

Solutia Inc.

Material Safety Data Sheet

1. PRODUCT AND COMPANY IDENTIFICATION

Product name: THERMINOL® 55 Heat transfer fluid

Reference Number: 000000000196

Date: 08/24/2007

Company Information:

United States:

Solutia Inc.
575 Maryville Center Drive, P.O. Box 66760
St. Louis, MO 63166-6760
Emergency telephone: Chemtrec: 1-800-424-9300
International Emergency telephone: Chemtrec: 703-527-3887
Non-Emergency telephone: 1-314-674-6661

Canada:

Solutia Canada Inc.
6800 St. Patrick Street
LaSalle, PQ H8N 2H3
Emergency telephone: CANUTEC: 1-613-996-6666
Non-Emergency telephone: 1-314-674-6661

Mexico:

Solutia MEXICO, S. DE R.L. DE C.V.
Prol. Paseo de la Reforma 2654
Local 501, Piso-5
Col. Lomas Altas
11950 Mexico, D.F.
Emergency telephone: SETIQ: (in Mexico) 01-800-002-1400
Non-Emergency telephone: (in Mexico) 01-55-5259-6800

Brazil:

Solutia Brazil Ltd.
Avenue Carlos Marcondes, 1200
CEP: 12241-420-São José dos Campos/SP-Brazil
Emergency telephone: 55 12 3932 7100 (PABX)
Non-Emergency telephone: 55 11 3146 1800 (PABX)

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

Form: liquid
Colour: clear to yellow
Odour: characteristic

WARNING STATEMENTS

CAUTION!
May cause eye irritation
May cause skin irritation
May cause respiratory tract irritation

POTENTIAL HEALTH EFFECTS

Likely routes of exposure: eye and skin contact
inhalation

Eye contact: Moderately irritating to eyes.

Skin contact: Moderately irritating to skin.
No more than slightly toxic if absorbed.
Repeated contact may cause a drying, solvent like action on the skin.

Inhalation: Elevated processing temperatures may cause release of vapours which are irritating if inhaled.
Significant adverse health effects are not expected to develop under normal conditions of exposure.
No more than slightly toxic if inhaled.

Ingestion: No more than slightly toxic if swallowed.
Significant adverse health effects are not expected to develop if only small amounts (less than a mouthful) are swallowed.

Signs and symptoms of overexposure: headache
dizziness/incoordination
nausea/vomiting
loss of consciousness
vertigo
confusion
anxiety
laboured breathing
drowsiness

Refer to Section 11 for toxicological information.

3. COMPOSITION/INFORMATION ON INGREDIENTS

<u>Components</u>	<u>CAS No.</u>	<u>Average concentration</u>	<u>Concentration range</u>	<u>Units</u>
C14-30-alkylaromatic derivatives	68855-24-3	100.0		%

4. FIRST AID MEASURES

If in eyes: Immediately flush with plenty of water.
If easy to do, remove any contact lenses.
Remove material from skin and clothing.
Get medical attention if irritation persists.

If on skin: Immediately flush the area with plenty of water.
Remove contaminated clothing.
Get medical attention.
Wash clothing before reuse.

If inhaled: Remove patient to fresh air.
If not breathing, give artificial respiration.
If breathing is difficult give oxygen.
Remove material from eyes, skin and clothing.

If swallowed: Immediate first aid is not likely to be required.
A physician or Poison Control Center can be contacted for advice.
Wash heavily contaminated clothing before reuse.

5. FIRE FIGHTING MEASURES

Fire point: 218 C Cleveland Open Cup

Hazardous products of combustion: carbon dioxide; carbon monoxide (CO); soot; smoke; hydrocarbons

Extinguishing media: Water spray, foam, dry chemical, or carbon dioxide

Unusual fire and explosion hazards: None known

Fire fighting equipment: Firefighters, and others exposed, wear self-contained breathing apparatus.
Equipment should be thoroughly decontaminated after use.

Miscellaneous advice: This product is not classified as a fire-resistant heat transfer fluid.
Precautions to avoid sources of ignitions should be taken.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions: Use personal protection recommended in section 8.

