



Factor II, Incorporated

The Art, Science and Technology of
Silicones and Prosthetics...

Safety Data Sheet

Product Code A-415

Date of issue: 09-09-2016

Revision Date: 05-05-2019

SECTION 1: IDENTIFICATION

PRODUCT IDENTIFIER

Product Name : Silicone Mixture

Product Code : A-415

Intended Use(s) : For professional use only

CONTACT INFORMATION FOR SUPPLIER OF SAFETY DATA SHEET

Factor II, Incorporated
5642 White Mountain Ave
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EMERGENCY TELEPHONE NUMBERS

928- 368-7502

SECTION 2: HAZARD(S) IDENTIFICATION

Hazard Classification

Physical Hazards

Flammable liquids

Category 3

Health Hazards Serious

Serious Eye Damage/Eye Irritation

Category 2A

Specific Target Organ Toxicity - Single Exposure

Category 31.

Specific Target Organ Toxicity - Repeated Exposure

Category 12.

Aspiration Hazard

Category 1

Target Organs

1. Respiratory tract irritation.
2. Central nervous system.

Unknown toxicity - Health

Acute toxicity, oral	0 %
Acute toxicity, dermal	3.31 %
Acute toxicity, inhalation, vapor	3.31 %
Acute toxicity, inhalation, dust or mist	3.31 %



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Hazard Symbol:



Signal Word:

Danger

Hazard Statement:

Flammable liquid and vapor.
Causes serious eye irritation.
May cause respiratory irritation.
Causes damage to organs through prolonged or repeated exposure.
May be fatal if swallowed and enters airways.

Precautionary Statement

Prevention:

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep container tightly closed. Ground and bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting/equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Wear protective gloves/protective clothing/eye protection/face protection. Wash thoroughly after handling. Use only outdoors or in a well-ventilated area. Do not breathe dust or mists. Do not eat, drink or smoke when using this product.

Response:

IF INHALED: Remove person to fresh air and keep comfortable for breathing. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
IF SWALLOWED: Immediately call a POISON CENTER/doctor. Do NOT induce vomiting. Call a POISON CENTER/doctor if you feel unwell. In case of fire: Use ... to extinguish.

Storage:

Store in well-ventilated place. Keep cool. Keep container tightly closed. Store locked up.

Disposal:

Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.



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Other hazards which do not result in GHS classification:

Static accumulating flammable liquid can become electrostatically charged even in bonded and grounded equipment. Sparks may ignite liquid and vapor. May cause flash fire or explosion.

SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

Mixtures

Chemical Identity	CAS number	Content in percent (%) [*]	Notes
Mineral Spirit	Trade secret	60 - 100%	# This substance has workplace exposure limit(s).
Tetraethyl Silicate, Tetraethoxysilane	78-10-4	15 - 40%	# This substance has workplace exposure limit(s).
1,2,4-TRIMETHYLBENZENE	95-63-6	3 - 7%	# This substance has workplace exposure limit(s).
Silicic acid, ethyl ester	11099-06-2	1 - 5%	No data available

. * All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

Trade secret information:

** A specific chemical identity and/or percentage of composition has been withheld as a trade secret.

SECTION 4: FIRST-AID MEASURES

Ingestion: Do NOT induce vomiting.

Inhalation: Move into fresh air and keep at rest. Get medical attention.

Skin Contact: Wash area with soap and water. If skin irritation occurs: Get medical advice/attention.

Eye contact: No data available

Most important symptoms/effects, acute and delayed

Symptoms: Treatment is symptomatic and supportive.

Hazards: No data available.

Indication of immediate medical attention and special treatment needed

Treatment No data available.



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SECTION 5: FIRE-FIGHTING MEASURES

General Fire Hazards: No data available.

Suitable (and unsuitable) extinguishing media

Suitable extinguishing media All standard extinguishing agents are suitable.

Unsuitable extinguishing media: No data available.

Specific hazards arising from the chemical:

Vapors may travel considerable distance to a source of ignition and flash back.

Special protective equipment and precautions for firefighters

Special fire fighting procedures: No data available.

Special protective equipment for fire-fighters:

Flammable Firefighters must wear NIOSH/MSHA approved positive pressure self-contained breathing apparatus with full face mask and full protective clothing.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:

Warning! Flammable Avoid contact with eyes, skin, and clothing. Keep out of reach of children.

Methods and material for containment and cleaning up:

Warn other workers of spill. Wear proper protective equipment as specified in the protective equipment section. Wipe, scrape, or soak up in an inert material and put in a container intended for flammable materials for disposal. Keep unauthorized personnel away.

Environmental Precautions: Do not allow runoff to sewer, waterway or ground.

SECTION 7: HANDLING AND STORAGE

Precautions for safe handling: Sensitivity to static discharge is expected; material has a flash point below 200 F.

