


KELKEN CONSTRUCTION SYSTEMS

Safety Data Sheet

SECTION 1 - Product and Company Identification			Effective Date: 1/20/20		
Manufacturer: AKZO Nobel Polymer Chemicals LLC			Emergency Phone 1-800-828-7929, Chicago, IL USA 1-312-544-7188, Chicago, IL USA 1-800-424-9300 (Chemtrec 24 Hr. Emer.)		
Product Name: PERKADOX CH-50 (Keligroust Catalyst) Chemical Name: Dibenzoyl peroxide, powder, 50% with dicyclohexyl phthalate			Prepared By: AKZO Nobel Polymer Chemicals Product Use Description: Curing Agent		
Section 2 - Hazards Identification				DANGER!	
HMIS Rating:	Health - 2	Flammability - 2	Reactivity - 3		
NFPA Codes:	Health - 2	Flammability - 2	Reactivity - 3		
					
GHS Classification:		Organic Peroxides, Type D Reproductive toxicity, Category 2	Eye irritation, Category 2B Acute aquatic toxicity, Category 1	Skin sensitization, Category 1 Chronic aquatic toxicity, Category 3	
Hazard Statement:		H242 Heating may cause fire H361 Suspected of damaging fertility or the unborn child	H317 May cause an allergic skin reaction	H320 Causes eye irritation H400 Very toxic to aquatic life w/long lasting effects	
Section 3 - Composition/Information on Ingredients					
Dibenzoyl peroxide	94-36-0	Org. Perox. B; H241 Eye Irrit. 2B; H320 Skin Sens. 1: H317 Aquatic Acute 1; H400	50-70		
Dicyclohexylphthalate	84-61-7	M-Factor (Acute): 10 Skin Sens. 1: H317 Repr. 2; H361 Aquatic Acute 3; H402 Aquatic Chronic 3; H412	30-50		
4. First Aid Measures: General Advice: Move out of dangerous area, consult a physician, show SDS to doctor.					
Eyes:	Immediately flush with plenty of water. If easy to do, contact lenses should be removed during the flushing, by trained personnel. Hold the eyelids apart during the flushing to ensure rinsing the entire surface of the eye and lids with water. Get medical attention if irritation persists.				
Skin:	Immediately wash skin w/soap and plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Wash clothing before reuse. Thoroughly clean or destroy contaminated shoes.				
Ingestion:	Call a physician or poison control center immediately. Induce vomiting as directed by medical personnel. The patient should lie on their left side while vomiting to reduce the risk of aspiration. Never give anything by mouth to an unconscious or convulsing person.				
Inhalation:	Remove to fresh air. If not breathing, give artificial respiration. Oxygen may additionally be given, by trained personnel, if it is available. Get medical attention if symptoms occur.				
Indication of any immediate medical attention and special treatment needed: Persons with pre-existing skin, respiratory, and/or central nervous system disease may be at increased risk if exposed to this material. Condition of the patient should be carefully monitored. Aspiration of this product during induced emesis can result in lung injury. If evacuation of stomach contents is considered necessary, use method likely to cause aspiration, such as gastric lavage after endotracheal intubation. Contact a Poison Control Center for additional treatment information. Treat patient symptomatically.					
Section 5 - Fire Fighting Measures		Extinguishing Media: Water spray, foam, sand, dry chemical powder, CO2.			
Unsuitable extinguishing media: Halons, Hazardous decomposition/combustion products: CO2, Carbon monoxide, Benzoic acid, Benzene.					
Protective equipment: Firefighters must wear fire resistant protective equipment. Wear approved respirator and protective gloves.					
Other Information: Evacuate all non-essential personnel. Extinguish a small fire with powder or carbon dioxide then apply water to prevent re-ignition. Cool closed containers with water. Water used to extinguish a fire should not be allowed to enter the drainage system or water courses. After a fire, ventilate thoroughly the area and soak with water, clean the walls and metallic surfaces.					
Fire and explosion hazard: CAUTION: re-ignition may occur. Decomposition under effect of heating (See also Section Hazardous decomposition products). If involved in a fire, it will support combustion. Dust explosion hazard. In case of fire and/or explosion do not breathe fumes.					