Environmental precautions: Keep out of drains and water courses.

Methods for cleaning up: Contain large spills with dikes and transfer the material to appropriate containers for reclamation or disposal. Absorb remaining material or small spills with an inert material and then place in a chemical waste container. Flush spill area with water.

Refer to Section 13 for disposal information and Sections 14 and 15 for reportable quantity information.

7. HANDLING AND STORAGE

Handling

Avoid contact with eyes, skin and clothing.
Avoid breathing vapour or mist.
Keep container closed.
Use with adequate ventilation.
Wash thoroughly after handling.
Precautions against ignitions and fire should be taken with this product.
Heat transfer fluids are intended for INDIRECT heating purposes ONLY.
This product has not been approved for food grade use.

Emptied containers retain vapour and product residue. Observe all recommended safety precautions until container is cleaned, reconditioned or destroyed. Do not cut, drill, grind or weld on or near this container. The reuse of this material's container for non industrial purposes is prohibited and any reuse must be in consideration of the data provided in this material safety data sheet.

Storage

General: Stable under normal conditions of handling and storage.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Airborne exposure limits: (ml/m³ = ppm)

THERMINOL® 55 No specific occupational exposure limit has been established.

Eye protection: Wear chemical goggles.
Have eye flushing equipment available.

Hand protection: Wear chemical resistant gloves.
Consult the glove/clothing manufacturer to determine the appropriate type
glove/clothing for a given application.

Body protection: Wear suitable protective clothing.
Consult the glove/clothing manufacturer to determine the appropriate type
glove/clothing for a given application.
Wear full protective clothing if exposed to splashes.
Wash contaminated skin promptly.
Launder contaminated clothing and clean protective equipment before reuse.
Wash thoroughly after handling.

Respiratory protection: Avoid breathing vapour or mist.
Use approved respiratory protection equipment when airborne exposure is excessive.
Consult the respirator manufacturer to determine the appropriate type of equipment for
a given application.
Observe respirator use limitations specified by the manufacturer.

Ventilation: Provide natural or mechanical ventilation to minimize exposure.
If practical, use local mechanical exhaust ventilation at sources of air contamination
such as processing equipment.

Components referred to herein may be regulated by specific Canadian provincial legislation. Please refer to exposure limits legislated for the province in which the substance will be used.

9. PHYSICAL AND CHEMICAL PROPERTIES

Flash point: 177 C Cleveland Open Cup

Autoignition temperature: 343 C ASTM E-659

Specific gravity: 0.863 - 0.901 @ 25 C

Boiling range : 340 - 390 C @ 1,013 hPa

Boiling point : 351 C @ 1,013 hPa

Water solubility: 1 mg/l @ 25 C

Kinematic viscosity: 13 - 34.1 mm²/s @ 38 C

NOTE: These physical data are typical values based on material tested but may vary from sample to sample. Typical values should not be construed as a guaranteed analysis of any specific lot or as specifications for the product.

10. STABILITY AND REACTIVITY

Conditions to avoid:	All sources of ignition.
Materials to avoid:	None known
Hazardous reactions:	Hazardous polymerization does not occur.
Hazardous decomposition products:	carbon monoxide (CO); carbon dioxide; soot; smoke; hydrocarbons

11. TOXICOLOGICAL INFORMATION

Human experience: Repeated contact may cause a drying, solvent like action on the skin.

This product has been tested for toxicity. Results from Solutia sponsored studies or from the available public literature are described below.

