SAFETY DATA SHEET

FORESPAR® MareLube™ TEF45™

Issue / Revision Date: 1/18/17

Section 1. Identification

Product Name FORESPAR® MareLube™ TEF45™

Trademark(s) used on

the label

FORESPAR® MareLube™ TEF45™

Other means of

identification Product code: 770065, 770066, 770067, 770068

NSF H-1 8030-01-450-4009 (Applies to #770066 only)

Registration

Number Not available.

Manufacturer Forespar Products Corp.

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Emergency telephone

number (with hours of

operation) 1-949-858-8820 Mon-Friday Hours 8 a.m.-5 p.m.

(USA Pacific Standard Time / California)

Section 2. Hazards identification

OSHA/HCS status This material is considered hazardous by the OSHA Hazard Communication Standard(29

CFR 1910.1200).

Classification of the substance or mixture

SKIN SENSITIZATION - Category 1.

GHS label elements



Hazard pictograms

Signal word Warning

Hazard statements May cause an allergic skin reaction.

Precautionary statements

General Read label before use. If medical advice is needed, have product container or label at

hand.

Section 2. Hazards identification

Prevention Wear protective gloves. Avoid breathing dust. Contaminated work clothing should not

be allowed out of the workplace.

Response IF ON SKIN: Wash with plenty of soap and water. Wash contaminated clothing before

reuse. If skin irritation or rash occurs: Get medical attention.

Storage Not applicable.

Disposal Dispose of contents and container in accordance with all local, regional, national and

international regulations.

Hazards not otherwise

Classified None known.

Section 3. Composition/information on ingredients

Substance/mixture Mixture.

Other means of

identification Not available.

CAS number/other identifiers

CAS number Not applicable.

Product code 770065, 770066, 770067, 770068

Ingredient name	%	CAS number
Calcium bis(dinonylnaphthalenesulphonate)	1 - 5	57855-77-3

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

Eye contact Immediately flush eyes with plenty of water, occasionally lifting the upper and lower

eyelids. Continue to rinse for at least 20 minutes. Get medical attention if irritation

occurs.

Inhalation Remove victim to fresh air and keep at rest in a position comfortable for breathing. If

not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical

attention immediately.

Skin contact Wash with plenty of soap and water. Wash contaminated clothing thoroughly with

water before removing it, or wear gloves. Continue to rinse for at least 20 minutes. Get medical attention. In the event of any complaints or symptoms, avoid further exposure.

Wash clothing before reuse. Clean shoes thoroughly before reuse.

Ingestion Wash out mouth with water. Remove victim to fresh air and keep at rest in a position

comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place

in recovery position and get medical attention immediately.

Most important symptoms/effects, acute and delayed

Section 4. First aid measures

Potential acute health effects

Eye contact

No known significant effects or critical hazards.

Inhalation

No known significant effects or critical hazards.

Skin contact May cause an allergic skin reaction.

Ingestion No known significant effects or critical hazards.

Section 4. First aid measures

Over-exposure signs/symptoms

Eye contact No known significant effects or critical hazards.

Inhalation No known significant effects or critical hazards.

Skin contact Adverse symptoms may include the following: irritation redness

Ingestion No known significant effects or critical hazards.

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician Treat symptomatically. Contact poison treatment specialist immediately if large

quantities have been ingested or inhaled.

Specific treatments No specific treatment.

Protection of first-aiders No action shall be taken involving any personal risk or without suitable training. It may

be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing

media In case of fire, use water spray (fog), foam, dry chemical or CO₂

Unsuitable extinguishing

media None known.

Specific hazards arising

from the chemical No specific fire or explosion hazard.

Hazardous thermal

decomposition products Decomposition products may include the following materials:

carbon dioxide carbon monoxide sulfur oxides

halogenated compounds metal oxide/oxides

Special protective actions

for fire-fighters No special measures are required.

Special protective equipment

for fire-fighters Fire-fighters should wear appropriate protective equipment and self-contained

breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency

personnel No action shall be taken involving any personal risk or without suitable training. Keep

unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders If specialized clothing is required to deal with the spillage, take note of any

information in Section 8 on suitable and unsuitable materials. See also the information

in "For non- emergency personnel".