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Section 6 - Accidental Release Measures			
Personal precautions: Do not breathe dust. Avoid contact with skin and eyes. For personal protection, see Section 8.			
Environmental precautions: Do not allow to enter drains or water courses. Methods and material for containment and cleaning up: Stop leakage if possible. Eliminate all sources of ignition, and do not generate flames or sparks. First moisten with water. Sweep up and put it into a container of disposal. Avoid dust generation. Keep contents moist. The waste should NOT be confined. Flush surroundings with large amounts of water and soap. Other Information: CAUTION: respiration may occur. Evacuate personnel to safe area.			
Section 7 - Handling and Storage	Precautions for safe handling: Never weigh out in the storage room. When using do not eat, drink or smoke. Do not breathe dust. Handle in well ventilated areas. Eliminate all sources of ignition, and do not generate flames or sparks. Keep away from reducing agents (e.g. amines), acids, alkalis and heavy metal compounds (e.g. accelerators, driers, metal soaps). Keep product and emptied container away from heat and sources of ignition. Confinement must be avoided. Do not allow to dry out. Avoid contact with skin and eyes. Avoid incompatible materials (See Section 10). Fire & explosion prevention: Avoid dust generation. Dust explosion possible in the presence of air. Use non-sparking tools in area's where explosive dust air mixtures may occur. Do not cut or weld on or near this container even when empty. Conditions for safe storage: Store in accordance with local/national regulations. Keep away from food, drink and animal feeding stuffs. Store in a dry well ventilated place away from sources of heat and direct sunlight. Store separate from other chemicals. Keep only in the original container. Storage: For maximum quality store below 25°C. Other Information: It is recommended to use electrical equipment of temperature group T3. However, auto ignition can never be excluded. Wash hands thoroughly after handling or contact. Keep work clothes separate and do not take them home.		
Section 8 - Exposure Controls/Personal Protection			
Control parameters: Ensure good ventilation and local exhaustion of the working area. Explosion proof ventilation recommended.			
Personal protection: Respiratory - Provide adequate ventilation. In case of insufficient ventilation wear suitable respiratory equipment (respirator with Filer P1). Hand: Wear suitable protective gloves of neoprene or synthetic rubber. Eye: Wear eye/face protection.			
Skin and body: Wear suitable protective clothing. Other information: Emergency- shower and facilities for rinsing eyes must be accessible. Launder clothes before reuse.			
OSHA TLV/TWA	5 mg/m ³	ACGHI TLV/TWA	5 mg/m ³
NIOSH REL/TWA	5 mg/m ³	NIOSH IDLH	1500 mg/m ³
Section 9 - Physical and Chemical Properties		Flammability (solid, gas): Decomposition products may be flammable	
Appearance: White Powder	Odor: Faint	Oxygen Content: 3.3%	pH: Not determined
Boiling Point: Decomposes	Melting/Freezing Point: Decomposes	Relative Vapor Density: N/A	
Flash Point: N/A	Volatile by Weight: 18%	Solubility in Water: @ 20°C insoluble	
Viscosity: N/A	Specific Gravity: 1.23 (20°C/68°F)	Density: 1230 kg/m ³ (20°C/68° F)	
Oxidizing Properties: N/A	Bulk Density: 640 kg/m ³ @ 20°C	Partition Coefficient: n-octane/water not determined	
Explosive Properties: Not explosive	Evap. Rate: (Butyl Acetate=1): Slower than Butyl Acetate	Organic peroxides: 49-51%	
SADT: 55 °C	Auto ignition temperature: Test method N/A	SADT: 55	
Upper/lower flammability or explosive limits: Not determined.		Volatile%: Not determined.	
Section 10 - Stability and Reactivity			
Conditions to avoid: Do not allow to dry out; confinement must be avoided; heat flames and sparks; for safety, store below 25°C (77 °)			
Materials to avoid: Contact with incompatible materials will result in hazardous decomposition. For queries regarding the suitability of other materials please contact the supplier. Do not mix with peroxide accelerators, unless under controlled processing. Use only stainless steel 316, PP, polyethylene or glass-lined equipment. Acids and bases, iron, copper reducing agents, heavy metals, rust.			
Hazardous decomposition products: Benzoic acid, Carbon oxides			
Thermal decomposition: SADT is the lowest temperature at which self accelerating decomposition may occur with a substance in the packaging as used in transport. A dangerous self-accelerating decomposition reaction and, under certain circumstances, explosion or fire can be caused by thermal decomposition at and above the SADT. Contact with incompatible substances can cause decomposition below the SADT. Reactivity: Stable under normal conditions. Chemical stability: Stable under recommended storage conditions.			
Self-accelerating decomposition temp: 55 °C (131 °F)			
Section 11 - Toxicological Information		No experimental toxicological data on the preparation as such available. The following data are	

