

**DEVCON Z**

This product appears in the following stock number(s):

12020 12030

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**1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION****Tradename:** DEVCON Z**General use:** The following information applies to the product as packaged; after evaporation of solvents, the coating is not hazardous.**Chemical family:** Zinc in epoxy-ester binder and solvent carrier**MANUFACTURER**ITW Devcon  
30 Endicott St.  
Danvers, MA 01923**EMERGENCY INFORMATION****Emergency telephone number**  
**(CHEMTREC): (800) 424-9300**  
**Other Calls: (978) 777-1100****2. COMPOSITION/INFORMATION ON INGREDIENTS****HAZARDOUS CONSTITUENTS****Exposure limits**

Constituent	Abbr.	CAS No.	Weight percent	ACGIH TLV	OSHA PEL	Other Limits
Zinc oxide		1314132	1-10	5 mg/m <sup>3</sup>	5 mg/m <sup>3</sup>	10 mg/m <sup>3</sup> (Canada)
Hydrotreated distillate, light		64742478	1-5	n/e	n/e	n/e
Heavy hydrotreated naphtha		64742489	1-10	400 ppm	400 ppm	n/e
Heavy hydrosulfurized naphtha		64742821	1-5	n/e	n/e	n/e
Zinc		7440666	> 70	n/e	n/e	n/e
Naphtha, solvent		8052413	1-10	100 ppm	500 ppm	n/e

"TLV" means the Threshold Limit Value exposure (eight-hour, time-weighted average, unless otherwise noted) established by the American Conference of Governmental Industrial Hygienists. "STEL" indicates a short-term exposure limit. "PEL" indicates the OSHA Permissible Exposure Limit. "n/e" indicates that no exposure limit has been established. An asterisk (\*) indicates a substance whose identity is a trade secret of our supplier and unknown to us.

**3. HAZARDS IDENTIFICATION****Emergency Overview**

Appearance, form, odor: Gray opaque liquid with hydrocarbon odor.

**WARNING! Flammable. Eye, skin and respiratory irritant. May cause central nervous system effects.**

**Potential health effects**

**Primary routes of exposure:**  Skin contact  Skin absorption  Eye contact  Inhalation  Ingestion

**Symptoms of acute overexposure:**

**Skin:** Moderate irritant (itching, redness, burning, swelling). May cause skin sensitization (drying, itching, redness, rashes, hives, burning, swelling, scaling, blistering, cracking, severe tissue damage). May be absorbed through skin and cause central nervous system (CNS) effects (see inhalation).

**Eyes:** Moderate irritant (stinging, burning sensation, tearing, redness, swelling).

**Inhalation:**

Breathing high concentrations of vapor may cause respiratory irritation, euphoria, excitation or giddiness, headache, nausea, vomiting, abdominal pain, loss of appetite, fatigue, muscular weakness, staggering gait, and CNS depression. CNS effects include dizziness, drowsiness, disorientation, vertigo, memory loss, visual disturbances, difficulty breathing, convulsions, unconsciousness, paralysis, coma, and death depending upon level of exposure concentration and/or duration.

**Ingestion:**

May cause irritation the mucous membranes of the mouth, throat, and esophagus. It can be readily absorbed through the stomach and intestinal tract. Symptoms include burning sensation, nausea, vomiting, dizziness, staggering gait, drowsiness, loss of consciousness, delirium and CNS effects.

**Effects of chronic overexposure:**

Prolonged or repeated exposure to high concentrations may cause kidney and neural dysfunction. Reports have been associated with repeated and prolonged exposures to solvents with irreversible brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling this product may be harmful or fatal. Chronic effects of ingestion and subsequent aspiration into the lungs may cause lung tumor formation and chronic lung dysfunction.

**Carcinogenicity -- OSHA regulated:** No

**ACGIH:** No

**National Toxicology Program:** No

**International Agency for Research on Cancer:**No

**Cancer-suspect constituent(s) :** None

**Medical conditions which may be aggravated by exposure:**

Personnel with pre-existing CNS disease, neurological conditions; eye, skin, and respiratory disorders; impaired kidney or liver function; and women attempting to conceive should avoid exposure.

**Other effects:**

May be toxic to the lungs, blood, liver, kidneys, and reproductive system.

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**4. FIRST AID MEASURES****First aid for eyes:**

Flush eye with clean water for at least 20 minutes while gently holding eyelids open, lifting upper and lower lids. Get immediate medical attention.

**First aid for skin:**

Immediately remove contaminated clothing and excess contaminant. Flush skin with water for at least 15 minutes. Wash thoroughly with soap and warm water. Get immediate medical attention.

**First aid for inhalation:**

Remove patient to fresh air. Administer oxygen if breathing is difficult. Get immediate medical attention.

