Material Safety Data Sheet The Euclid Chemical Company HEY'DI K-11 GRAY 50# PL Version 2. Print Date 09/26/2008 **REVISION DATE: 09/24/2008 SECTION 1 - PRODUCT IDENTIFICATION** 50# PL Trade name HEY'DI K-11 GRAY Product code TR2120750521 Ξ. COMPANY : Euclid Chemical Company 19218 Redwood Road Cleveland, OH 44110 Telephone 1-800-321-7628 : : U.S. only: 1-800-424-9300 Emergency Phone: International Users Call Collect: 1-703-527-3887 **SECTION 2 - HAZARDS IDENTIFICATION Emergency Overview** Gray. Powder. Dust may irritate nose and throat. Dust irritating to the respiratory tract. Leave area to breathe fresh air. Avoid further overexposure. If symptoms persist, get medical attention. Acute Potential Health Effects/ Routes of Entry Dust may irritate nose and throat. Dust irritating to the respiratory tract. Inhalation • Direct contact may cause severe irritation. May cause mechanical irritation or abrasion, Eyes and possible chemical burns. May cause temporary injury. May cause irritation to the mouth, throat and stomach. May cause gastrointestinal Ingestion : irritation, nausea, and vomiting. Skin • May cause severe irritation. May cause dryness, cracking, irritation, and chemical burns. May produce cement dermatitis due to primary irritation from alkaline, hydroscopic and abrasive properties. **Aggravated Medical Conditions** Pre-existing eye, skin and respiratory disorders may be aggravated by exposure. **Chronic Health Effects** Inhalation of crystalline silica (quartz) can cause cancer based on animal data, and IARC concludes sufficient evidence in humans (Group 1). Prolonged and repeated overexposure to free crystalline silica dust above the TLV level may cause scarring of the lungs with cough and shortness of breath. A delayed lung injury, silicosis may result from breathing free silica. **SECTION 3 - PRODUCT COMPOSITION Chemical Name** CAS-No. Weight % Portland cement 65997-15-1 40.0 - 70.0 Crystalline Silica (Quartz)/ Silica 14808-60-7 30.0 - 60.0 Sand 7631-86-9 10.0 - 30.0 Amorphous silica 3.0 - 7.0 Aluminum oxide 1344-28-1 Iron oxide 1309-37-1 1.0 - 5.0 RPI Company 1/7 TR2120750521

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Calcium oxide Sulfur trioxide Diphosphorus pentoxide Vinyl acetate		1305-78-8 7446-11-9 1314-56-3 108-05-4	1.0 - 5.0 - <0.1 - <0.1 - <0.1	
SECTION 4 - FIRST AID	MEASU	RES		
Get immediate medical a	attention for	any significant ove	rexposure.	
Inhalation :	Leave are medical a		air. Avoid further overexposure. If symptoms	persist, get
Eye contact :		n water for at least immediately.	15 minutes while holding eye lids apart. Get r	nedical
Skin contact :			ghly using soap and water. If irritation, rash c cal attention immediately.	or other
Ingestion :		duce vomiting unles Physician immedia	ss advised by a physician. Call nearest Poiso ately.	n Control
SECTION 5 - FIRE FIGH	ITING ME	ASURES		
Flash point Method	:	Not available. Not available.		
Lower explosion limit	:	Not available.		
Upper explosion limit	:	Not available.		
Autoignition temperature	e :	Not available.		
Extinguishing media	:		ot expected to burn under normal conditions or opriate to the surroundings.	of use.Use
Hazardous combustion products	:	Not available.		
Protective equipment for firefighters	· :	Not applicable. I	Product is not expected to burn.	
Fire and explosion cond	itions :	This product not	expected to ignite under normal conditions of	of use.
SECTION 6 - ACCIDEN	TAL RELI	EASE MEASUR	RES	
			ith material. Dampen material with water to co r for disposal. Flush spill area with water.	ontrol
SECTION 7 - HANDLIN	G AND ST	FORAGE		
also apply to emptied co	ntainers. Pe	ersonal protective e	es. Clean hands thoroughly after handling. Pr quipment must be worn during maintenance in sealed containers in a cool, dry, ventilated	or repair of