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applicable to the ingredient(s) listed below:			
Dicyclohexyl phthalate: Acute toxicity		Oral LD50 >2000 mg/kg (rat)	Dermal LD50 >2000 mg/kg (rat)
Germ cell mutagenicity Not mutagenic (in vitro)		Irritation to Skin: Slight irritation	
Sensitization Sensitizing (skin) (LLNA test) (mouse)		Eye expected to be: Irritation to eyes	
Carcinogenicity/Mutagenic data Negative (Ames test)		Genotoxicity No evidence of genotoxic effect in vitro	
Chronic toxicity/Carcinogenicity sub chronic (90 days) oral toxicity No Observed Adverse Effect Level (NOAEL); 50 mg/kg/day (rat)			
Developmental toxicity; No Observed adverse Effect Level (NOAEL); 16-21 mg/kg/day (oral) (rat)			
Other toxicological Information cytogenetic test: Negative not clastogenic (in vitro cytogenetic test)			
Dibenzoyl peroxide, 78%: Acute toxicity		Oral LD50 >5000 mg/kg (rat)	Inhalation LC50 >24300 mg/m ³ (rat), dust
Germ cell mutagenicity Not mutagenic		Irritation, Skin Minimally irritating	
Sensitization Sensitizing (skin)		Eye Irritating to eyes. (rabbit)	
Chronic toxicity/Carcinogenicity 29 days, No Observed Adverse Effect Level (NOAEL); 1000 mg/kg/day		(NOAEL); 500 mg/kg/day (oral)	
No experimental ecological data are available on the preparation as such. The following data are applicable to the ingredient(s) listed:			
Section 12 - Ecological Information Ecotoxicity: No experimental ecological data are available on the preparation as such. The following data are applicable to the ingredient(s) listed below:			
Dicyclohexyl phthalate: Ecotoxicity		fish 96 h-LC50: >2 mg/l (max. attainable concentration) (<i>Oryzias latipes</i>)	
daphnia 48 h-EC50: >2 mg/l (max. attainable concentration) (<i>Daphnia magna</i>)		algae 3 days: ?2 mg/l (<i>Pseudokirchneriella subcapitata</i>)	
bacteria Activated sludge; 3h-No Observed Effect Concentration(NOEC) >100mg/l		max. attainable concentration)	
Fate	Degradation Biotic Readily biodegradable.		Bioaccumulation Not expected to bioaccumulate.
Fate	Low Pow = 4.82 at 25°C	Low Koc = 3.46 (estimated)	Bio Concentration Factor (BCF) = 85 (estimated)
Other Information May cause long-term adverse effects in the aquatic environment.			
Dibenzoyl peroxide, 78%: Ecotoxicity		fish 96h-LC50: 0.06 mg/l	daphnia 48h-EC50: 0.11 mg/l (<i>Daphnia magna</i>)
algae 72h-EC50: 0.06 mg/l	bacteria Activated sludge respiration inhibition test EC50: 35 mg/		
Fate	Degradation Abiotic Half-life: 2.4 hrs. at 50°C		Degradation Biotic Inherently biodegradable.
Bioaccumulation Bio Concentration Factor (BCF): 66.6			
Fate	Koc = 3.8 at 22°C	Other Information Very toxic to aquatic organisms.	
Section 13 - Disposal Considerations		Product: Due to high risk of contamination recycling/recovery is not recommended. Waste disposal in accordance with regulations (most probably controlled incineration). Contaminated packaging: According to local regulations. Emptied container is emptied. Do not wash residues into drains or other waterways. Other info: For further advice contact manufacturer.	
Section 14 - Transport Information			
<u>Land Transport</u>		<u>Sea Transport (IMO/IMDG-code)</u>	
<u>Air Transport (ICAO-TI/IATA-DGR)</u>			
Proper Shipping Name Organic peroxide type D, solid (Dibenzoyl peroxide, 50%)		Proper Shipping Name Organic peroxide type D, solid (Dibenzoyl peroxide)	
Transport Hazard Class 5.2		Transport Hazard Class 5.2	
UN Number 3106		UN Number 3106	
TREM-Card or ERG number NA ERG No. 145		EMS F-J, S-§	
Required Labels 5.2		Marine Pollutant yes	
Other Information This product does not contain an environmentally hazardous substance per 49 CFR 172-101, Appendix A.		Other Information Label(s): 5.2	
Section 15 - Regulatory Information Products and or components listed below are subject to the following:			
CERCLA Hazardous Substance	Yes	New Jersey R-T-K Hazard Sub.	Yes
Penn. Hazardous Substance list	Yes	US Toxic Substance Cont. Act (TSCA)	Yes
Non-Domestic Subst. List-Canada	No	Domestic Substance List-Canada	Yes
California Hazardous Substances	Yes	Connecticut Hazardous Mat. Survey	Yes
Illinois Toxic Subst. Disclosure to Es	Yes	Massachusetts Substance	Yes
SARA Title III, Section 313	Yes	Minnesota Hazardous Substance	Yes

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Rhode Island Hazardous Substance	Yes		
Hazard Classes:			
Description	Applicable	Description	Applicable
EPA Immediate health	Yes	EPA Delayed health	Yes
EPA Fire	Yes	EPA Pressure	No
EPA Reactive	Yes	EHS Material	No
Hazard Rating Source	HMIS		
WHMIS Hazard classes	C,D-2A,D-2B,F		
Other Regulatory Information This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the SDS contains all of the information required by the Controlled Product Regulations.			
Section 16. Other Information			
Workers using this product should read and understand this SDS and be trained in the proper use of this material. This SDS has been prepared in accordance with federal OSHA Hazard Communication Standard.			
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