SAFETY DATA SHEET

TO COMPLY WITH OSHA HAZARD COMMUNICATION STANDARD 29 CFR.1910.1200 & THE GLOBALLY HARMONIZED SYSTEM OF CLASSIFICATION AND LABELLING OF CHEMICALS

1. PRODUCT AND COMPANY IDENTIFICATION

1.1 Product Identifier

Product Form: Liquid
Substance Name: SHARKTHANE A SIDE FOAM
Product Code(s): 30040700000101, 30040700000131, 30040700000151, 30100100100015

1.2 Details of the Supplier of the Safety Data Sheet

Fiberlay Inc.
1468 Northgate Blvd
Sarasota, FL 34234
T 206-782-0660
F 888-782-0662
www.Fiberlay.com

1.3 Emergency Telephone Number

Emergency Number: CHEMTREC: Domestic - 800-424-9300

2. HAZARDS IDENTIFICATION

2.1 HAZARD CODE/CLASS

- Acute Tox.(inhalation dust, mist) : Class4
- STOT Single : Class1
- STOT Rep. : Class1

2.2 HAZARD STATEMENT CODE

Symbol

SIGNAL WORD : DANGER

RISK PHRASES

H332 : Harmful if inhaled.
H370 : Causes damage to organs.
H372 : Causes damage to organs(state all organs affected, in known) through prolonged or repeated exposure. (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard)

SAFETY PHRASES

PREVENTION : P260 : Do not breathe dust/fume/gas/mist/vapors/spray.
P261 : Avoid breathing dust/fume/gas/mist/vapors/spray.
P264 : Wash … thoroughly after handling.(cont'd)
P270 : Do not eat, drink, or smoke when using this product.
P271 : Use only outdoors or in a well-ventilated area.

RESPONSE : P310 : Immediately call a POISON CENTER or doctor/physician.
P314 : Get medical advice/attention if you feel unwell.
P320 : Specific treatment is urgent(see…on this label)
P321 : Specific treatment.
P304+P340 : IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P307+P311 : If exposed: Call a POSION CENTER or doctor/physician.

STORAGE : P405 : Store locked up.
P403+P233 : Store in a well-ventilated place. Keep container tightly closed.

DISPOSAL : P501 : Dispose of contents and containers in accordance with local, regional and international regulations.

2.3 OTHER HAZARD

Polymethylene polyphenyl isocyanate: Health – No Data
Fire - No Data
Reactivity – No Data

3. COMPOSITION / INFORMATION ON INGREDIENTS

Component	Cas No.	Percentage
Polymethylenepolyphenyl Isocyanate	9016-87-9	100
4,4'-Methylenediphenyl Diisocyanate	101-68-8	35~45

4. FIRST AID MEASURES

EYE CONTACT

Wash eyes immediately with large amounts of water or normal saline, occasionally lifting upper and lower lids, until no evidence of chemical remains.(at least 15-20 minutes)

SKIN CONTACT

Remove contaminated clothing and shoes immediately.
Wash with soap or mild detergent and large amounts of water until no evidence of chemical remains. (at least 15-20 minutes)

INHANLATION

Perform artificial respiration if necessary.
Qualified medical personnel should consider administering oxygen.

INGESTION

If vomiting occurs, keep head lower than hips to keep respiration.
Treat symptomatically and supportively.
Get medical attention if needed.

NOTE TO PHYSICIAN

No specific antidote.
Treat symptomatically and supportively.

5. FIRE FIGHTING MEASURES

5.1 EXTINGUISHING MEDIA

Dry chemical powder, carbon dioxide, water spray or regular foam.
For larger fires, use water spray, fog or regular foam.

5.2 HAZARDOUS COMBUSTION PRODUCTS

Thermal decomposition products may include highly toxic fumes of hydrogen cyanide and toxic oxides of carbon and nitrogen.

5.3 FIRE FIGHTING

Move container from fire area if you can do it without risk.
Leave a maximum space when fight a fire.
Avoid inhalation noxious vapors, keep with one's own back to the wind.

6. ACCIDENTAL RELEASE MEASURES

Do not touch spilled material.
Stop leak if you can do it without risk after put on protective equipment.
Keep unnecessary people away. Isolate hazard area and deny entry.
Remove and exclude source of fire. Ensure adequate ventilation.
For small spills, take up with sand or other absorbent material and place into clean, dry containers for later disposal.
For larger spills, construct dike far ahead of spill for later disposal.
Prevent from entering drains, scoop up and place in a dry open top containers.
Treat with neutralizing solution.(mixture of water 90-95%, concentrated ammonia 3-8%, detergent 2%)
Do not seal waste container to prevent from blowing up by evolution of CO_2.