Conditions for safe storage, including any incompatibilities:

Keep away from heat, sparks and open flame.
Keep container closed.



SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

Control Parameters

Occupational Exposure Limits

Chemical Identity	Type	
Mineral Spirit	TWA	100 ppm
	REL	350 mg
	Ceil_Time	1,800 m
	PEL	500 ppm
	TWA	100 ppm
Tetraethyl Silicate, Tetraethoxysilane	TWA	10 ppm
	REL	10 ppm
	PEL	100 ppm
	TWA	10 ppm
1,2,4-TRIMETHYLBENZENE	TWA	25 ppm
	REL	25 ppm
	TWA	25 ppm

Appropriate Engineering Controls

Use only in well-ventilated areas.

Individual protection measures, such as personal protective equipment

General information:

Ventilation and other forms of engineering controls are preferred for controlling exposures. Respiratory protection may be needed for nonroutine or emergency situations.

Eye/face protection:

Face shield Safety glasses with side shields
Monogoggles

Skin Protection

Hand Protection:

Chemical resistant gloves

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Physical state:

liquid



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Form:	liquid
Color:	Blue
Odor:	Faint
Odor threshold:	No data available.
pH:	Not applicable
Melting point/freezing point:	< -34 °C
Initial boiling point and boiling range:	Not applicable
Flash Point:	36.60 °C (Closed Cup)
Evaporation rate:	No data available.
Flammability (solid, gas):	No data available.
Upper/lower limit on flammability or explosive limits	
Flammability limit - upper (%):	6.00 %(V)
Flammability limit - lower (%):	1.00 %(V)
Explosive limit - upper (%):	No data available.
Explosive limit - lower (%):	No data available.
Heat of combustion:	No data available.
Vapor pressure:	Not applicable
Vapor density:	No data available.
Density:	Calculated 0.86 g/cm ³
Relative density:	0.81
Solubility(ies)	
Solubility in water:	Negligible
Solubility (other):	Soluble in toluene
Partition coefficient (n-octanol/water) Log Pow:	No data available.
Auto-ignition temperature:	245.00 °C
Decomposition temperature:	No data available.
SADT:	No data available.
Viscosity, dynamic:	No data available.
Viscosity, kinematic:	No data available.
VOC:	765 g/l

SECTION 10: STABILITY AND REACTIVITY

Reactivity:	No data available.
Chemical Stability:	No data available.
Possibility of hazardous reactions:	Hazardous polymerisation does not occur.
Conditions to avoid:	Keep away from sources of ignition - No smoking. Keep away from sources of ignition - No smoking.
Incompatible Materials:	Oxidizing agents.
Hazardous Decomposition Products:	Carbon



SECTION 11: TOXICOLOGICAL INFORMATION

Information on likely routes of exposure Ingestion: No data available.

Inhalation: No data available.

Skin Contact: No data available.

Eye contact: No data available.

Symptoms related to the physical, chemical and toxicological characteristics

Ingestion: No data available.

Inhalation: No data available.

Skin Contact: No data available.

Eye contact: No data available.

Information on toxicological effects

Acute toxicity (list all possible routes of exposure)

Oral Product: ATEmix : 5,198.39 mg/kg

Specified substance(s):

Tetraethyl Silicate, Tetraethoxysilane

LD 50 (Rat, No data available.): 6,270 mg/kg

LD 50: > 2,000 mg/kg

Dermal Product: Not applicable. Not classified for acute toxicity based on available data.

Specified substance(s):

Tetraethyl Silicate, Tetraethoxysilane

LD 50 (Rabbit, No data available.): 5,875 mg/kg

Inhalation Product: ATEmix : 41.83 mg/l

ATEmix : 5.7 mg/l

Specified substance(s):

Tetraethyl Silicate, Tetraethoxysilane

TDL_o (Rat, No data available.): 1 mg/l

Repeated dose toxicity Product: No data available.

Skin Corrosion/Irritation Product: No data available.

Serious Eye Damage/Eye Irritation Product: No data available.

Respiratory or Skin Sensitization Product: No data available.

Carcinogenicity Product: No data available.

IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:



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No carcinogenic components identified

US. National Toxicology Program (NTP) Report on Carcinogens:

No carcinogenic components identified

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050):

No carcinogenic components identified

Germ Cell Mutagenicity

In vitro Product: No data available.

In vivo Product: No data available.

Reproductive toxicity Product: No data available.

Specific Target Organ Toxicity - Single Exposure Product: No data available.

Specific Target Organ Toxicity - Repeated Exposure Product: No data available.

Target Organs

Specific Target Organ Toxicity - Single Exposure: Respiratory tract irritation.

Specific Target Organ Toxicity - Repeated Exposure: Central nervous system.

Aspiration Hazard Product: No data available.

Other effects: None.

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity:

Acute hazards to the aquatic environment:

Fish Product: No data available.

