal oxide/oxides

Special protective actions

for fire-fighters

Special protective equipment for fire-fighters Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable

training.

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is

inadequate. Put on appropriate personal protective equipment.

For emergency responders If specialized clothing is required to deal with the spillage, take note of any information in

Section 8 on suitable and unsuitable materials. See also the information in "For non-

emergency personnel".

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Section 6. Accidental release measures

Environmental precautions

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and materials for containment and cleaning up

Small spill

Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Large spill

Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling

Protective measures

Put on appropriate personal protective equipment (see Section 8). Avoid exposure - obtain special instructions before use. Avoid exposure during pregnancy. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapor or mist. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

Advice on general occupational hygiene

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

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Section 8. Exposure controls/personal protection

Ingredient name	Exposure limits
petroleum process oil, <3.0% DMSO extractable material	ACGIH TLV (United States, 6/2013). TWA: 5 mg/m³ 8 hours. Form: Inhalable fraction NIOSH REL (United States, 10/2013). TWA: 5 mg/m³ 10 hours. Form: Mist STEL: 10 mg/m³ 15 minutes. Form: Mist ACGIH TLV (United States). STEL: 10 mg/m³ OSHA PEL (United States, 2/2013). TWA: 5 mg/m³ 8 hours.

Appropriate engineering controls

Environmental exposure controls

If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

Hygiene measures

Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection

Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles. Recommended: splash goggles

Skin protection

Hand protection

Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

Body protection

Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. Recommended: lab coat

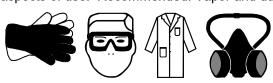
Other skin protection

Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection

Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use. Recommended: Vapor and dust respirator.

Personal protective equipment (Pictograms)



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Section 8. Exposure controls/personal protection

Section 9. Physical and chemical properties

Appearance

Physical state Liquid.

Color Amber. [Light]
Odor Not available.
Odor threshold Not available.
pH Not available.
Melting point Not available.
Boiling point Not available.

Flash point Closed cup: >160°C (>320°F) [ASTM D6450]

Burning time

Burning rate

Evaporation rate

Flammability (solid, gas)

Lower and upper explosive

Not applicable.

Not available.

Not available.

(flammable) limits

Vapor pressureNot available.Vapor densityNot available.Density1.11 g/cm³Relative density1.11

Solubility Insoluble in the following materials: cold water.

Solubility in water Not available.

Partition coefficient: n- Not applicable.

octanol/water

Auto-ignition temperature

Decomposition temperature

SADT

Not available.

Not available.

Not available.

Not available.

Section 10. Stability and reactivity

ReactivityNo specific test data related to reactivity available for this product or its ingredients.

Chemical stability The product is stable.

Possibility of hazardous

reactions

Under normal conditions of storage and use, hazardous reactions will not occur.

Conditions to avoid No specific data.

Incompatible materials No specific data.

Hazardous decomposition Under normal conditions of storage and use, hazardous decomposition products should

products not be produced.

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Section 10. Stability and reactivity

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
zinc carboxylate	LC50 Inhalation Vapor	Rat	>5700 mg/m³ (Based on tests of similar materials)	4 hours
	LD50 Dermal	Rat	>2000 mg/kg (Based on tests of similar materials)	-
	LD50 Oral	Rat	>5000 mg/kg (Based on tests of similar materials)	-
petroleum process oil, <3.0% DMSO extractable material	LD50 Dermal	Rabbit	>2000 mg/kg	-
	LD50 Oral	Rat	>5000 mg/kg	-

Irritation/Corrosion

Not available.

Conclusion/Summary

Eyes

zinc carboxylate: Causes serious eye irritation. (Rabbit)

Sensitization

3	Route of exposure	Species	Result
zinc carboxylate	skin	Guinea pig	Not sensitizing (Based on tests of similar materials)

Mutagenicity

Product/ingredient name	Test	Experiment	Result
zinc carboxylate	OECD 471	Experiment: In vitro Subject: Bacteria	Negative (Based on tests of similar materials)
	OECD 474	Experiment: In vivo Subject: Mammalian-Animal	Negative (Based on tests of similar materials)

Carcinogenicity

Not available.

Reproductive toxicity

Not available.

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Section 11. Toxicological information

Conclusion/Summary zinc carboxylate: May damage the unborn child.

Teratogenicity

Not available.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

Information on the likely routes of exposure

Routes of entry anticipated: Oral, Inhalation, Eyes.

Potential acute health effects

Eye contact Causes serious eye irritation.

Inhalation No known significant effects or critical hazards.

Skin contact May be harmful in contact with skin.

Ingestion No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact Adverse symptoms may include the following:

pain or irritation

watering redness

Inhalation Adverse symptoms may include the following:

reduced fetal weight increase in fetal deaths skeletal malformations

Skin contact Adverse symptoms may include the following:

reduced fetal weight increase in fetal deaths skeletal malformations

Ingestion Adverse symptoms may include the following:

reduced fetal weight increase in fetal deaths skeletal malformations

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate Not available.

effects

Potential delayed effects Not available.

Long term exposure

Potential immediate Not available.

effects

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Section 11. Toxicological information

Potential delayed effects Not available.

Potential chronic health effects

Product/ingredient name	Result	Species	Dose	Exposure
zinc carboxylate	Sub-chronic NOEL Oral	Rat	234 mg/kg (Based on tests of similar materials)	-

GeneralNo known significant effects or critical hazards.CarcinogenicityNo known significant effects or critical hazards.MutagenicityNo known significant effects or critical hazards.