7. HANDLING AND STORAGE

Observe all federal, state and local regulations when storing this substance.
Should be handled in a well ventilated area.
Do not eat, drink or smoke in working area.
Use disposable containers and tools where possible.
Store in a cool, dry, well-ventilated area between 5-35℃, out of direct sunlight.
Store away from incompatible substances.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 EXPOSURE LIMITS

Component	Korea Regulation	ACGHI Regulation	Biological Exposure Limit
Polymethylenepolyphenyl Isocyanate	**NO DATA**	**NO DATA**	**NO DATA**

NOTE: TWA: time-weighted average
STEL: short term exposure limit

8.2 PERSONAL PROTECTION

VENTILATION

Process enclosure ventilation recommended to meet published exposure limits.

EYE PROTECTION

Employee must wear splash-proof or dust-resistant safety goggles and a face shield to prevent eye contact with this substance.

Emergency wash facilities

Where there is any possibility that an employee's eyes and/or skin may be exposed to this substance, the employer should provide an eye wash fountain and quick drench shower within the immediate work area for emergency use.

CLOTHING

Employee must wear appropriate protective (impervious) clothing and equipment to prevent repeated or prolonged skin contact with this substance.

GLOVES

Employee must wear appropriate protective gloves to prevent contact with this substance.

RESPIRATOR

The following respirators and maximum use concentrations are recommendations by the U.S. Department of Health and Human Services, NIOSH Pocket Guide to Chemical Hazards; NIOSH criteria documents or by the U.S. Department of Labor, 29 CFR 1910 Subpart Z.

The specific respirator selected must be based on contamination levels found in the work place, must not exceed the working limits of the respirator and be jointly approved by the National Institute for Occupational Safety and Health and the Mine Safety and Health Administration (NIOSH-MSHA).

9. PHYSICAL AND CHEMICAL PROPERTIES

DESCRIPTION :	DARK-AMBER TO BROWN, VICOUS LIQUID
ODOR :	MUSTY ODOR
ODOR THRESHOLD VALUE :	NO DATA
pH :	NO DATA
MELTING POINT / FREEZING POINT :	>= 0℃(>=32℉)
INITIAL BOILING POINT & BOILING POINT RANGE :	200~208 ℃ (392~406℉)
FLASHING POINT :	> 200℃
VAPORIZATION VELOCITY :	NO DATA
FLAMMABLILITY(SOLID, GAS) :	NO DATA
IGNITION OR EXPLOSION RANGE MAXIMUM/MINIMUM :	WITHOUT CORRESPONDING
VAPOR PRESSURE :	$1*10^{-5}$hPa(25℃)
SOLUBILITY :	REACTS
VAPOR DENSITY :	8.6
SPECIFIC GRAVITY :	1.23(25℃)
n-OCTANOL/WATER DIVISION COEFFICIEN:	10.46
SPONTANEOUS COMBUSTION TEMP. :	> 600℃
DECOMPOSITON TEMP. :	329℃
VISCOSITY :	150~220cps (25℃)

10. STABILITY AND REACTIVITY

10.1 REACTIVITY

Reacts slowly and exothermically on contact with water, generating sufficient heat and pressure to rupture the container in a closed system.

10.2 CONDITIONS TO AVOID

May burn but does not ignite readily.

Avoid contact with strong oxidizers, excessive heat, sparks, or open flame.

10.3 INCOMPATIBILLITIES

INGREDIENT	FORECAST REACTION
ACID	May react violently to heat
ALCOHOLS	May react violently to heat
AMINES	May react violently to heat
BASE	May react violently to heat
OXIDIZERS	Fire and explosion hazard

10.4 HAZARDOUS DECOMPOSITION

Thermal decomposition products may include highly toxic fumes of hydrogen cyanide and toxic oxides of carbon and nitrogen.

11. TOXICOLOGICAL INFORMATION

INHALATION

May cause respiratory tract irritation, chest discomfort, breathlessness, wheezing, cough with sputum, and reduced pulmonary function. Other effects may include headache, nausea, fever, depression and insomnia.

Other effects may include headache, nausea, fever, depression and insomnia.
High levels may produce chemical pneumonia, inflammation and pulmonary edema which may be fatal.
Sensitization reactions, including severe asthmatic reactions, may occur in previously exposed persons.

INGESTION

May cause irritation of the mouth and stomach.
Early hemolysis and intravascular clotting also occurred.
May also cause corrosion of the mouth, throat and digestive tract.
Diarrhea, abdominal cramps, bloody, watery stools, and vomiting of rock-hard whitish fragments from isocyanate polymerization developed.

