

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

 Safety Data Sheet

 Canada HPR (Hazardous Products Regulations / Règlement sur les produits dangereux (SOR/2015-17))

 Issue date: 10/14/2016
 Revision date: 01/27/2023
 Supersedes: 07/17/2019
 Version

 Version: 3.0

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SECTION 1: Identification				
1.1. Identification				
Product form	: Mixture			
Product name		r'l HD (4188-13, 4188-12)		
.2. Recommended use and re		()		
Recommended use	: Heat Transfe	r Fluids		
Restrictions on use		l information available		
I.3. Supplier				
Nu-Calgon		Can	adian importan	
2611 Schuetz Rd		Can	adian importer:	
St Louis, MO 63043				
314-469-7000 / 800-554-5499				
.4. Emergency telephone nur	mber			
Emergency number	: 1-800-424-93	300		
2	CHEMTREC	(24 HOURS)		
SECTION 2: Hazard(s) ident	ification			
L1. Classification of the subs				
BHS classification				
Not classified				
2.2. GHS Label elements, inclu	uding precautionary stater	ments		
GHS-US labelling				
lo labelling applicable				
2.3. Other hazards which do n	ot result in classification			
lo additional information available				
2.4. Unknown acute toxicity (GHS)			
,,				
lot applicable	formation on ingredie	ents		
Not applicable	formation on ingredie	ents		
lot applicable SECTION 3: Composition/in .1. Substances	formation on ingredio	ents		
Not applicable SECTION 3: Composition/in 8.1. Substances Not applicable	formation on ingredi	ents		
Not applicable SECTION 3: Composition/in 3.1. Substances Not applicable 3.2. Mixtures		ents		
Not applicable SECTION 3: Composition/in 3.1. Substances Not applicable 3.2. Mixtures This mixture does not contain any sub	bstances to be mentioned	ents		
Not applicable SECTION 3: Composition/in 3.1. Substances Not applicable 3.2. Mixtures This mixture does not contain any sub SECTION 4: First-aid measu	bstances to be mentioned	ents		
Not applicable SECTION 3: Composition/inf 3.1. Substances Not applicable 3.2. Mixtures This mixture does not contain any sub SECTION 4: First-aid measu 3.1. Description of first aid measu	bstances to be mentioned Ires easures		ious person.	
Not applicable SECTION 3: Composition/inf a.1. Substances Not applicable b.2. Mixtures This mixture does not contain any sub SECTION 4: First-aid measures and the sures general	bstances to be mentioned ITES easures : Never give a	nything by mouth to an unconsc	•	victim to rest.
Not applicable SECTION 3: Composition/inf 3.1. Substances Not applicable 3.2. Mixtures This mixture does not contain any sub SECTION 4: First-aid measures 5.1. Description of first aid measures 5.2. General 5.3. Substances 5.4. Substances 5.5. Substa	bstances to be mentioned ITES easures : Never give a : Remove pers	nything by mouth to an unconsc son to fresh air and keep comfor	table for breathing. Allow the	
Not applicable SECTION 3: Composition/in A.1. Substances Not applicable A.2. Mixtures This mixture does not contain any sub SECTION 4: First-aid measures A.1. Description of first aid measures First-aid measures after inhalation First-aid measures after skin contact	bstances to be mentioned Ires easures : Never give a : Remove pers : Wash contan	nything by mouth to an unconsc	table for breathing. Allow the /ash skin thoroughly with mild	
Not applicable SECTION 3: Composition/in 3.1. Substances Not applicable 3.2. Mixtures This mixture does not contain any sub SECTION 4: First-aid measu	bstances to be mentioned Ires easures : Never give a : Remove pers : Wash contan : In case of co	nything by mouth to an unconsc son to fresh air and keep comfor ninated clothing before reuse. W	table for breathing. Allow the /ash skin thoroughly with mild th plenty of water.	
Not applicable SECTION 3: Composition/inf 3.1. Substances Not applicable 3.2. Mixtures This mixture does not contain any sub SECTION 4: First-aid measures SECTION 4: First-aid measures First-aid measures general First-aid measures after inhalation First-aid measures after skin contact First-aid measures after eye contact First-aid measures after ingestion	bstances to be mentioned Ires easures : Never give a : Remove pers : Wash contan : In case of co	nything by mouth to an unconsc son to fresh air and keep comfor ninated clothing before reuse. W ntact, immediately flush eyes wi DN CENTER/doctor if you feel u	table for breathing. Allow the /ash skin thoroughly with mild th plenty of water.	
Not applicable SECTION 3: Composition/inf 3.1. Substances Not applicable 3.2. Mixtures This mixture does not contain any sub SECTION 4: First-aid measures SECTION 4: First-aid measures First-aid measures general First-aid measures after inhalation First-aid measures after eye contact First-aid measures after eye contact First-aid measures after ingestion	bstances to be mentioned ITES easures : Never give a : Remove pers : Wash contan : In case of co : Call a POISC s and effects (acute and do	nything by mouth to an unconsc son to fresh air and keep comfor ninated clothing before reuse. W ntact, immediately flush eyes wi DN CENTER/doctor if you feel u	table for breathing. Allow the /ash skin thoroughly with mild th plenty of water. nwell. Drink plenty of water.	

