

KENRICH PETROCHEMICALS, INC.
MATERIAL SAFETY DATA SHEET

Section 1: PRODUCT AND MANUFACTURER'S IDENTIFICATION

MANUFACTURER - Kenrich Petrochemicals, Inc. Information Phone: 201-823-9000
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Product Name: **Ken-React® KZ 55**
Product Code: **KRKZ55T450**
CAS #: **117753-51-2**
Chemical Family: **Organo-Zirconates**

Section 2: COMPOSITION/INFORMATION ON COMPONENTS

Chemical Name: Zirconium IV tetrakis 2.2 (bis-2 propenolatomethyl) butanolato, adduct with 2 moles Ditridecyl hydrogen phosphite
.....>99%

Section 3: HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW: Yellow liquid with an alcoholic odor. It presents little or no immediate significant hazard if spilled. It presents no unusual hazard if involved in a fire, however, upon thermal decomposition it may emit toxic fumes.

Breathing: This substance has the potential of being a respiratory tract irritant.

Skin Contact: Prolonged or repeated skin contact may cause skin irritation.

Eye Contact: Contact with eyes may cause eye irritation.

Swallowing: Harmful if swallowed.

Inhalation: There is the potential for respiratory tract irritation.

Long Term Health Effects: Not known.

Conditions Aggravated by Exposure: Not known.

Original MSDS: 07/21/86;

1st Revision: 03/22/89;

2nd Revision: 03/17/97

3rd Revision: 12/28/01

4th Updated: 06/06/03

Updated: JAN 2008

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Section 4: FIRST AID MEASURES

Skin: Wash with soap and water. Get medical attention if irritation develops or persists.

Eyes: Immediately flush eyes with plenty of water for at least 15 minutes, holding eyelids apart. Get immediate medical attention if irritation or other symptoms develop.

Swallowing: Get immediate medical attention. Never give anything by mouth to an unconscious person.

Breathing: If exposed to excessive levels of vapors or mists, remove to fresh air and get immediate medical attention if cough or other symptoms develop.

Section 5: FIRE FIGHTING MEASURES

Flash Point 185°F 85°C
Method TCC
Lower Explosive Point Not determined
Upper Explosive Point Not determined
Auto-ignition Temperature Not determined
Extinguishing Media Foam, CO₂, Dry chemical, Water spray

Fire Fighting Procedure: Evacuate area and fight fire from a safe distance. Wear self-contained breathing apparatus pressure-demand (HNSA/NIOSH approved or equivalent) and full protective gear.

Special Fire Fighting Procedure: As with any fire, wear self-contained breathing apparatus pressure-demand (MNSA/NIOSH approved or equivalent) and full protective gear. Using water can cause frothing with the potential for increasing fire intensity.

Unusual Fire and Explosion Hazards: May emit toxic fumes upon thermal decomposition.

Sensitivity to Explosion by Mechanical Impact: None

Sensitivity to Explosion by Static Discharge: Potential exists

Conditions of Flammability: Material will burn - avoid sources of ignition and also avoid temperatures that are within range of the flash point.

Section 6: ACCIDENTAL RELEASE MEASURES

General: This material should be prevented from contaminating soil or from sewage and drainage systems and bodies of water. Isolate hazard/spill area. Keep unnecessary and unprotected personnel from entering area.

Small Spill: Absorb spill with inert material, then place in a chemical waste container.

Large Spill: Shut off leak, if safe to do so. Clean up spills immediately, observing precautions in Protective Equipment Section. Contain spilled liquid with sand or earth. Retain all contaminated water and soil for removal and treatment.

Section 7: HANDLING AND STORAGE

HANDLING: Although this material does not present a significant skin or eye hazard, skin and eye contact should be prevented as good industrial hygiene practice. Wearing of protective gloves and eye protection is recommended. Always wash arms and hands after handling, as with any chemical.

STORAGE: Store in a cool, dry and well ventilated area away from strong oxidizers and acids. Avoid those areas where there are ignition sources.

