

Caldera 10

Low-Temperature Heat Transfer Fluid

Safety Data Sheet (SDS)

OSHA HazCom Standard 29 CFR 1910.1200(g), Rev. 2012 and GHS Rev 03.

1. Identification

Product identifier

Trade name Caldera 10
Product description Low-Temperature Heat Transfer Fluid

Details of the supplier of the safety data sheet

Manufacturer/supplier Isel
5266 Highway Ave - Jacksonville, FL 32254
904-378-3232
Emergency telephone number 904-378-3232

2. Hazard(s) Identification

Classification of the substance or mixture



GHS08

Label elements

GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS).

Hazard pictograms



GHS08

Signal word

Danger

Hazard statements

May be fatal if swallowed and enters airways

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2. Hazard(s) Identification (continued)

Precautionary statements

Wear protective gloves.
Wear eye protection / face protection.
Wash thoroughly after handling.
Do not eat, drink or smoke when using this product.
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.
Continue rinsing.
If swallowed: Call a poison center/doctor if you feel unwell.
Specific treatment (see on this label).
If skin irritation occurs: Get medical advice/attention.
If eye irritation persists: Get medical advice/attention.
Rinse mouth.
If on skin: Wash with plenty of water.
Take off contaminated clothing and wash it before reuse.
Dispose of contents/container in accordance with local/regional/national/international regulations.

Classification system

NFPA ratings (scale 0-4)



Health=0; Fire=1; Reactivity=0

HEALTH	0
FIRE	1
REACTIVITY	0

Health=0; Fire=1; Reactivity=0

3. Composition / Information on Ingredients

Chemical characterization:

Mixtures

Dangerous Components

Hydrocarbon, <22 cSt

72623-86-0



Asp Hazard 1-H304

4. First-aid Measures

Description of first aid measures

General information

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

After inhalation

In case of unconsciousness, place patient securely on side position for transportation.

After skin contact

Immediately wash with water and soap and rinse thoroughly. If irritation occurs consult a doctor.

After eye contact

Rinse opened eye for at least 15 minutes under running water. If symptoms persist, consult a doctor.

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4. First-aid Measures (continued)

After swallowing	Immediately call a doctor.
Most important symptoms and effects, both acute and delayed	No further relevant information available.
Indication of any immediate medical attention and special treatment needed	No further relevant information available.

5. Fire-fighting Measures

Extinguishing media

Suitable extinguishing agents CO₂ or Powder. Water mist to cool, no direct water spray. Collect spillage.

Special hazards arising from the substance or mixture No further relevant information available.

Advice for firefighters

Protective equipment As in any fire, wear self-contained breathing apparatus pressure-demand (NIOSH approved or equivalent), and full protective gear to prevent contact with skin and eyes.

6. Accidental Release Measures

Personal precautions, protective equipment and emergency procedures Not required

Environmental precautions Do not allow to enter sewers/ surface or ground water

Methods and material for containment and cleaning up Absorb with liquid-binding material (i.e. sand, diatomite, acid binders, universal binders, sawdust). Dispose contaminated material as waste according to section 13. Ensure adequate ventilation. Dispose of the collected material according to regulations.

Reference to other sections See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

7. Handling and Storage

Precautions for safe handling Ensure good ventilation/exhaustion at the workplace. Prevent formation of aerosols.

Information about protection against explosions and fires No special measures required

Conditions for safe storage, including any incompatibilities

Storage

Requirements to be met by storerooms and receptacles: No special requirements

Further information about storage conditions Keep receptacle tightly sealed

Specific end use(s) No further relevant information available

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8. Exposure Controls / Personal Protection

Additional information about design of technical systems

No further data; see section 7

Control parameters

Components with occupational exposure limits

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

Additional information

The lists that were valid during the creation were used as basis.

Exposure controls

Personal protective equipment

General protective and hygienic measures

Keep away from foodstuffs, beverages and feed. Immediately remove all soiled and contaminated clothing. Wash hands before breaks and at the end of work. Avoid contact with the eyes and skin.

Breathing equipment

Not required

Protection of hands



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture. Select glove material based on penetration times, rates of diffusion and degradation.

Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

Penetration time of glove material

The exact break-through time has to be determined and observed by the manufacturer of the protective gloves.

Eye protection

Tightly sealed goggles

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9. Physical and Chemical Properties

Information on basic physical and chemical properties

General Information

Appearance

Form	Liquid
Color	Slight yellow tint
Odor	Slight hydrocarbon odor
Odor Threshold	Not determined
pH-value	Not determined

Change in condition

Melting point/Melting range	Not applicable
Boiling point/Boiling range	NA
Flash Point	>290°F(>140°C)
Flammability (solid/gaseous)	Not applicable

Ignition temperature

Decomposition temperature	Not determined
Auto-igniting	Not determined
Danger of explosion	Not determined

Explosion limits

Lower	Not determined
Upper	Not determined
Vapor Pressure @ 20 DEG C	<0.003 kPa
Density @ 20 DEG C	0.83-0.86
Relative Density	Not determined
Vapor Density	Not determined
Evaporation Rate	Not determined
Solubility in/Miscibility with Water	Not miscible
Partition coefficient (n-octanol/water)	Not determined

