

 Freez - Kontr'l HD (4188-13, 4188-12)

 Safety Data Sheet

 according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

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Version: 3.0

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SECTION 1: Identification				
1.1. Identification				
Product form	: Mixture			
Product name	: Freez - Kontr	'l HD (4188-13, 4188-12)		
1.2. Recommended use and	restrictions on use			
Recommended use	: Heat Transfe	r Fluids		
Restrictions on use	: No additional	information available		
1.3. Supplier				
Nu-Calgon				
2611 Schuetz Rd				
St Louis, MO 63043				
T 314-469-7000 / 800-554-5499				
1.4. Emergency telephone n				
Emergency number	: 1-800-424-93 CHEMTREC			
	ONE WITCH	()		
SECTION 2: Hazard(s) ider	tification			
2.1. Classification of the sub	ostance or mixture			
GHS classification				
Not classified				
No additional information available 2.4. Unknown acute toxicity	not result in classification (GHS_US)			
Not applicable				
SECTION 3: Composition/i	nformation on ingredie	ents		
3.1. Substances				
Not applicable				
3.2. Mixtures				
This mixture does not contain any s	ubstances to be mentioned ac	cording to the criteria of section	n 3.2 of HazCom 2012	
SECTION 4: First-aid meas	ures			
4.1. Description of first aid n	neasures			
First-aid measures general	•	nything by mouth to an unconse	•	
First-aid measures after inhalation	•	on to fresh air and keep comfo	-	
First-aid measures after skin contac		ninated clothing before reuse. V	• •	d soap and water.
First-aid measures after eye contact		ntact, immediately flush eyes w		
First-aid measures after ingestion		N CENTER/doctor if you feel u	inweil. Drink pienty of water.	
	ms and effects (acute and de			
Symptoms/effects after inhalation	: Inhalation of	vapours may cause respiratory	irritation.	
4.0 Increase direction and directions	at a second a second at the second second			

4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

SECTION 5: Fire-fighting measures 5.1. Suitable (and unsuitable) extinguishing media

0 0	Carbon dioxide. Dry chemical. Foam. Water spray.Do not use a solid water stream as it may scatter and spread fire.	
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5.2.	Specific hazards arising from the che	
Fire ha	•	: No particular fire or explosion hazard.
Reactiv	/ity	No dangerous reactions known.
5.3.	Special protective equipment and protective	ecautions for fire-fighters
	iting instructions	: Evacuate area. Do not allow run-off from fire fighting to enter drains or water courses.
	ion during firefighting	: Wear a self contained breathing apparatus. Wear fire/flame resistant/retardant clothing.
SECT	ION 6: Accidental release meas	
6.1.	Personal precautions, protective equ	
-	Il measures	 Avoid all eye and skin contact and do not breathe vapour and mist. Use personal protective equipment as required. Ensure adequate ventilation.
6.1.1.	For non-emergency personnel	
Protect	ive equipment	: Refer to section 8.2.
Emerge	ency procedures	: Evacuate unnecessary personnel.
6.1.2.	For emergency responders	
Protect	ive equipment	: Refer to section 8.2.
Emerge	ency procedures	: Ventilate area. Stop leak if safe to do so.
6.2. Avoid r	Environmental precautions elease to the environment.	
6.3.	Methods and material for containme	nt and cleaning up
For cor	ntainment	: Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.
Method	ls for cleaning up	: Absorb and/or contain spill with inert material, then place in suitable container.
6.4. Section	Reference to other sections	handling. Section 8: personal protective equipment.
	ION 7: Handling and storage	
7.1.	Precautions for safe handling	
Precau	tions for safe handling	: Do not handle until all safety precautions have been read and understood. Obtain special instructions before use. Avoid all eye and skin contact and do not breathe vapour and mist. Ensure good ventilation of the work station. Use personal protective equipment as required.
Hygien	e measures	: Do not eat, drink or smoke when using this product. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.
7.2.	Conditions for safe storage, includin	ig any incompatibilities
Storage	e conditions	: Keep container closed when not in use. Keep only in the original container.
Incomp	atible products	: Strong acids. Strong bases.
Heat ar	nd ignition sources	: Keep away from heat, sparks and flame.
Storage	e area	: Store in dry, cool, well-ventilated area.
SECT	ION 8: Exposure controls/perso	onal protection
8.1. No add	Control parameters itional information available	
8.2.	Appropriate engineering controls	
Approp	riate engineering controls	: Avoid splashing. Emergency eye wash fountains should be available in the immediate vicinity of any potential exposure. Emergency safety showers should be available in the immediate vicinity of any potential exposure. Ensure good ventilation of the work station.
Enviror	nmental exposure controls	: Prevent leakage or spillage. Prevent contaminated water run-off.
8.3.	Individual protection measures/Pers	onal protective equipment
Persor	al protective equipment:	
Avoid a	Il unnecessary exposure.	