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Levels:

Component	OSHA		ACGIH	
	TWA	STEL	TWA	STEL
117753-51-2	Not Established		Not Established	

Engineering Controls: Source of fine spray, mist or vapor should be controlled with local exhaust ventilation.

Respiratory Protection: A NIOSH/MHSA approved air purifying respirator may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits, if established. Consult with respirator's manufacturer to determine the appropriate type of equipment for a given application. Protection provided by air purifying respirators is limited. Use a positive pressure air supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air purifying respirators may not provide adequate protection. A respiratory protection program that meets OSHA 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use.

Eye/Face Protection: Always use safety glasses. Where contact with the eyes is likely, use chemical goggles. Use a face shield as needed.

Skin Protection: Wear impervious gloves and chemical protective clothing, including impervious sleevelets, overalls, aprons, or boots, as needed, to prevent contact with skin.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance Yellow liquid
 Odor Alcoholic
 Boiling Range >300°F
 Specific Gravity (relative to water @ 60°F 1.0
 Vapor Density (relative to air) Heavier
 Vapor Pressure (mm Hg) Not established
 pH > 5
 Solubility in Water Insoluble
 Freezing/Melting Point Not applicable
 Octanol/Water Partition Coefficient Not applicable
 Odor Threshold Not established
 Flash Point (TCC) 185°F 85°C minimum
 Auto-Ignition Temperature Not determined

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Section 9: PHYSICAL AND CHEMICAL PROPERTIES (cont'd)

Explosive Properties None
 Oxidizing Properties None
 Viscosity @ 77°F < 100 cps
 Evaporation Rate (relative to n-butyl acetate) Slower

Section 10: STABILITY AND REACTIVITY

Stable Yes
 Strong Oxidizer No
 Hazardous Polymerization Not prone to hazardous polymerization.
 Incompatibility Oxidizers and acids; Alkaline materials and reducing agents.

Conditions to AvoidKeep from contact with oxidizers, acids, alkali and reducing agents. Avoid sources of ignition.

Hazardous Decomposition ProductsOxides of carbon and zirconium.

Section 11: TOXICOLOGICAL INFORMATION

Oral LD50>5 g/Kg
Ames-Nonmutagenic All Strains S-9 Activated
Carcinogenicity: NTP: N/E IARC: N/E OSHA: N/E

Section 12: ECOLOGICAL INFORMATION

Ecotoxicological and Chemical Fate InformationNot available

Section 13: DISPOSAL CONSIDERATIONS

Waste DisposalDispose of in accordance with all federal, state, and local regulations

Container DisposalDispose of in accordance with all federal, state, and local regulations.

Section 14: TRANSPORT INFORMATION

DOT Shipping Name . . . Not regulated
Hazard Class
Packing Group
UN/NA No
DOT Labels None
Subsidiary Label None
DOT Placard (BULK) . . .COMBUSTIBLE

IMO Shipping NameNot regulated
Hazard Class
Packing Group
UN No
IMO Labels None
Subsidiary Label None

IATA Shipping NameNot regulated
Hazard Class
Packing Group
UN No
IATA Labels None
Subsidiary Label None

Section 15: REGULATORY INFORMATION

SARA 311/312 Chronic Health Hazard Not determined
SARA 311/312 Acute Health Hazard Irritant
SARA 311/312 Fire Hazard Combustible Liquid
SARA 311/312 Sudden Pressure Not applicable
SARA 311/312 Reactivity Hazard No

Section 302 - Extremely Hazardous Ingredient None
CERCLA Hazardous Substance None
Section 313 Toxic Chemicals None
NJ Environmental Hazardous Substances List Not Listed
California Proposition 65 Ingredients None

Reported in TSCA Inventory Yes
Reported in EEC Inventory No
Reported in Canada Inventory No
Reported in Australia Inventory No

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Section 16: OTHER INFORMATION

HMIS Hazard Rating Health = 1; Fire = 0; Reactivity = 0

NFPA Hazard Rating Health = 1; Fire = 0; Reactivity = 0

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