Printing date: 03.04.2014 Reviewed on: 03.04.2014

1 Identification

Product identifier

Trade name: ENVIROTEMP™ FR3™ Fluid

SAP Material Numbers: 100088941; 100089128; 100089127; 100089129; 110013820

CAS Number: 8001-22-7

Application of the substance / the mixture: Dielectric coolant

Details of the supplier of the Safety Data Sheet

Manufacturer/Supplier: Cargill, Incorporated Cargill Industrial Specialties 9320 Excelsior Blvd. Hopkins, Minnesota 55343

Tel: 1-952-984-9122

E-mail: CIS_CustomerService@Cargill.com

Emergency telephone number: 1-800-255-3924 (ChemTel)



2 Hazard(s) identification

Classification of the substance or mixture:

The product is not classified as hazardous according to the Globally Harmonized System (GHS).

Label elements

GHS label elements: Not Regulated. **Hazard pictograms:** Not Regulated. **Signal word:** Not Regulated.

Hazard-determining components of labeling: None.

Hazard statements: Not Regulated.

Hazard description

WHMIS-symbols: Not hazardous under WHMIS.

Classification system:

NFPA ratings (scale 0 - 4)



Health = 0

Fire = 1

Reactivity = 0

HMIS ratings (scale 0 - 4)



Health = 0

Fire = 1

Reactivity = 0

Other hazards

Results of PBT and vPvB assessment

PBT: Not applicable. **vPvB:** Not applicable.

3 Composition/information on ingredients

Chemical characterization: Mixture.

CAS No.: 8001-22-7

Description: Soybean Oil with nonhazardous additives.

Hazardous components: None.

Printing date: 03.04.2014 Reviewed on: 03.04.2014

Trade name: ENVIROTEMP™ FR3™ Fluid

4 First-aid measures

Description of first aid measures

General information:

No special measures required.

After inhalation:

Supply fresh air; consult doctor in case of complaints.

After skin contact:

Generally the product does not irritate the skin.

Clean with water and soap.

If skin irritation continues, consult a doctor.

After eye contact:

Remove contact lenses if worn.

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

After swallowing:

Rinse out mouth and then drink plenty of water.

Do not induce vomiting; immediately call for medical help.

Most important symptoms and effects, both acute and delayed:

Gastric or intestinal distress when ingested.

Danger: None

Indication of any immediate medical attention and special treatment needed:

No additional information.

5 Fire-fighting measures

Extinguishing media

Suitable extinguishing agents:

Foam.

Fire-extinguishing powder.

Carbon dioxide.

Gaseous extinguishing agents.

For safety reasons unsuitable extinguishing agents: Water

Special hazards arising from the substance or mixture:

In case of fire, the following can be released: Carbon monoxide (CO)

Advice for firefighters

Protective equipment:

Wear self-contained respiratory protective device.

Wear fully protective suit.

Additional information: No additional information.

6 Accidental release measures

Personal precautions, protective equipment and emergency procedures:

Particular danger of slipping on leaked/spilled product.

Wear protective equipment.

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

Printing date: 03.04.2014 Reviewed on: 03.04.2014

Trade name: ENVIROTEMP™ FR3™ Fluid

Methods and material for containment and cleaning up:

Send for suitable recovery and/or disposal authorities.

Contain and control the leaks or spills with non-combustible absorbent materials such as sand, earth, vermiculite, or diatomaceous earth in drums for waste disposal.

Clay materials (Fuller's earth, oil dry products) saturated with Envirotemp FR3 fluid can, under certain conditions, undergo a slow oxidation that releases heat. If the heat so released cannot escape, it is possible that the temperature may increase.

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: None

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:

Avoid storage near extreme heat, ignition sources or open flame.

Protect from humidity and water.

Information about storage in one common storage facility: Store away from oxidizing agents.

Further information about storage conditions: Store in cool, dry conditions in well sealed receptacles.

Specific end use(s): No additional information.

8 Exposure controls/personal protection

Additional information about design of technical systems: No additional information.

Control parameters

Components with limit values that require monitoring at the workplace: Not required.

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

Exposure controls

Personal protective equipment:

General protective and hygienic measures: No additional information.

Breathing equipment:

Not required under normal conditions of use.

Protection of hands:

Wash hands after use. For extended skin contact, gloves are recommended.



Protective gloves

The glove material has to be impermeable and resistant to the product. Selection of the glove material should be based on the penetration time, rates of diffusion and the degradation of the glove material. Wear protective gloves to handle contents of damaged or leaking units.

Material of gloves:

The selection of a suitable gloves does not only depend on the material, but also on the quality, and varies from manufacturer to manufacturer.

Penetration time of glove material:

The exact break through time has to be determined by the manufacturer of the protective gloves. DO NOT exceed the breakthrough time set by the Manufacturer.

Trade name: ENVIROTEMP™ FR3™ Fluid

Eye protection:



Safety glasses

Body protection:

Protective work clothing may be required for spills.

Not required under normal conditions of use.

Limitation and supervision of exposure into the environment: No special requirements.

9 Physical and chemical properties

nformation on basic physical and ch General Information	nemical properties	
Appearance		
Form:	Liquid	
Color:	Light green	
Odor:	Slight	
Odor threshold:	Not determined.	
pH-value:		
Change in condition		
Melting point/Melting range:	Not determined.	
Boiling point/Boiling range:	>360 °C / >680 °F /	
Flash point:	Open cup flash point ≥ 310°C	
	Closed cup flash point ≥ 250°C	
Flammability (solid, gaseous):	Not applicable.	
Ignition temperature:	Not applicable.	
Decomposition temperature:	Not determined.	
Autoignition:	401 - 404°C (ASTM E659)	
Danger of explosion:	Product does not present an explosion hazard.	
Explosion limits		
Lower:	Not determined.	
Upper:	Not determined.	
Oxidizing properties:	Non-oxidizing.	