Environmental precautions Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains

and sewers. Inform the relevant authorities if the product has caused environmental

pollution (sewers, waterways, soil or air).

Section 6. Accidental release measures

Methods and materials for containment and cleaning up

Small spill Move containers from spill area. Avoid dust generation. L

Move containers from spill area. Avoid dust generation. Using a vacuum with HEPA filter will reduce dust dispersal. Place spilled material in a designated, labeled waste

container. Dispose of via a licensed waste disposal contractor.

Large spill Move containers from spill area. Approach release from upwind. Prevent entry into

sewers, water courses, basements or confined areas. Avoid dust generation. Do not dry sweep. Vacuum dust with equipment fitted with a HEPA filter and place in a closed, labeled waste container. Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling

Protective measures Put on appropriate personal protective equipment (see Section 8). Persons with a

history of skin sensitization problems should not be employed in any process in which this product is used. Do not get in eyes or on skin or clothing. Do not ingest. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can

be hazardous. Do not reuse container.

Advice on general occupational hygiene

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. See also Section 8 for additional information on hygiene

measures.

Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations. Store in original container protected from

direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate

containment to avoid environmental contamination.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits None.

Appropriate engineering Good general ventilation should be sufficient to control worker exposure to **Controls**

airborne controls contaminants.

Environmental exposure

Controls

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation.

Individual protection measures

Hygiene measures Wash hands, forearms and face thoroughly after handling chemical products, before

eating, smoking and using the lavatory and at the end of the working period.

Appropriate techniques should be used to remove potentially contaminated clothing.

Contaminated work clothing should not be allowed out of the workplace. Wash

contaminated clothing before reusing. Ensure that eyewash stations and safety showers

are close to the workstation location.

Eye/face protection Safety eyewear complying with an approved standard should be used when a risk

assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases

or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side- shields.

Section 8. Exposure controls/personal protection

Skin protection

Hand protection Chemical-resistant, impervious gloves complying with an approved standard should be

> worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

Body protection Personal protective equipment for the body should be selected based on the task being

performed and the risks involved and should be approved by a specialist before

handling this product.

Other skin protection Appropriate footwear and any additional skin protection measures should be selected

based on the task being performed and the risks involved and should be approved by a

specialist before handling this product.

Respiratory protection Use a properly fitted, particulate filter respirator complying with an approved standard

if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working

limits of the selected respirator.

Section 9. Physical and chemical properties

Appearance

Physical state Semi-solid Color White Odor Mild

Not available Odor threshold рН Not available Melting point Not available **Boiling point** Not available

Flash point Open cup: 176.67° C (350° F) [Cleveland]

Burning time Not available **Burning rate** Not available **Evaporation rate** Not available Flammability (solid, gas) Not available Lower and upper explosive Not available

(flammable) limits

Vapor pressure Not available Vapor density Not available Relative density 1.13 g/ml

Solubility Insoluble in the following materials: cold water and hot water.

Partition coefficient: Not available

n-octanol/water

Auto-ignition temperature

Not available Not available SADT Viscosity Not available

Section 10. Stability and reactivity

No specific test data related to reactivity available for this product or its ingredients. Reactivity

Chemical stability The product is stable.

Possibility of hazardous Under normal conditions of storage and use, hazardous reactions will not occur.

reactions

Conditions to avoid Do not heat above flash point.

Incompatible materials Reactive or incompatible with the following materials: oxidizing materials.

Hazardous decomposition Under normal conditions of storage and use, hazardous decomposition products should

products not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Calcium bis	LD50 Dermal	Rabbit Rat	>20 g/kg	-
(dinonylnaphthalenesulph	LD50 Oral		>5000 mg/kg	-
onate)				

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Calcium bis	Skin - Moderate	Rabbit	-	0.5 mL	-
(dinonylnaphthalenesulph	irritant				
onate)					

SensitizationThere is no data available.MutagenicityThere is no data available.CarcinogenicityThere is no data available.Reproductive toxicityThere is no data available.TeratogenicityThere is no data available.Specific target organ toxicityThere is no data available.

(single exposure)

Specific target organ toxicity There is no data available.

(repeated exposure)

Aspiration hazard There is no data available.

Information on the likely

Dermal contact. Eye contact. Ingestion.

routes of exposure

Potential acute health effects

Eye contactNo known significant effects or critical hazards.
Inhalation
No known significant effects or critical hazards.

