SECTION 1. Identification of the substance/preparation and of the company

Product details

Name Used on Label	:	**Thermal C50S**
Order-No. (5 Liter)	:	8891411
Order-No. (10 Liter)	:	8891410
Order-No. (55 Gal Drum)	:	8891305
Company Manufactured for:	:	JULABO U.S.A., INC 884 Marcon Blvd ALLENTOWN, PA 18109 / U.S.A.
Phone	:	[+1] 610-231-0250
Fax	:	[+1] 610-231-0260
E-mail	:	info@julabo.us
Internet	:	www.julabo.us
Emergency Information	:	CHEMTREC 1-800-424-9300
Trade name	:	
Application	:	Bath fluid for laboratory circulators; temperature range +20°C to +250 °C

SECTION 2. Hazards identification

GHS Classification
Not a hazardous substance or mixture
GHS Label Element
Not a hazardous substance or mixture.
Other Hazards
None known.

SECTION 3. Composition/information on ingredients

Identity	CAS #	%	TLV OSHA PEL
Siloxanes and silicones, dimethyl	63148-62-9	>99	Not established
Iron siloxane complex		<1	Not established

Substance/mixture : Substance
Substance name : Iron siloxane complex
Chemical nature : Silicone
Hazardous Components : No hazardous ingredients

SECTION 4. First aid measures

If inhaled : If inhaled, remove to fresh air.
Get medical attention if symptoms occur

In case of skin contact : Wash with water and soap as a precaution. Remove contaminated clothing
Get medical attention if symptoms occur

In case of eye contact : Flush eyes with water for at least 15 minutes.
Get medical attention if irritation develops and persists.

After swallowing : DO NOT induce vomiting
Rinse mouth thoroughly with water
Get medical attention if symptoms occur

Most important symptoms and effects, both acute and delayed : None known

Protection of first-aiders	: No special precautions necessary for first aid responders.
Notes to physician	: Treat symptomatically and supportively.

SECTION 5. Firefighting measures

Suitable extinguishing media	Water Spray Alcohol-resistant foam Dry chemical Carbon dioxide (CO_2)
Unsuitable extinguishing media	: None known
Specific hazards during firefighting	: Exposure to combustion products may be a hazard to health
Hazardous combustion products	: Carbon oxides, Silicon oxides, Metal oxides, Formaldehyde
Extinguishing methods	: Use water spray to cool unopened containers. Remove undamaged containers from fire area. Evacuate area.
Special protective equipment for fire-fighters	: Wear self-contained breathing apparatus for firefighting if necessary.

SECTION 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures
Particular danger of slipping on leaked / spilled product.
Follow safe handling advice and personal protective equipment recommendations.

Environmental precautions
Discharge into the environment must be avoided. Prevent further leakage or spillage if safe to do so. Prevent spreading over a wide area (*i.e.* by containment or oil barriers). Retain and dispose of contaminated wash water. Local authorities should be advised if significant spillages cannot be contained.

Methods for cleaning up
Soak up spill with inert absorbent material (*e.g.* sand, silica gel, acid binder, universal binder, sawdust).
For large spills, provide diking or other appropriate containment to keep material from spreading. If dyked material can be pumped, store recovered material in appropriate container. Clean up remaining materials from spill with suitable absorbent.
Local or national regulations may apply to releases and disposal of this material, as well as those materials and items employed in the cleanup of releases. You will need to determine which regulations are applicable.

SECTION 7. Handling and storage

Technical measures	: See Engineering measures in Section 8 under EXPOSURE CONTROLS/PERSONAL PROTECTION section
Local/Total ventilation	: Use only with adequate ventilation
Advice on safe handling	: Handle in accordance with good industrial hygiene and safety practice. Take care to prevent spills, waste and minimize release to the environment.
Conditions for safe storage	: Keep in properly labeled containers. Store in accordance with the particular national regulations.
Materials to avoid	: Do not store with the following product types: Strong Oxidizing Agents

SECTION 8. Exposure controls / personal protection

Ingredients with workplace control parameters
Contains no substances with occupational exposure limit values.

Engineering measures
Processing may form hazardous compounds (see section 10).
Ensure adequate ventilation and minimize workplace exposure concentrations.

Personal Protective Equipment

Eye protection	: safety glasses
Hand Protection	: Glove material must be impermeable and resistant to the product. Due to missing tests no recommendation to the glove material can be given for the product. Select the glove material on consideration of penetration times, rates of diffusion and the degradation.
Material of gloves	Selection of suitable gloves not only depends on the material, but also on quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material cannot be calculated in advance and must be checked prior to the application.
Penetration time of glove material	The exact break-through time has to be found out by the manufacturer of the protective gloves and must be observed.
Remarks	Wash hands before breaks and at the end of workday.
Skin and body protection	Skin should be washed after contact.
Respiratory protection	No personal respiratory protective equipment normally required.
Hygiene measures	Ensure that eye flushing systems and safety showers are located close to the working place. When using, do not eat, drink or smoke. Wash contaminated clothing before re-use. These precautions are for room temperature handling. Use at elevated temperature applications may require added precautions.

SECTION 9. Physical and chemical properties

Appearance	: liquid
Color	: brown
Odor	: characteristic
Odor threshold	: No data available
pH	: No data available
Melting point / freezing point	: No data available
Initial boiling point	: >250 °C
Flash point (closed cup)	: 285 °C
Evaporation rate	: No data available
Flammability (solid, gas)	: Not applicable
Upper explosion limit	: No data available
Lower explosion limit	: No data available
Vapor pressure	: No data available
Relative vapor density	: No data available
Relative density	: 0.96
Solubility	
Water solubility	: No data available
Partition coefficient:	
Noctanol/water	: No data available
Auto-ignition temperature	: >476 °C
Thermal decomposition	: No data available
Viscosity	
Viscosity, kinematic	: 50 cSt @ 25 °C
Explosive properties	: Not explosive
Oxidizing properties	: The substance or mixture is not classified as oxidizing.