Material Safety Data Sheet The Euclid Chemical Company HEY'DI K-11 GRAY 50# PL Version 2. Print Date 09/26/2008 **REVISION DATE: 09/24/2008** SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION Personal protection equipment Respiratory protection : Wear appropriate, properly fitted NIOSH/MSHA approved dust respirator where airborne concentrations are expected to exceed exposure limits indicated on the MSDS. Follow manufacturer's directions for respirator use. Hand protection Use suitable impervious rubber or vinyl gloves and protective apparel to 1 reduce exposure. Eye protection Wear appropriate eye protection.Wear chemical safety goggles and/or face : shield to prevent eye contact. Do not wear contact lenses. Do not touch eyes with contaminated body parts or materials. Have eye washing facilities readily available. : Prevent contact with shoes and clothing. Skin and body protection Use professional judgment in the selection, care, and use.Wear gloves, head Protective measures coverings and full body clothing as necessary to prevent skin irritation. Washable or disposable clothing may be used. Do not take unwashed clothing home. Work clothes should be washed separately from other clothing and the washing machine rinsed thoroughly following use. Inform the launderer of the proper procedures. Store work clothes and street clothes separately to prevent contamination. Use only in well ventilated areas. Provide maximum ventilation in enclosed Engineering measures 1 areas.Use local exhaust when the general ventilation is inadequate. **Exposure Limits Chemical Name** CAS Number Regulation Limit Form Portland cement 65997-15-1 ACGIH TWA: 10 mg/m3 OSHA PEL: 5 mg/m3Respirable fraction. OSHA PEL: 15 mg/m3 Total dust. Crystalline Silica (Quartz)/ Respirable. 14808-60-7 OSHA TWA: 0.1 mg/m3 Silica Sand OSHA TWA: 0.3 mg/m3 Total dust. OSHA PEL: 15 mg/m3 Total dust. OSHA PEL: 5 mg/m3 Respirable fraction. ACGIH TWA: 0.025 mg/m3 Respirable fraction. 7631-86-9 Amorphous silica ACGIH TWA: 3 mg/m3 Respirable particles. ACGIH TWA: 10 mg/m3 Inhalable particles. 15 ma/m3 OSHA PEL: Total dust. OSHA PEL: 5 mg/m3 Respirable fraction. OSHA TWA: 0.8 mg/m3 Aluminum oxide 1344-28-1 ACGIH TWA: 10 mg/m3 OSHA PEL: 5 mg/m3 Respirable fraction. OSHA PEL: 15 mg/m3 Total dust. 15 mg/m3 Total dust. OSHA TWA: OSHA TWA: 5 mg/m3Respirable fraction. **RPIT** Company 3/7 TR2120750521

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Chemical Name	CAS Number	Regulation	<u>Limit</u>	<u>Form</u>
Iron oxide	1309-37-1	OSHA PEL:	10 mg/m3	Fume.
		OSHA TWA:	15 mg/m3	Total dust.
		OSHA TWA:	5 mg/m3	Respirable fraction.
		ACGIH TWA:	5 mg/m3	Respirable fraction.
Calcium oxide	1305-78-8	ACGIH TWA:	2 mg/m3	
		OSHA PEL:	5 mg/m3	
		OSHA TWA:	15 mg/m3	Total dust.
		OSHA TWA:	5 mg/m3	Respirable fraction.
Vinyl acetate	108-05-4	ACGIH TWA:	10 ppm	
		ACGIH STEL:	15 ppm	

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Form	:	Powder
Color	:	Gray
Odor	:	None
рН	:	Not available.
Vapour pressure	:	Not available.
Vapor density	:	Not available.
Melting point/range	:	Not available.
Freezing point	:	Not available.
Boiling point/range	:	Not available.
Water solubility	:	Miscible
Specific Gravity	:	3.0
% Volatile Weight	:	0.0 %

SECTION 10 - REACTIVITY / STABILITY

: Not Applicable. : Material is stable under normal storage, handling, and use.

Stability Hazardous polymerization

: Will not occur under normal conditions.