Teratogenicity May damage the unborn child.

Developmental effects

No known significant effects or critical hazards.

Fertility effects

No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Route	ATE value
Dermal	3125 mg/kg

Other information Not available.

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
petroleum process oil, <3.0% DMSO extractable material	Acute EC50 >10000 mg/l (Based on tests of similar materials)	Daphnia	48 hours
	Acute LC50 >100 mg/l (Based on tests of similar materials)	Fish	96 hours
	Acute NOEL >100 mg/l (Based on tests of similar materials)	Algae	72 hours
	Acute NOEL >1000 mg/l (Based on tests of similar materials)	Daphnia	48 hours
	Acute NOEL >100 mg/l (Based on tests of similar materials)	Fish	96 hours

Conclusion/Summary

zinc carboxylate: Harmful to aquatic life with long lasting effects.

Persistence and degradability

Product/ingredient name	Test	Result		Dose		Inoculum
zinc carboxylate	OECD 301E	99 % - Rea	idily - 28 days	-		-
Product/ingredient name	Aquatic half-life		Photolysis		Biodeg	radability
zinc carboxylate petroleum process oil, <3.0% DMSO extractable material	-		-		Readily Not rea	

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Section 12. Ecological information

Bioaccumulative potential

	Product/ingredient name	LogPow	BCF	Potential
2	zinc carboxylate	-	60960	high

Mobility in soil

Soil/water partition coefficient (Koc)

Not available.

Other adverse effects

No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods

The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

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

Section 14. Transport information

Regulatory information	UN number	Proper shipping name	Classes	PG*	Label	Additional information
DOT Classification	Not regulated.	-	-	-		-
TDG Classification	Not regulated.	-	-	-		-
ADR/RID Class	Not regulated.	-	-	-		-
IMDG Class	Not regulated.	-	-	-		-
IATA-DGR Class	Not regulated.	-	-	-		-

PG*: Packing group

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Section 15. Regulatory information

<u>United States Inventory (TSCA 8b)</u>
All components are listed or exempted.

EPA Accession No. 253351

zinc carboxylate: EPA has issued a Significant New Use Rule (SNUR) under Section (5)(a) of TSCA regulating releases to water. The requirements are specific in 40 CFR 721.10760.

U.S. Federal regulations

TSCA 8(a) CDR Exempt/Partial exemption: Not determined

TSCA 12(b) one-time export: zinc carboxylate

CERCLA: Hazardous substances.: zinc carboxylate: No RQ is being assigned to the

generic or broad class.;

Clean Water Act (CWA) 307: zinc carboxylate

SARA 302/304

Composition/information on ingredients

No products were found.

SARA 304 RQ Not applicable.

SARA 311/312

Classification EYE IRRITATION - Category 2A

TOXIC TO REPRODUCTION - Category 1B

Composition/information on ingredients

Name	%	Classification
zinc carboxylate		EYE IRRITATION - Category 2A TOXIC TO REPRODUCTION - Category 1B

SARA 313

	Product name	CAS number	%
Form R - Reporting requirements	zinc carboxylate	-	80
Supplier notification	zinc carboxylate	-	80

SARA 313 notifications must not be detached from the SDS and any copying and redistribution of the SDS shall include copying and redistribution of the notice attached to copies of the SDS subsequently redistributed.

State regulations

Massachusetts The following components are listed: OIL MIST, MINERAL

New York None of the components are listed.

New Jersey The following components are listed: zinc carboxylate

Pennsylvania The following components are listed: zinc carboxylate

California Prop. 65 None of the components are listed.

International regulations

Australia Inventory (AIIC)

Canada Inventory

All components are listed or exempted.

All components are listed or exempted.

China Inventory (IECSC)

All components are listed or exempted.

Japan Inventory (CSCL)

All components are listed or exempted.

Korea inventory (KECI)

All components are listed or exempted.

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All components are listed or exempted.

Section 15. Regulatory information

New Zealand Inventory of Chemicals

(NZIoC)

Philippines Inventory (PICCS) All components are listed or exempted.

Taiwan Chemical Substances

Inventory (TCSI)

Not determined.

Section 16. Other information

Hazardous Material Identification System (U.S.A.)



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The customer is responsible for determining the PPE code for this material. For more information on HMIS® Personal Protective Equipment (PPE) codes, consult the HMIS® Implementation Manual.

National Fire Protection Association (U.S.A.)



Copyright ©2001, National Fire Protection Association, Quincy, MA 02269. This warning system is intended to be interpreted and applied only by properly trained individuals to identify fire, health and reactivity hazards of chemicals. The user is referred to certain limited number of chemicals with recommended classifications in NFPA 49 and NFPA 325, which would be used as a guideline only. Whether the chemicals are classified by NFPA or not, anyone using the 704 systems to classify chemicals does so at their own risk.

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Key to abbreviations ATE = Acute Toxicity Estimate

BCF = Bioconcentration Factor

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

IATA = International Air Transport Association

IBC = Intermediate Bulk Container

IMDG = International Maritime Dangerous Goods

LogPow = logarithm of the octanol/water partition coefficient

MARPOL = International Convention for the Prevention of Pollution From Ships, 1973

as modified by the Protocol of 1978. ("Marpol" = marine pollution)

UN = United Nations

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Section 16. Other information

References Not available.

Information contact Vanderbilt Global Services, LLC

Corporate Risk Management

1-203-295-2143

Visit www.vanderbiltchemicals.com for more information.

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