SECTION 10. Stability and reactivity

Reactivity	: Not reactive
Chemical stability	: Stable under normal conditions
Possibility of hazardous reactions	: Use at elevated temperatures may form hazardous components. Can react with strong oxidizing agents
Conditions to avoid	: None known
Incompatible materials	: Oxidizing agents, silicone rubber

Hazardous decomposition products
Thermal decomposition : Formaldehyde

SECTION 11. Toxicological information

Information on likely routes of exposure
Inhalation
Ingestion
Skin contact
Eye contact

Acute toxicity
Not classified based on available information.

Skin corrosion / irritation
Not classified based on available information.

Serious eye damage / eye irritation
Not classified based on available information

Respiratory or skin sensitization
Skin sensitization: Not classified based on available information.
Respiratory sensitization: Not classified based on available information.

Germ cell mutagenicity
Not classified based on available information.

Carcinogenicity
Not classified based on available information.

IARC
No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

OSHA
No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by OSHA.

NTP
No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by NTP.

Reproductive toxicity
Not classified based on available information.

STOT – repeated exposure
Not classified based on available information.

STOT – single exposure
Not classified based on available information.

Aspiration toxicity
Not classified based on available information.

SECTION 12. Ecological information

Ecotoxicity : No data available

Persistence and degradability : No data available

Bioaccumulative potential : No data available

Mobility in soil : No data available

Other adverse effects : No data available

SECTION 13. Disposal considerations

Disposal methods
Resource Conservation and Recovery Act (RCRA) : This product has been evaluated for RCRA characteristics and does not meet the criteria of hazardous waste if discarded in its purchased form.

Waste from residues : Dispose of in accordance with local regulations.

Contaminated packaging	: Dispose of as unused product. Empty containers should be taken to an approved waste handling site for recycling or disposal.

SECTION 14. Transport information

International Regulation

UNRTDG	: Not regulated as a dangerous good
IATA-DGR	: Not regulated as a dangerous good
IMDG-Code	: Not regulated as a dangerous good

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
Not applicable for product as supplied.

Domestic regulation

49 CFR	: Not regulated as a dangerous good.

SECTION 15. Regulatory information

EPCRA – Emergency Planning and Community Right-to-Know

CECRLA Reportable Quantity
This material does not contain any components with a CERCLA RQ.

SARA 304 Extremely Hazardous Substances Reportable Quantity
This material does not contain any components with a section 304 EHS RQ.

SARA 311/312 Hazards	: No SARA hazards
SARA 302	: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.
SARA 313	: This material does not contain any chemical components with known CAS numbers that exceed the threshold (DeMinimis) reporting levels established by SARA Title III, Section 313.
California Prop 65	WARNING: This product contains a chemical known in the State of California to cause birth defects or other reproductive harm. 2-Ethylhexanoic Acid CAS# 149-57-5 % WT: 0.1%

The ingredients of this product are reported in the following inventories:

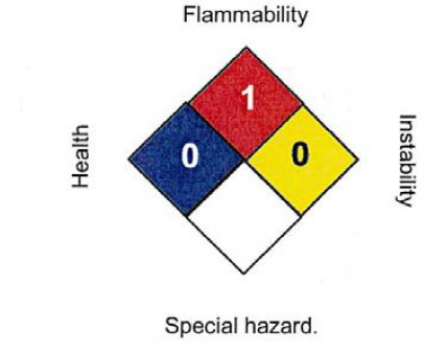
KECI	: All ingredients listed, exempt or notified.
REACH	: All ingredients (pre)-registered or exempt.
IECSC	: All ingredients listed or exempt.
DSL	: All chemical substances in this product comply with the CEPA 1999 and NSNR and are on or exempt from listing on the Canadian Domestic Substances list (DSL).
TSCA	: All chemical substances in this material are included on or exempted from listing on the TSCA Inventory of Chemical Substances.
AICS	: All ingredients listed or exempt.
ENCS/ISHL	: All components are not listed on ENCS/ISHL.
PICCS	: All ingredients listed or exempt.

Inventories
AICS (Australia), DSL (Canada), IECSC (China), REACH (European Union), ENCS (Japan), ISHL (Japan), KECI (Korea), NZIoC (New Zealand), PICCS (Phillippines), TSCA (USA).

SECTION 16. Other information

Further Information

NFPA:



HMIS III:

HEALTH	0
FLAMMABILITY	1
PHYSICAL HAZARD	0

0 = not significant, 1 =Slight,
2 = Moderate, 3 = High
4 = Extreme, * = Chronic

Sources of key data used to Compile the Safety Data Sheet	: Interim technical data, data from raw materials, SDSs, OECD eChem Portal search results and European Chemicals Agency, http://echa.europa.edu/
Revision Date	: 29 April 2015

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information is designed only as guidance for safe handling, use, processing, storage, transportation, disposal and release and shall not be considered a warranty or quality specification of any type. The information provided relates only to the specific material identified at the top of this SDS and may not be valid when the SDS material is used in combination with any other materials or in any process, unless specified in the text. Material users should review the information and recommendations in the specific context of their intended manner of handling, use, processing and storage, including an assessment of the appropriateness of the SDS material in the user's end product, if applicable.