**First aid for ingestion:**

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. If vomiting occurs spontaneously, keep head below hips (if sitting) or to the side (if lying down) to prevent aspiration. Get immediate medical attention.

**Note to physician :**

INHALATION: monitor for respiratory distress. If cough or difficulty in breathing develops, evaluate for upper respiratory tract inflammation, bronchitis, and pneumonitis. Vigorous anti-inflammatory/steroid treatment may be required. Administer 100% humidified supplemental oxygen with assisted ventilation as required. INGESTION: Material may present an aspiration/ chemical pneumonitis hazard. Obtain chest x-ray and liver function tests. Monitor for cardiac function, respiratory distress and arterial blood gases in severe exposure cases.

**5. FIRE FIGHTING MEASURES****General fire and explosion characteristics:**

Class II, Combustible Liquid.

**Extinguishing media:** Water Carbon dioxide Dry chemical Foam Alcohol foam**Flash Point (°F):** 102**Method:** estimate**Explosive limits in air (percent) -- Lower:** 0.5      **Upper:** 6.0**Special firefighting procedures:**

Do not enter confined space without full bunker gear. Firefighters should wear self-contained breathing apparatus and protective clothing. Cool fire exposed containers with water.

**Unusual fire and explosion hazards:**

Vapors may form an explosive mixture in air and/or in confined spaces. Containers exposed to intense heat from fires could rupture from vapor pressure buildup. Vapors are heavier than air and may travel to an ignition source and flash back. Burning liquid may float on water. Personnel in vicinity and downwind should be evacuated.

**Hazardous products of combustion:**

Carbon monoxide, carbon dioxide and unidentified organic and inorganic products of combustion.

**6. ACCIDENTAL RELEASE MEASURES****Spill control:**

Avoid personal contact. Evacuate area. Eliminate ignition sources. Ventilate area.

**Containment:**

Dike, contain and absorb with clay, sand or other suitable material.

**Cleanup:**

Wear appropriate respirator and protective clothing. For large spills, pump to storage/salvage vessels. Soak up residue with an absorbent such as clay, sand, or other suitable material and dispose of properly (RCRA hazardous waste). Flush area with water to remove trace residue. Small spills- take up with an absorbent material and place in appropriate containers for disposal.

**Special procedures:**

Prevent spill from entering drainage/sewer systems, waterways, and surface waters. Collect run-off water and transfer to drums or tanks for later disposal. Notify local health authorities and other appropriate agencies if such contamination occurs. Spills on porous surfaces can contaminate groundwater. Use bonding/ grounding lines and non-sparking tools.

## 7. HANDLING AND STORAGE

### Handling precautions:

Do not breathe vapor or mist. Do not get in eyes, on skin or clothing. Wash thoroughly after handling. Close container after each use. Ground/bond container when pouring. Keep away from heat, flame or sparks. Use non-sparking tools. Wash thoroughly with soap and water after using and particularly before eating, drinking, smoking, applying cosmetics, or using toilet facilities. Launder contaminated clothing and protective gear before reuse. Discard contaminated leather articles. Provide appropriate ventilation/respiratory protection against decomposition products (see Section 10) during welding/flame cutting operations and to protect against nuisance dust during sanding/grinding of cured product.

### Storage:

Keep in a cool place, without direct exposure to sunlight. Keep container tightly closed and otherwise in accordance with NFPA regulations. Maintain air space in storage containers.

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## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Engineering controls

#### Ventilation :

Use ventilation that is adequate to keep employee exposure to airborne concentrations below exposure limits (or to the lowest feasible levels when limits have not been established). Although good general mechanical ventilation is usually adequate for most industrial applications, local exhaust ventilation is preferred (see ACGIH - Industrial Ventilation). Local exhaust may be required for confined areas (see OSHA 1910.146).

#### Other engineering controls :

Have emergency shower and eye wash available.

### Personal protective equipment

#### Eye and face protection:

Chemical goggles if liquid contact is likely, or safety glasses with side shields.

#### Skin protection:

Chemical-resistant rubber (e.g. nitrile, neoprene) gloves and other protective gear as needed to prevent skin contact.

#### Respiratory protection:

None needed in normal use with proper ventilation. In poorly ventilated areas use NIOSH approved organic vapor cartridge respirator or fresh airline respirator as exposure levels dictate (see OSHA 1910.134). A supplied air (positive pressure or continuous flow) respirator or a self-contained breathing apparatus is required if there is any potential for uncontrolled release or when contaminant concentrations are unknown.

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

Specific gravity:	2.9	Boiling point (°F):	322-394
Melting point (°F):	n/d	Vapor density (air = 1):	>1
Vapor pressure (mmHg):	n/d at 100 °F	Evaporation rate (butyl acetate = 1):	<1
VOC (grams/liter):	< 400	Solubility in water:	Negligible
Percent volatile by volume:	n/d	pH (5% solution or slurry in water):	7
Percent solids by weight:	88		

**10. STABILITY AND REACTIVITY**

This material is chemically stable. Hazardous polymerization will not occur.