Acute animal toxicity data

Oral:	LD50 , rat , > 15,800 mg/kg , Practically nontoxic following oral administration.
Dermal:	LD50 , rabbit , > 7,940 mg/kg , Practically nontoxic after skin application in animal studies.
Inhalation:	limit test , rat , , No mortality or signs of toxicity at the highest level achievable.
Eye irritation:	rabbit , Slightly irritating to eyes., 24 h
Skin irritation:	rabbit , Moderately irritating to skin., 24 h
Repeat dose toxicity:	rat , , diet , 90 day , , Produced effects on body weight, serum enzymes and/or organ weights in repeat dose studies.
Target organs affected	kidneys, liver
Repeat dose toxicity:	rat , , inhalation , 28 days , , Adverse effects observed in repeat dose studies.
Target organs affected	blood
Developmental toxicity:	rat , gavage , , No effects on offspring observed in laboratory animals in the presence of maternal toxicity.
Mutagenicity:	No genetic effects were observed in standard tests using bacterial and animal cells.

12. ECOLOGICAL INFORMATION

Environmental Toxicity

Invertebrates	48 h, EL50 (water accommodated fraction - W.A.F.) Water flea (Daphnia magna) > 600 mg/l
Fish:	96 h, LC50 Rainbow trout (Oncorhynchus mykiss) > 100 mg/l

96 h, LC50 Fathead minnow (*Pimephales promelas*) > 1000 mg/l

Algae: 96 h, EL50 (water accommodated fraction - W.A.F.) Algae (*Selenastrum capricornutum*) > 1000 mg/l

Environmental fate

Biodegradation Modified SCAS (OECD 301A) 1 %
Resistant to biodegradation.
Modified Sturm (OECD 301B) 4 %
Resistant to biodegradation.
theoretical CO2 evolution 3 %
Resistant to biodegradation.

13. DISPOSAL CONSIDERATIONS

US EPA RCRA Status: This material when discarded may be a hazardous waste as that term is defined by the Resource Conservation and Recovery Act (RCRA), 40 CFR 261.24, due to its toxicity characteristic. This material should be analyzed in accordance with Method 1311 for the compound(s) below.

US EPA RCRA D018 Compound/Characteristic: BENZENE
hazardous waste number:

Disposal considerations: Incineration

Miscellaneous advice: This product meets the criteria for a synthetic used oil under the U.S. EPA Standards for the Management of Used Oil (40 CFR 279). Those standards govern recycling and disposal in lieu of 40 CFR 260 -272 of the Federal hazardous waste program in states that have adopted these used oil regulations. Consult your attorney or appropriate regulatory official to be sure these standards have been adopted in your state. Recycle or burn in accordance with the applicable standards.
Solutia operates a used fluid return program for certain fluids under these used oil standards. Contact your Sales Representative for details.
This product should not be dumped, spilled, rinsed or washed into sewers or public waterways.

14. TRANSPORT INFORMATION

The data provided in this section is for information only. Please apply the appropriate regulations to properly classify your shipment for transportation.

US DOT

Other: Not regulated for transport.

Canadian TDG

Other: Not regulated for transport.

ICAO/IATA Class

Other: Not regulated for transport.

15. REGULATORY INFORMATION

All components are in compliance with the following inventories: U.S. TSCA, Canadian DSL, EU EINECS, Japanese ENCS, Australian AICS, Korean, Phillipine PICCS, Chinese

Canadian WHMIS classification: D2(B) - Materials Causing Other Toxic Effects

SARA Hazard Notification:

Hazard Categories Under Title III Rules (40 CFR 370): Immediate

Section 302 Extremely Hazardous Substances: Not applicable

Section 313 Toxic Chemical(s): Not applicable

CERCLA Reportable Quantity:

Not applicable

This product has been classified in accordance with the hazard criteria of the Canadian Controlled Products Regulation and the MSDS contains all the information required by the Canadian Controlled Products Regulation.

Refer to Section 11 for OSHA/HPA Hazardous Chemical(s) and Section 13 for RCRA classification.

Safety data sheet also created in accordance with Brazilian law NBR 14725

16. OTHER INFORMATION

Product use: Heat transferring agents

Reason for revision: Minor changes ;, Section 14

	Health	Fire	Reactivity	Additional Information
Suggested NFPA Rating	1	1	0	
Suggested HMIS Rating:	1	1	0	B

Prepared by the Solutia Hazard Communication Group. Please consult Solutia @ 314-674-6661 if further information is needed.

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