Printing date: 03.04.2014 Reviewed on: 03.04.2014

Trade name: ENVIROTEMP™ FR3™ Fluid

Vapor pressure at 20 °C (68 °F): < 1.3 Pa (< 0.01 mm Hg)

Density at 20 °C (68 °F): 0.92 g/cm³ (7.677 lbs/gal)

Relative density at 20 °C (68 °F): Not applicable Vapor density: Not determined.

VOC: None detected.

Solubility in / Miscibility with

Water: Insoluble.

Partition coefficient (n-octanol/water): Not determined.

Viscosity

Dynamic: Not determined. Kinematic at 40 °C (104 °F): 33 - 35 mm²/s

Other information: No additional information.

10 Stability and reactivity

Reactivity

Chemical stability

Thermal decomposition / conditions to be avoided:

To avoid thermal decomposition, avoid temperatures > 250C.

Possibility of hazardous reactions:

Reacts with strong oxidizing agents.

Reacts with strong alkali.

Conditions to avoid: Store away from oxidizing agents. **Incompatible materials:** No additional information. Hazardous decomposition products: None.

11 Toxicological information

Information on toxicological effects

Acute toxicity: Not acutely toxic (OECD 420)

Primary irritant effect

On the skin: No irritant effect. On the eye: No irritating effect.

Sensitization: No sensitizing effects known.

Additional toxicological information:

When used and handled according to specifications, the product does not have any harmful effects

according to our experience and the information provided to us.

The substance is not subject to classification.

Printing date: 03.04.2014 Reviewed on: 03.04.2014

Trade name: ENVIROTEMP™ FR3™ Fluid

Carcinogenic categories

NTP (National Toxicology Program):

None of the ingredients are listed.

Repeated Dose Toxicity: None.

12 Ecological information

Toxicity

Aquatic toxicity: No Observable Adverse Effect > 10 000 mg/L (ASTM D608, OECD 203).

Oral toxicity: No Observable Adverse Effect > 2 000 mg/kg (OECD 420).

Persistence and degradability: Readily biodegradable. Bioaccumulative potential: No potential for bioaccumulation.

Mobility in soil: Product has low mobility in soil.

Additional ecological information

Results of PBT and vPvB assessment

PBT: Not applicable. **vPvB:** Not applicable.

Other adverse effects: No additional information.

13 Disposal considerations

Waste treatment methods

Recommendation:

Product and packaging must be disposed of in accordance with relevant national and local regulations. May be incinerated. Unopened product may be returned for reclamation.

Uncleaned packagings:

Recommendation: Disposal must be made according to the applicable regulations. **Recommended cleansing agent:** Water. Use cleansing agents, if necessary.

14 Transport information

UN-Number

DOT, ADR, ADN, IMDG, IATA: Not Regulated

UN proper shipping name

DOT, ADR, ADN, IMDG, IATA: Not Regulated

Printing date: 03.04.2014 Reviewed on: 03.04.2014

Trade name: ENVIROTEMP™ FR3™ Fluid

Transport hazard class(es)		
DOT, ADR, ADN, IMDG, IATA		
Class:	Not applicable	
Packing group		
DOT, ADR, IMDG, IATA:	Not applicable	
Environmental hazards:		
Marine pollutant:	No	
Special precautions for user:	Not applicable.	
Transport in bulk according to Annex II of		
MARPOL73/78 and the IBC Code:	Not applicable.	
UN "Model Regulation":	-	

15 Regulatory information

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

Section 355 (extremely hazardous substances):

None of the ingredient is listed.

Section 313 (Specific toxic chemical listings):

None of the ingredient is listed.

TSCA (Toxic Substances Control Act):

All ingredients are listed.

Proposition 65 (California)

Chemicals known to cause cancer:

None of the ingredient is listed.

Chemicals known to cause reproductive toxicity for females:

None of the ingredient is listed.

Chemicals known to cause reproductive toxicity for males:

None of the ingredient is listed.

Chemicals known to cause developmental toxicity:

None of the ingredient is listed.

Carcinogenic categories

EPA (Environmental Protection Agency):

None of the ingredient is listed.

IARC (International Agency for Research on Cancer):

None of the ingredient is listed.

TLV (Threshold Limit Value established by ACGIH):

None of the ingredient is listed.

Printing date: 03.04.2014 Reviewed on: 03.04.2014

Trade name: ENVIROTEMP™ FR3™ Fluid

MAK (German Maximum Workplace Concentration):

None of the ingredient is listed.

NIOSH-Ca (National Institute for Occupational Safety and Health):

None of the ingredient is listed.

OSHA-Ca (Occupational Safety & Health Administration):

None of the ingredient is listed.

State Right to Know Listings:

None of the ingredient is listed.

Canadian substance listings:

Canadian Domestic Substances List (DSL):

All ingredients are listed.

Canadian Ingredient Disclosure list (limit 0.1%):

None of the ingredient is listed.

Canadian Ingredient Disclosure list (limit 1%):

None of the ingredient is listed.

16 Other information

Date of preparation / last revision: 03/04/2014

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).

IMDG: International Maritime Code for Dangerous Goods.

DOT: US Department of Transportation.

IATA: International Air Transport Association.

GHS: Globally Harmonized System of Classification and Labelling of Chemicals.

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).

DNEL: Derived No-Effect Level (REACH).

PNEC: Predicted No-Effect Concentration (REACH).

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