Hand protection:

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Wear suitable gloves resistant to chemical penetration. PVC. nitrile rubber gloves. neoprene gloves

Eye protection:

Chemical goggles or safety glasses

Skin and body protection:

Long sleeved protective clothing

Respiratory protection:

In case of inadequate ventilation wear respiratory protection. Use an approved respirator equipped with oil/mist cartridges.

Other information:

Do not eat, drink or smoke when using this product.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and che		
Physical state	:	
Appearance	:	Clear.
Colour	:	pink
Odour	:	odourless
Odour threshold	:	No data available
рН	:	9.2 – 10.6
Melting point	:	No data available
Freezing point	:	-60 – -50 °C
Boiling point	:	> 100 °C
Flash point	:	> 100 °C
Relative evaporation rate (butylacetate=1)	:	No data available
Flammability (solid, gas)	:	No data available
Vapour pressure	:	< 0.1 mm Hg @ 20 °C
Relative vapour density at 20 °C	:	> 1
Relative density	:	1.036 – 1.064 @ 20 °C
Solubility	:	Soluble in water.
Log Pow	:	No data available
Auto-ignition temperature	:	371 °C
Decomposition temperature	:	No data available
Viscosity, kinematic	:	No data available
Viscosity, dynamic	:	No data available
Explosive limits	:	No data available
Explosive properties	:	No data available
Oxidising properties	:	No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No dangerous reactions known.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur.

10.4. Conditions to avoid

Heat.

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10.5. Incompatible materials

Strong acids. Strong bases.

10.6. Hazardous decomposition products

Thermal decomposition generates : Carbon oxides (CO, CO2). alcohols. Organic acids. Aldehydes.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

5		
Acute toxicity (oral) :	classified	
Acute toxicity (dermal) :	classified	
Acute toxicity (inhalation) :	classified	
Skin corrosion/irritation :	classified	
Serious eye damage/irritation :	classified	
Respiratory or skin sensitisation :	classified	
Germ cell mutagenicity :	classified	
Carcinogenicity :	classified	
Reproductive toxicity :	classified	
STOT-single exposure :	classified	
STOT-repeated exposure :	classified	
Aspiration hazard :	classified	
Viscosity, kinematic :	data available	
Likely routes of exposure :	alation. Skin and eye contact.	
Symptoms/effects after inhalation :	alation of vapours may cause re	spiratory irritation.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general

: No ecotoxicological data about this product are known.

12.2. Persistence and degradability

Not established.
Not established.
Not established.

12.5. Other adverse effects

Other information

: No additional information available.

SECTION 13: Disposal considerations

13.1. Disposal methods

Waste disposal recommendations

: Dispose in a safe manner in accordance with local/national regulations.

SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT

Not regulated.

Transport by sea

Not regulated.

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Air transport

Not regulated.

SECTION 15: Regulatory information

15.1. US Federal regulations

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

This product or mixture is not known to contain a toxic chemical or chemicals in excess of the applicable de minimis concentration as specified in 40 CFR §372.38(a) subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

15.2. International regulations

CANADA No additional information available

EU-Regulations No additional information available

National regulations No additional information available

15.3. US State regulations

A WARNING:

This product can expose you to Ethylene oxide, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

Component	Carcinogenicity	Developmental toxicity	Reproductive toxicity male	Reproductive toxicity female	No significant risk level (NSRL)	Maximum allowable dose level (MADL)
Propylene oxide(75- 56-9)	Х					
Ethylene oxide(75-21- 8)	Х	Х	Х	х	2 µg/day	20 µg/day

SECTION 16: Other informat	ion
Revision date	: 01/27/2023
Data sources	: ACGIH (American Conference of Government Industrial Hygienists). European Chemicals Agency (ECHA) C&L Inventory database. Accessed at http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database. Krister Forsberg and S.Z. Mansdorf, "Quick Selection Guide to Chemical Protective Clothing", Fifth Edition. OSHA 29CFR 1910.1200 Hazard Communication Standard. National Fire Protection Association. Fire Protection Guide to Hazardous Materials; 10th edition. TSCA Chemical Substance Inventory. Accessed at http://www.epa.gov/oppt/existingchemicals/pubs/tscainventory/howto.html.
Other information	: None.

Abbreviations and acronyms:

ATE: Acute Toxicity Estimate
CAS (Chemical Abstracts Service) number
EC50: Environmental Concentration associated with a response by 50% of the test population.
GHS: Globally Harmonized System (of Classification and Labeling of Chemicals).
LD50: Lethal Dose for 50% of the test population
OSHA: Occupational Safety & Health Administration
STEL: Short Term Exposure Limits

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	TSCA: Toxic Substances Control Act
	TWA: Time Weighted Average
NFPA health hazard	: 0 - Materials that, under emergency conditions, would offer no hazard beyond that of ordinary combustible materials.
NFPA fire hazard	: 1 - Materials that must be preheated before ignition can occur.
NFPA reactivity	: 0 - Normally stable, even under fire exposure conditions, and not reactive with water.

Indication of changes:

Product identifier. Composition/information on ingredients.

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