Treat symptomatically.

SECTION 5: Fire-fighting measures				
5.1. Suitable (and unsuitable) extinguishing media				
Suitable extinguishing media	: Carbon dioxide. Dry chemical. Foam. Water spray.			
Unsuitable extinguishing media	: Do not use a solid water stream as it may scatter and spread fire.			
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5.2. Specific hazards arising	
Fire hazard	: No particular fire or explosion hazard.
5.3. Special protective equip	ment and precautions for fire-fighters
Firefighting instructions	: Evacuate area. Do not allow run-off from fire fighting to enter drains or water courses.
Protection during firefighting	: Wear a self contained breathing apparatus. Wear fire/flame resistant/retardant clothing.
SECTION 6: Accidental rele	ease measures
6.1. Personal precautions, p	rotective equipment and emergency procedures
General 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 pers	sonnel
Protective equipment	: Refer to section 8.2.
Emergency procedures	: Evacuate unnecessary personnel.
6.1.2. For emergency respond	ers
Protective equipment	: Refer to section 8.2.
Emergency procedures	: Ventilate area. Stop leak if safe to do so.
6.2. Environmental precaution	ons
6.3. Methods and material fo	r containment and cleaning up
For containment	: Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.
Methods for cleaning up	: Absorb and/or contain spill with inert material, then place in suitable container.
6.4. Reference to other secti	ons
Section 13: disposal information. Se	ection 7: safe handling. Section 8: personal protective equipment.
SECTION 7: Handling and s	storage
7.1. Precautions for safe har	ıdling
Precautions 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.
Hygiene 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 stora	age, including any incompatibilities
Storage conditions	: Keep container closed when not in use. Keep only in the original container.
Incompatible products	: Strong acids. Strong bases.
Heat and ignition sources	: Keep away from heat, sparks and flame.
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Storage area : Store in dry, cool, well-ventilated area.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

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No additional information available	

8.2. Appropriate engineering controls

Appropriate 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.

Environmental exposure controls

: Prevent leakage or spillage. Prevent contaminated water run-off.

8.3. Individual protection measures/Personal protective equipment

Personal protective equipment:

Avoid all unnecessary exposure.

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Hand protection:

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 ch	en	nical properties
Physical state	:	Liquid
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 informa	ition
11.1. Information on toxicological effect	S
Acute toxicity (oral)	: Not classified
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified
Skin corrosion/irritation	: Not classified
Serious eye damage/irritation	: Not classified
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified
STOT-repeated exposure	: Not classified
Aspiration hazard	: Not classified
Viscosity, kinematic	: No data available
Likely routes of exposure	: Inhalation. Skin and eye contact.
Symptoms/effects after inhalation	: Inhalation of vapours may cause respiratory irritation.
SECTION 12: Ecological informatio	n
12.1. Toxicity	
Ecology - general	: No ecotoxicological data about this product are known.
12.2. Persistence and degradability	
Freez - Kontr'l HD (4188-13, 4188-12)	
Persistence and degradability	Not established.

Not established.		
2.3. Bioaccumulative potential		
Freez - Kontr'l HD (4188-13, 4188-12)		
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

Transportation of Dangerous Goods

Not regulated.

Transport by sea

Not regulated.

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Air transport

Not regulated.

SECTION 15: Regulatory information

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All ingredients are listed on the Canadian Domestic Substances List (DSL) or Non-Domestic Substances List (NDSL).

SECTION 16: Other information			
Revision date	: 01/27/2023		
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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	
TSCA: Toxic Substances Control Act	
TWA: Time Weighted Average	

Indication of changes:

Product identifier. Composition/information on ingredients.

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