Viscosity

Viscosity - Dynamic	4.25
Viscosity - Kinematic	5

Solvent content

Organic solvents	0.00%
Other Information	No further information

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10. Stability and Reactivity

Reactivity	No further relevant information available
Chemical stability	Stable under normal conditions
Thermal decomposition / conditions to be avoided	No decomposition if used according to specifications
Possibility of hazardous reactions	No dangerous reactions known
Conditions to avoid	No further relevant information available
Incompatible materials	No further relevant information available
Hazardous decomposition products	No dangerous decomposition products known

11. Toxicological Information

Information on toxicological effects

Acute toxicity

Primary irritant effect:

On the skin	Irritant to skin and mucous membranes
On the eye	Irritating effect. Causes serious eye irritation
Additional toxicological information	The product shows the following dangers according to internally approved calculation methods for preparations: Harmful. Irritant.

Carcinogenic categories

IARC (International Agency for Research on Cancer)	None of the ingredients are listed. Group 1 - Carcinogenic to humans Group 2A - Probably carcinogenic to humans Group 2B - Possibly carcinogenic to humans Group 3 - Not classifiable as to its carcinogenicity to humans Group 4 - Probably not carcinogenic to humans
NTP (National Toxicology Program)	None of the ingredients are listed
OSHA-Ca (Occupational Safety & Health Administration)	None of the ingredients are listed

12. Ecological Information

Toxicity	No data is available on this product.
Aquatic toxicity	No further relevant information available
Persistence and degradability	No further relevant information available
Bioaccumulative potential	No further relevant information available
Mobility in soil	No further relevant information available
Additional ecological information	
General notes	Water hazard class 1 (Self-assessment): slightly hazardous for water

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12. Ecological Information (continued)

Results of PBT and vPvB assessment

PBT	Not applicable
vPvB	Not applicable
Other adverse effects	No further relevant information available

13. Disposal Considerations

Uncleaned packagings

Recommendation	Disposal must be made according to official regulations.
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14. Transportation Information

UN-Number

DOT, ADR, ADN, IMDG, IATA	Non-regulated material
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UN proper shipping name

DOT, ADR, ADN, IMDG, IATA	Non-regulated material
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Transport hazard class(es)

DOT, ADR, ADN, IMDG, IATA

Class	Non-regulated material
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Packing group

DOT, ADR, IMDG, IATA	Non-regulated material
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Environmental hazards

Marine pollutant	No
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Special precautions for user	Not applicable
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Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable
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UN "Model Regulation"	—
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15. Regulatory Information

Safety, health and environmental regulations/legislation specific for the substance or mixture

Sara

Section 355 (extremely hazardous substances)	None of the ingredients are listed
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Section 313 (Specific toxic chemical listings)	None of the ingredients are listed
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TSCA (Toxic Substances Control Act)	All components are included
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Proposition 65

Chemicals known to cause cancer	None of the ingredients are listed
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15. Regulatory Information

Chemicals known to cause reproductive toxicity for females	None of the ingredients are listed
Chemicals known to cause reproductive toxicity for males	None of the ingredients are listed
Chemicals known to cause developmental toxicit	None of the ingredients are listed
Carcinogenic categories	
EPA (Environmental Protection Agency)	None of the ingredients are listed
TLV (Threshold Limit Value established by ACGIH)	None of the ingredients are listed
NIOSH-Ca (National Institute for Occupational Safety and Health)	None of the ingredients are listed
GHS label elements	Non-regulated material
Hazard pictograms	 GHS08
Signal word	Danger
Hazard-determining components of labeling	Hydrocarbon, <22 cSt
Hazard statements	Harmful if swallowed. Causes skin irritation. Causes serious eye irritation.
Precautionary statements	Wear protective gloves. Wear eye protection / face protection. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If swallowed: Call a poison center/doctor if you feel unwell. Specific treatment (see on this label). If skin irritation occurs: Get medical advice/attention. If eye irritation persists: Get medical advice/attention. Rinse mouth. If on skin: Wash with plenty of water. Take off contaminated clothing and wash it before reuse. Dispose of contents/container in accordance with local/regional/national/international regulations.
National regulations	The product is subject to be labeled according with the prevailing version of the regulations on hazardous substances.
State Right to Know	Hydrocarbon, <22 cSt 72623-86-0  Asp Hazard 1-H304
Chemical safety assessment	A chemical safety assessment has not been carried out

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16. Other Information

The information and recommendations in this safety data sheet are, to the best of our knowledge, accurate as of the date of issue. Nothing herein shall be deemed to create warranty, expressed or implied and shall not establish a legally valid contractual relationship. It is the responsibility of the user to determine applicability of this information and the suitability of the material or product for any particular purpose.

Date of preparation / last revision 02/19/2016 / 1

Abbreviations and acronyms

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

ADN: The European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

Acute Tox. 4: Acute toxicity, Hazard Category 4

Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2

Eye Irrit. 2A: Serious eye damage/eye irritation, Hazard Category 2A