ELEMENTIS

MATERIAL SAFETY DATA SHEET

Revision date: 20-Jul-2011 Supercedes: 23-Sep-2003 MSDS Number: 10449

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product name: DAPRO® DF 1181

Product Use Description: Defoamer

Anti-foaming agent

Company/Undertaking

Identification:

Elementis Specialties, Inc.
329 Wyckoffs Mill Road
Hightstown, NJ 08520
Elementis UK Ltd.
c/o Elementis GmbH
Stolberger Str. 370

USA 50933 Cologne, Germany Tel: (609) 443-2000 Tel. +49 (0) 221 2923 2000

Emergency telephone number: CHEMTREC Emergency Response Number: 1-800-424-9300 (1-703-527-3887)

SGS Emergency Response Number: + 32 (0)3 575 55 55

Product Stewardship@elementis.com

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

Appearance: Liquid
Color: Off-white
Odor: Characteristic

WARNING

Harmful by inhalation

May be harmful if swallowed

May cause skin irritation and/or dermatitis

May cause slight eye irritation

May cause irritation of respiratory tract

Potential health effects:

Eye contact: May cause slight eye irritation. Signs and symptoms include burning, tearing,

redness and swelling.

Skin contact: May cause skin irritation and/or dermatitis.

Inhalation: Harmful by inhalation. May cause irritation of respiratory tract. Vapors may cause

drowsiness and dizziness.

Ingestion: May be harmful if swallowed. Ingestion may cause gastrointestinal irritation, nausea,

vomiting and diarrhea.

Routes of exposure: Inhalation, Skin, Ingestion

Target Organs: Respiratory system

See Sections 11 & 12 for additional toxicological and ecological information

Environmental hazard: See Section 12, below

3. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Components

Components	CAS-No	Weight %
Octamethylcyclotetrasiloxane	556-67-2	2.5 - 10%
Poly(oxy-1,2-ethanediyl),.alpha (dinonylphenyl)omegahydroxy- ,branched	68891-21-4	2.5 - 10%
White mineral oil (Petroleum)	8042-47-5	50 - 100%

This product is considered hazardous as defined under OSHA's Hazard Communication Standard (29 CFR 1910.1200).

4. FIRST AID MEASURES

Inhalation: IF INHALED: Remove to fresh air and keep at rest in a position comfortable for

breathing. If breathing is difficult, give oxygen.

Skin contact: Wash off immediately with soap and plenty of water. If a person feels unwell or

symptoms of skin irritation appear, consult a physician.

Eye contact: Rinse immediately with plenty of water, also under the eyelids. If eye irritation

persists, consult a specialist.

Ingestion: If swallowed, seek medical advice immediately and show this container or label. Do

not induce vomiting without medical advice. Never give anything by mouth to an

unconscious person.

5. FIRE-FIGHTING MEASURES

Flash Point: > 300 °F /> 145 °C

Flash Point Method: ASTM D3278

Autoignition temperature: Not selfigniting

Unusual Fire and Explosion

Hazards:

Emits toxic fumes under fire conditions

Reactivity Hazard: None known

Suitable extinguishing media: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide

Hazardous combustion products: Carbon monoxide, Carbon dioxide (CO2).

Special Fire Fighting Procedure: Wear self contained breathing apparatus for fire fighting if necessary

6. ACCIDENTAL RELEASE MEASURES

Personal precautions: Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.

Use personal protective equipment.

Environmental precautions: Prevent further leakage or spillage if safe to do so. Do not flush into surface water or

sanitary sewer system.

Clean-up methods: Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal

binder, sawdust). Sweep up and shovel into suitable containers for disposal. Prevent

product from entering drains. Clean contaminated surface thoroughly. Local authorities should be advised if significant spillages cannot be contained.

7. HANDLING AND STORAGE

Handling: Avoid contact with skin, eyes and clothing. Avoid breathing mists, dusts, or vapors.

Wash hands thoroughly after handling.

Storage: Keep containers tightly closed in a cool, well-ventilated place. Keep product and

empty container away from heat and sources of ignition.

Additional Storage: Not required under normal use

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering measures: Maintain adequate ventilation to keep hazardous ingredients below their PELs or

TLVs. Use NIOSH/MSHA approved respirator whenever exposure limits exceeded.

Personal Protective Equipment

Eye protection: Safety glasses

Skin and body protection: Choose body protection in relation to its type, to the concentration and amount of

dangerous substances, and to the specific work-place

Respiratory protection: In case of mist, spray or aerosol exposure wear suitable personal respiratory

protection and protective suit.

Hand protection: Protective gloves, Neoprene gloves

Hygiene measures: Handle in accordance with good industrial hygiene and safety practice.

Exposure controls

Components	OSHA STEL	OSHA PEL	OSHA TWA	ACGIH STEL	ACGIH TWA
White mineral oil					5 mg/m ³
(Petroleum)					J J

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Liquid

Color: Off-white

Odor: Characteristic

Physical state: Liquid

Vapor pressure: < 1.0 mm Hg @ 25°C

Boiling point/range: 260 (°C)

Solubility: Water insoluble

Density: 0.85 g/cm³

Bulk Density 7.1 lbs/gal

Bulk density: 7.1 lbs/gal

Flash Point: $> 300 \,^{\circ}\text{F} / > 145 \,^{\circ}\text{C}$

Explosive properties: Not explosive

Solvent content:

Percent Volatile: ~ 71 %

VOC content: 2.08 lbs/gal; 250 g/l

10. STABILITY AND REACTIVITY

Stability: Stable at normal conditions

Conditions to avoid: Heat, flames and sparks

Materials to avoid: Oxidizing agents

Hazardous decomposition

products:

No decomposition if stored normally

Possibility of Hazardous

Reactions:

Will not occur

11. TOXICOLOGICAL INFORMATION

11. TOXICOLOGICAL INFORMATION

Acute toxicity

Components	LC50/inhalation/4h/Rat	LD50/Dermal/Rat	LD50/Oral/Rat
Octamethylcyclotetrasiloxane	> 12.7 mg/kg/4hrs (rat) > 17.6 mg/L/1hr (rat)	> 2400 mg/kg (rat) 794 uL/kg (rabbit)	1540 mg/kg
Poly(oxy-1,2-ethanediyl),.alpha (dinonylphenyl)omegahydroxy- ,branched		No data available	No data available
White mineral oil (Petroleum)	> 5 mg/L	No data available	> 5000 mg/kg

Local effects

Skin irritation: May cause skin irritation and/or dermatitis.

Eye irritation: May cause eye/skin irritation.

Inhalation: Harmful by inhalation. May cause irritation of respiratory tract. Vapors may cause

drowsiness and dizziness.

Ingestion: May be harmful if swallowed, avoid ingestion. Ingestion may cause gastrointestinal

irritation, nausea, vomiting and diarrhea.

Chronic toxicity: See table and/or data, below

Components	NTP	IARC	OSHA
White mineral oil (Petroleum)		Group 3- Unclassifiable as to	
		carcinogenicity to humans	

Specific effects

Carcinogenic effects: No classification data on the carcinogenic properties of this material is available from

the IARC, NTP or OSHA

Target Organs: Respiratory system

Components	EU - Endocrine Disrupters Candidate List	EU - Endocrine Disruptors - Evaluated Substances
Octamethylcyclotetrasiloxane	Category 1	Category 1
Poly(oxy-1,2-ethanediyl),.alpha (dinonylphenyl)omegahydroxy- .branched	Group III Chemical	

12. ECOLOGICAL INFORMATION

Aquatic toxicity:

Components	LC50/96hr/48hr/24hr	EC50/96hr/48hr/24hr	Bioaccumulation Concentration Factor	No Observable Effect Concentration/96hr/ 48hr/24hr (NOEC)
Octamethylcyclotetrasiloxa ne	> 1000 mg/L (Bluegill) > 500 mg/L (Zebra danio)	25.2 mg/L (Daphnia magna; 24hr)	No data available	No data available
Poly(oxy-1,2- ethanediyl),.alpha (dinonylphenyl)omega hydroxy-,branched	No data available	No data available	No data available	No data available
White mineral oil (Petroleum)	> 10 g/L (fresh water, fish)	No data available	No data available	No data available

Persistence and degradability:

No data available

Environmental Fate and

Pathways:

Mobility: No data available

Biodegradability: No data available

Bioaccumulative potential: No data available

Physical / Chemical: No data available

BOD/COD:

COD-value: No data available

BOD5-value: No data available

13. DISPOSAL CONSIDERATIONS

Waste from residues / unused

products:

Do not contaminate ponds, waterways or ditches with chemical or used container.

Dispose of in accordance with Local and National regulations.

RCRA Hazardous Waste:

RCRA: Not listed

14. TRANSPORT INFORMATION

U.S. Department of Transportation Ground (49 CFR):

Proper shipping name: Not regulated

International Air Transportation (ICAO/IATA):

Proper shipping name: Not regulated

14. TRANSPORT INFORMATION

International Maritime Organization (IMO/IMDG):

Proper shipping name: Not regulated

Surface Shipments in Europe (ADR/RID):

Proper shipping name: Not regulated

15. REGULATORY INFORMATION

Heavy metals:

Heavy metals content (ppm): Not applicable

International Inventories

TSCA/ Listed EINECS/ Listed

(USA) (EU)

DSL/ Listed **NDSL**/ Not applicable

(CANADA) (CANADA)

ENCS/ Not Listed IECSC/ Listed

(JAPAN) (CHINA)

PICCS/ Not Listed KECL Not Listed

(PHILLIPINES) (KOREA)

AICS/ Listed HSNO/ Listed

(AUSTRALIA) New Zealand:

NECSI/ Listed

(TAIWAN)

U.S. Regulations

TSCA Section 12(b) Export Notification

This product does not contain chemicals that are required to be notified under the TSCA 12(b) Export Notification.

SARA Title III:

Section 302 EHS: None Section 311/312: None

Section 313: Not listed

California Prop. 65:

Not listed

Canada

WHMIS hazard class: Non-controlled

This MSDS has been prepared according to the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all of the information required

by the CPR.

16. OTHER INFORMATION

HMIS:

Health: 1 Flammability: 1 Reactivity: 0

This Material Safety Data Sheet contains changes from the previous version in Sections:

2, 3, 5, 8, 9, 11, 12, 15

Previous Revision Date:

23-Sep-2003

Key/Legend: N/A: Not applicable N/D: Not determined ppm: Parts per million

X: Listed

Prepared by: Product Stewardship

The data set forth in these sheets are based on information provided by the suppliers of the raw materials and chemicals used in the manufacture of the aforementioned product. ELEMENTIS SPECIALTIES makes no warranty with respect to the accuracy of the information provided by their suppliers, and declaims all liability of reliance thereon. ELEMENTIS SPECIALTIES warrants only that its products conforms with their published specifications, and no other express warranty is made with regards thereof. We do not guarantee favorable results, and we assume no liability in connection with the use of the products. They are intended for use by persons having technical skill and knowledge, at their own discretion and risk.