Skin contact May cause an allergic skin reaction.

IngestionNo known significant effects or critical hazards.Symptoms related to the physical, chemical and toxicological characteristicsEye contactNo known significant effects or critical hazards.InhalationNo known significant effects or critical hazards.Skin contactAdverse symptoms may include the following:

irritation redness

Ingestion No known significant effects or critical hazards.

Delayed and immediate effects and also chronic effects from short and long term

exposure

Short term exposure

Potential immediate No known significant effects or critical hazards.

effects

Potential delayed effects No known significant effects or critical hazards.

Long term exposure

Potential immediate No known significant effects or critical hazards.

effects

Potential delayed effects No known significant effects or critical hazards.

Potential chronic health effects

General Once sensitized, a severe allergic reaction may occur when subsequently exposed to

very low levels.

CarcinogenicityNo known significant effects or critical hazards.MutagenicityNo known significant effects or critical hazards.TeratogenicityNo known significant effects or critical hazards.Developmental effectsNo known significant effects or critical hazards.

Section 11. Toxicological information

Numerical measures of toxicity

Acute toxicity estimates

Route	ATE value
Oral	166315.8 mg/kg

Section 12. Ecological information

<u>Toxicity</u> There is no data available.

<u>Persistence and degradability</u> There is no data available.

Bioaccumulative potential There is no data available.

Mobility in soil

Soil/water partition coefficient (Koc)

Not available.

Other adverse effects No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods

The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling empty containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

	DOT Classification	IMDG	IATA
UN number	Not regulated.	Not regulated.	Not regulated.
UN proper shipping	-	-	-
name			
Transport hazard	-	-	-
class(es)			
Packing group	-	-	-
Environmental hazards	No.	No.	No.
Additional information			

AERG Not applicable.

Special precautions for user

Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport in bulk according to Annex II of MARPOL

Not available.

Section 15. Regulatory information

U.S. Federal regulations Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs)

Clean Air Act Section 602 Class I Substances

Clean Air Act Section 602 Class II Substances DEA List I Chemicals (Precursor Chemicals)

DEA List II Chemicals (Essential Chemicals)

SARA 302/304

Composition/information on ingredients

No products were found.

SARA 304 RQ Not applicable.

SARA 311/312

Classification Immediate (acute) health hazard

Composition/information on ingredients

Name	%	Fire hazard	Sudden release of pressure	Reactive	Immediate (acute) health hazard	Delayed (chronic) health hazard
Calcium bis(dinonylnaphthalenesulphonate	1 - 5	No.	No.	No.	No.	No.

SARA 313

No products were found. **State regulations**

Massachusetts
None of the components are listed.
New York
None of the components are listed.
New Jersey
None of the components are listed.
None of the components are listed.
None of the components are listed.

Not listed

California Prop. 65 No products were found.

International regulations

International lists Australia inventory (AICS): All components are listed or exempted.

China inventory (IECSC): All components are listed or exempted.

Korea inventory: All components are listed or exempted.

New Zealand Inventory of Chemicals (NZIoC): All components are listed or exempted.

Philippines inventory (PICCS): All components are listed or exempted.

Chemical Weapons

Convention List Schedule I

Chemicals

Chemical Weapons Not listed

Convention List Schedule II

Chemicals

Chemical Weapons Not listed

Convention List Schedule III

Chemicals

Section 16. Other information

Hazardous Material Information System (U.S.A.)

Health 0 * Flammability 1 * Physical hazards 0 *

Caution: HMIS® and NFPA ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks.

The customer is responsible for determining the PPE code for this material.

National Fire Protection Association (U.S.A.)

Health 0 Flammability 1 Instability 0

History

Date of issue mm/dd/yyyy 10/2/2015

Version 1

Revised Section(s) Not applicable.

Key to abbreviations ATE = Acute Toxicity Estimate

BCF = Bioconcentration Factor

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

IATA = International Air Transport Association

IBC = Intermediate Bulk Container

IMDG = International Maritime Dangerous Goods

LogPow = logarithm of the octanol/water partition coefficient

MARPOL 73/78 = International Convention for the Prevention of Pollution From Ships,

1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)

UN = **United Nations**

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