Specified substance(s):

Tetraethyl Silicate, Tetraethoxysilane

LC100 (No data available. 24 h): 9,000 mg/l

LC50 (Brachydanio rerio, 96 h): > 245 mg/l

Aquatic Invertebrates Product: No data available.

Specified substance(s):

Tetraethyl Silicate, Tetraethoxysilane

EC50 (Blue Crab): 7,800 mg/l

Chronic hazards to the aquatic environment:

Fish Product: No data available.

Aquatic Invertebrates Product: No data available.

Toxicity to Aquatic Plants Product: No data available.

Persistence and Degradability

Biodegradation Product: No data available.



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Specified substance(s):

Tetraethyl Silicate, Tetraethoxysilane

98 % (28 d, OECD-Guideline 301 A (DOC Die-Away Test))

Readily biodegradable

BOD/COD Ratio Product: No data available.

Bioaccumulative Potential

Bioconcentration Factor (BCF) Product: No data available.

Partition Coefficient n-octanol / water (log Kow) Product:
No data available.

Mobility in Soil: No data available.

Known or predicted distribution to environmental compartments

Mineral Spirit No data available.

Tetraethyl Silicate, Tetraethoxysilane No data available.

1,2,4TRIMETHYLBENZENE No data available.

Silicic acid, ethyl ester No data available.

Known or predicted distribution to environmental compartments

1-butanol, titanium(4+)salt No data available.

Other Adverse Effects: No data available.

SECTION 13: DISPOSAL CONSIDERATIONS

Disposal instructions: Disposal should be made in accordance with federal, state and local regulations.

Contaminated Packaging: Dispose of as unused product.

SECTION 14: TRANSPORT INFORMATION

DOT

UN Number:	UN 1993
UN Proper Shipping Name:	Flammable liquids, n.o.s.(SOLVENT NAPHTHA, TETRAETHYL SILICATE)
Transport Hazard Class(es)	
Class:	3
Label(s):	3
Packing Group:	III
Marine Pollutant:	No

IMDG

UN Number: UN 1993



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UN Proper Shipping Name:	FLAMMABLE LIQUID, N.O.S.(SOLVENT NAPHTHA, TETRAETHYL SILICATE)
Transport Hazard Class(es)	
Class:	3
Label(s):	3
EmS No.:	F-E, S-E
Packing Group:	III
Marine Pollutant:	No
Limited quantity	5.00L
Excepted quantity	E1

IATA

UN Number:	UN 1993
Proper Shipping Name:	Flammable liquid, n.o.s.(SOLVENT NAPHTHA, TETRAETHYL SILICATE)
Transport Hazard Class(es):	
Class:	3
Label(s):	3
Packing Group:	III
Cargo aircraft only Packing Instructions:	366
Passenger and cargo aircraft Packing Instructions:	366
Limited quantity:	10.00L
Packing Instructions:	Y344
Excepted quantity	E1

Environmental Hazards:	Not regulated.
Marine Pollutant:	No

SECTION 15: REGULATORY INFORMATION

US Federal Regulations

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)
None present or none present in regulated quantities.

CERCLA Hazardous Substance List (40 CFR 302.4):
None present or none present in regulated quantities.

Superfund Amendments and Reauthorization Act of 1986 (SARA)
Hazard categories
Fire Hazard
Acute Health Hazard
Fire Hazard Immediate (Acute) Health Hazards
Delayed (Chronic) Health Hazard

SARA 302 Extremely Hazardous Substance



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Silicic acid, ethyl ester

US. Rhode Island RTK

No ingredient regulated by RI Right-to-Know Law present.

US. Pennsylvania RTK - Hazardous Substances

Chemical Identity

Mineral Spirit
Tetraethyl Silicate, Tetraethoxysilane
1,2,4-TRIMETHYLBENZENE
Silicic acid, ethyl ester

Inventory Status

Australia AICS:	y (positive listing)	Remarks: None.
EU EINECS List:	y (positive listing)	Remarks: None
Japan (ENCS) List:	y (positive listing)	Remarks: None.
China Inventory of Existing Chemical Substances:	y (positive listing)	Remarks: None.
Korea Existing Chemicals Inv. (KECI):	y (positive listing)	Remarks: None
Canada DSL Inventory List:	y (positive listing)	Remarks: None.
Canada NDSL Inventory:	n (Negative listing)	Remarks: None.
New Zealand Inventory of Chemicals:	n (Negative listing)	Remarks: None.
Philippines PICCS:	y (positive listing)	Remarks: None.
US TSCA Inventory:	y (positive listing)	Remarks: None.
Taiwan. Taiwan inventory (CSNN):	y (positive listing)	Remarks: None

SECTION 16: OTHER INFORMATION

HMIS III:

Health	3 – Serious	* - Chronic health effect
Flammability	3 – Serious	
Physical Hazards	1 – Slight	
Personal Protection		

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