SKIN CONTACT

Liquid may cause irritation and possible first degree burns.
Second degree burns may occur from longer exposures.
May cause inflammation, rash and itching.
Sensitization has been reported to occur in humans.
Dark stains on the hands may occur temporarily.
May irritate the skin causing redness, pain, contact eczema and follicular papules.
May cause sensitization dermatitis.

EYE CONTACT

May cause irritation with redness, pain, and blurred vision
Repeated and prolonged contact with irritants may cause conjunctivitis.

11.2 ACUTE & CHRONIC EXPXOSURE EFFECTS

Polymethylenepolyphenyl Isocyanate
Acute Tox.(ORAL) : LD50 49000mg/kg(Rat)
Acute Tox.(Dermal) : LD50>9400mg/kg(Rabbit)
Acute Tox.(Inhalation: dust, mist) : LC50 490mg/m3/4hr(Rat)
Acute Tox.(Inhalation: vapor) : Class4
STOT Single : Class1
STOT Rep. : Class1

12. ECOLOGICAL INFORMATION

12.1 AQUATIC / TERRESTRIALECOLOGICAL TOXICITY
No data available

12.2 REMAINING & RESOLVABILITY
No data available

12.3 BIOTIC CONCENTRATION
No data available

13. DISPOSAL CONSIDERATIONS

13.1 DISPOSAL METHOD

Observe all federal, state and local regulations when disposing of this substance.
Incineration under approved incinerator is the preferred method

14. TRANSPORT INFORMATION

UN NUMBER
- Polymethylenepolyphenyl Isocyanate : NO DATA

UN OPTIMIM SHIPPINGNAME
- Polymethylenepolyphenyl Isocyanate : WITHOUT CORRESPONDING

DANGEROUSNESS GRADE OF TRANSPORTATION :
- Polymethylenepolyphenyl Isocyanate : WITHOUT CORRESPONDING

CONTAINER GRADE
- Polymethylenepolyphenyl Isocyanate : WITHOUT CORRESPONDING

SUBSTANCE OF SEA POLLUTION
- Polymethylenepolyphenyl Isocyanate : NO DATA

SAFETY COUNTERMEASURE
- EMERGENCY ACTION(FIRE) : WITHOUT CORRESPONDING
- EMERGENCY ACTION(OUTFLOW) : WITHOUT CORRESPONDING

15. REGULATORY INFORMATION

PRODUCT TOTAL INFORMATION : NO DATA

COMPOMENT INFORMATION
Polymethylenepolyphenyl Isocyanate : NO DATA

EU CLASSIFICATION INFORMATION

SETTLEMENT CLASSFICATION RESULT
Polymethylenepolyphenyl Isocyanate : WITHOUT CORRESPONDING

RISK PHRASES
Polymethylenepolyphenyl Isocyanate : WITHOUT CORRESPONDING

SAFETY PHRASES
Polymethylenepolyphenyl Isocyanate : WITHOUT CORRESPONDING

AMERICAN ADMINISTRATION INFORMATION

California Proposition 65: This product does not contain any components that are regulated under Proposition 65.

OSHA(29CFR1910. 119) : WITHOUT CORRESPONDING

CERCLA103(40CFR302.4)
Polymethylenepolyphenyl Isocyanate : WITHOUT CORRESPONDING

EPCRA302(40CFR355.30)
Polymethylenepolyphenyl Isocyanate : WITHOUT CORRESPONDING

EPCRA304(40CFR355.40)
Polymethylenepolyphenyl Isocyanate : WITHOUT CORRESPONDING

EPCRA313(40CFR372.65)
Polymethylenepolyphenyl Isocyanate : CORRESPOND

PIC MATERIAL : WITHOUT CORRESPONDING

POPS MATERIAL : WITHOUT CORRESPONDING

MONTREAL PROTOCOL MATERIAL : WITHOUT CORRESPONDING

16. OTHER INFORMATION

16.1 REFERENCE

- EU : http://ec.europa.eu/enterprise/reach/docs/ghs/ghs_prop_vol_iiia_en.pdf
- KOREA : http://www.kosha.net
- UN GHS FILE

Sharkthane believes the law requires us to inform you that detectable amounts of any of the listed chemicals might be present in Sharkthane products. Based on a review of the list, Sharkthane products, like all synthetic and naturally occurring chemical substances, may conceivably contain trace contaminants of some of the listed substances. While not necessarily added to our products as ingredients, some of the listed chemicals may be present in the raw materials as received from suppliers over which we have no control.

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Prepared by: Kevin Aber
Comments: This Safety Data Sheet was prepared using information provided by Sharkthane.

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