SECTION 11 - TOXICOLOGICAL INFORMATION

Amorphous silica, CAS-No.: 7631-86-9 Acute oral toxicity (LD-50 oral)

22,500 mg/kg (Rat) 15,000 mg/kg (Mouse)

Diphosphorus pentoxide, CAS-No.: 1314-56-3

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Acute inhalation toxicity (LC-50)

Vinyl acetate, CAS-No.: 108-05-4 Acute oral toxicity (LD-50 oral) Acute inhalation toxicity (LC-50) Print Date 09/26/2008

0.061 mg/l for 1 h (Guinea pig) 0.271 mg/l for 1 h (Mouse) 1.689 mg/l for 1 h (Rabbit) 1.217 mg/l for 1 h (Rat)

2,920 mg/kg (Rat) 1,613 mg/kg (Mouse) 3,680 mg/l for 4 h (Rat) 5,150 mg/l for 4 h (Mouse) 21,800 mg/l for 4 h (Guinea pig) 8,800 mg/l for 4 h (Rabbit) 1,550 mg/l for 4 h (Mouse) 2,500 mg/l for 4 h (Rabbit) 6,215 mg/l for 4 h (Guinea pig) 2,511 mg/l for 4 h (Rabbit)

SECTION 12 - ECOLOGICAL INFORMATION

No Data Available

SECTION 13 - DISPOSAL CONSIDERATIONS

Disposal Method : Not regulated under RCRA. Dispose of in compliance with state and local regulations. Do not incinerate.

SECTION 14 - TRANSPORTATION / SHIPPING DATA

TDG / DOT Shipping Description:

NOT REGULATED

SECTION 15 - REGULATORY INFORMATION

North American Inventories:

All components are listed or exempt from the TSCA inventory. This product or its components are listed on, or exempt from the Canadian Domestic Substances List.

U.S.	Federal	Regulations:

An

SARA 311/312 Hazards : Acute Health Hazard Chronic Health Hazard	
OSHA Hazardous Components :65997-15-1Portland cement65997-15-1Crystalline Silica (Quartz)/ Silica Sand14808-60-7Amorphous silica7631-86-9Aluminum oxide1344-28-1Iron oxide1309-37-1Calcium oxide1305-78-8Sulfur trioxide7446-11-9Vinyl acetate108-05-4OSHA Status: Considered:IrritantCarcinogen	
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following criteria:		
OSHA Flammability	: Not Regulated	
Regulatory VOC (less water and exempt solvent) VOC Method 310	: 0 g/l : 0 %	
Chemical is listed as an IARC, NT Crystalline Silica (Quartz)/ Silica		
U.S. State Regulations: MASS RTK Components	: Portland cement Crystalline Silica (Quartz)/ Silica Sand Amorphous silica Aluminum oxide Iron oxide Calcium oxide Sulfur trioxide Diphosphorus pentoxide Vinyl acetate	65997-15-1 14808-60-7 7631-86-9 1344-28-1 1309-37-1 1305-78-8 7446-11-9 1314-56-3 108-05-4
Penn RTK Components	: Portland cement Crystalline Silica (Quartz)/ Silica Sand Amorphous silica Aluminum oxide Iron oxide Calcium oxide	65997-15-1 14808-60-7 7631-86-9 1344-28-1 1309-37-1 1305-78-8
NJ RTK Components	: Portland cement Crystalline Silica (Quartz)/ Silica Sand Amorphous silica Aluminum oxide Iron oxide Calcium oxide	65997-15-1 14808-60-7 7631-86-9 1344-28-1 1309-37-1 1305-78-8
reproductive harm: 14808-60-7 Cry	nown to the State of California to cause ca stalline Silica (Quartz)/ Silica Sand fur trioxide	ncer, birth defects and/or other
ECTION 16 - OTHER INFORM	MATION	
HMIS Rating :Health2Flammability0Reactivity0PPE	0 = Minimum 1 = Slight 2 = Moderate 3 = Serious 4 = Severe	
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Further information:

For Industrial Use Only. Keep out of Reach of Children. The hazard information herein is offered solely for the consideration of the user, subject to their own investigation of compliance with applicable regulations, including the safe use of the product under every foreseeable condition.

Prepared by: Rich Mikol

Legend

ACGIH - American Conference of Governmental Hygienists CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act DOT - Department of Transportation DSL - Domestic Substance List EPA - Environmental Protection Agency HMIS - Hazardous Materials Information System IARC - International Agency for Research on Cancer MSHA - Mine Safety Health Administration NDSL - Non-Domestic Substance List

NIOSH - National Institute for Occupational Safety and Health

NTP - National Toxicology Program

OSHA - Occupational Safety and Health Administration

PEL - Permissible Exposure Limit

RCRA - Resource Conservation and Recovery Act

RTK - Right To Know SARA - Superfund Amendments and Reauthorization Act STEL - Short Term Exposure Limit TLV - Threshold Limit Value TSCA - Toxic Substances Control Act TWA - Time Weighted Average V - Volume VOC - Volatile Organic Compound WHMIS - Workplace Hazardous Materials Information System