**Conditions to avoid :**

Heat, sparks, ignition sources, and open flames.

**Incompatible materials:**

Strong oxidizers, acids and bases. Halogens. Peroxides. Oxygen.

**Hazardous products of decomposition:**

Oxides of carbon. Unidentified organic compounds in smoke.

**Conditions under which hazardous polymerization may occur:**

None known.

**11. TOXICOLOGICAL INFORMATION**

**Acute oral effects:** LD50 (rat): Not available.

**Acute dermal effects:** LD50 (rabbit): Not available.

**Acute inhalation effects:** LC50 (rat): Not available.

Exposure: hours.

**Eye irritation:**

Not available.

**Subchronic effects:**

Based upon laboratory animal studies, repeated direct application of Stoddard Solvent to the skin can produce defatting dermatitis, kidney damage and changes in blood-forming capacity. Rats developed kidney damage and elevated blood urea nitrogen levels when exposed to a concentration of 1.9 mg/L for 65 days. The kidney damage in rats appeared to involve both the tubules and glomeruli, but only occurred in males; therefore these effects may not be pertinent to humans.

**Carcinogenicity, teratogenicity, and mutagenicity:**

Not available.

**Other chronic effects:**

Not available.

**Toxicological information on hazardous chemical constituents of this product:**

Constituent	Oral LD50 (rat)	Dermal LD50 (rabbit)	Inhalation LC50 4hr, (rat)
Zinc oxide	n/d	n/d	n/d
Hydrotreated distillate, light	n/d	n/d	n/d
Heavy hydrotreated naphtha	n/d	n/d	n/d
Heavy hydrosulfurized naphtha	n/d	n/d	n/d

Constituent	Oral LD50 (rat)	Dermal LD50 (rabbit)	Inhalation LC50 4hr, (rat)
Zinc	n/d	n/d	n/d
Naphtha, solvent	>5 gm/kg	>3 gm/kg	n/d

'n/d' = 'not determined'

## 12 ECOLOGICAL INFORMATION

### Ecotoxicity:

Not available.

### Mobility and persistence:

Not available.

### Environmental fate:

Not available.

## 13. DISPOSAL CONSIDERATIONS

Please see also Section 15, Regulatory Information.

### Waste management recommendations:

If this product becomes a waste, it would be a hazardous waste by RCRA criteria (40CFR 261). Dispose of according to applicable federal, state, and local regulations. Do not dispose of in a landfill. Incineration is the preferred method of disposal. Empty containers still contain hazardous product residue (vapors and/or liquid). Follow all MSDS and label warnings even after container is emptied. Residual vapors in empty containers may explode on ignition - DO NOT cut, drill, grind, or weld on or near container.

## 14. TRANSPORT INFORMATION

**Proper shipping name:** Paint

**Technical name :** N/A

**Hazard class :** 3

**UN number:** 1263

**Packing group:** III

**Emergency Response Guide no.:** 127

**IMDG page number:** N/A

**Other:** Ground shipments not regulated. Air shipments prohibited

**15. REGULATORY INFORMATION****U.S. Federal Regulations****TSCA**

All ingredients of this product are listed, or are exempt from listing, on the TSCA inventory.

The following RCRA code(s) applies to this material if it becomes waste:

D001

Regulatory status of hazardous chemical constituents of this product:

Constituent	Extremely Hazardous*	Toxic Chemical**	CERCLA RQ (lbs)	TSCA 12B Export Notification
Zinc oxide	No	No	0.0	Not required
Hydrotreated distillate, light	No	No	0.0	Not required
Heavy hydrotreated naphtha	No	No	0.0	Not required
Heavy hydrosulfurized naphtha	No	No	0.0	Not required
Zinc	No	Yes	0.0	Required
Naphtha, solvent	No	No	0.0	Not required

\*Consult the appropriate regulations for emergency planning and release reporting requirements for substances on the SARA Section 301 Extremely Hazardous Substance list.

\*\*Substances for which the "Toxic Chemical" column is marked "Yes" are on the SARA Section 313 list of Toxic Chemicals, for which release reporting may be required. For specific requirements, consult the appropriate regulations.

**For purposes of SARA Section 312 hazardous materials inventory reporting, the following hazard classes apply to this material:** - Immediate health hazard -- Delayed health hazard -- Fire hazard -

**Canadian regulations**

**WHMIS hazard class(es) :** B3; D2B

All components of this product are on the Domestic Substances List.

**16. OTHER INFORMATION**

<b>Hazardous Materials Identification System (HMIS) ratings:</b>	<b>Health</b>	<b>Flammability</b>	<b>Reactivity</b>
	<b>2*</b>	<b>2</b>	<b>1</b>

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