Safety Data Sheet

1. IDENTIFICATION OF THE SU	BSTANCE/PREPARATION AND COMPANY
Product name:	UI-102T FLUORINE LINE MAINTENANCE SPRAY
Number	: UI102T_Eng
Company Identification	
Manufacture & Distributor	: SHIMANO NORTH AMERICA FISHING, INC.
Address	: 9560 Palmetto Commerce Parkway Ladson, South Carolina 29456 U.S.A.
Emergency Phone number	: +1-949-951-5003
Manufacture & Distributor	: SHIMANO EUROPE B.V.
Address	: High Tech Campus 92 NL-5656 AG Eindhoven, The Netherlands
Emergency Phone number	: +31-40-2612222
Manufacture & Distributor	: SHIMANO INC.
Address	: 3-77 Oimatsu-cho Sakaiku Sakai OSAKA 5908577, JAPAN
Emergency Phone number	: 0570-031961

2. HAZARDS IDENTIFICATION

GHS Classification		
<physical hazards=""></physical>	AEROSOLS	Category 1
<health hazards=""></health>	SPECIFIC TARGET ORGAN SYSTEMIC TOXICITY	
	SINGLE EXPOSURE	Category 3
<environmental hazards=""></environmental>	HAZARDOUS TO THE AQUATIC ENVIRONMENT (ACUTE)	Category 3
<hazards symbol=""></hazards>		
	\wedge	



<Signal word> <Hazard communication> DANGER

- •Extremely flammable aerosol
- ·Pressurized container: may burst if heated
- ·May cause respiratory irritation
- •May cause drowsiness or dizziness
- ·Harmful to aquatic life

*When there is not mention by the GHS classification, perform enough consideration about the safety measures / emergency measures / storage / disposal in reference to following Cautions

<Safety measurements>

• Do not handle until all safety precautions have been read and understood.

- •Keep away from ignition sources such as heat, sparks, or open flame.
- •Use only non-sparking tools.
- •Do not breath mist and vapor.
- •Use only in a outdoor or well-ventilated area.
- •Avoid release to the environment.
- Do not eat, drink or smork when using this product.
- ·To avoid thermal decomposition, do not overheat. Abnormally long
- processing time or high temperatures can produce irritating and toxic fumes.
- •Wear appropriate protective gloves, glasses, clothes, face shield, or mask.
- •Wash hands thoroughtly after handling.

<first-aid measures=""> <storage></storage></first-aid>	 If inhaled : Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical treatment if you feel unwell. If swallowed : Rinse mouth, do not induce vomiting. Immediately get medical treatment. If eye contact : Rinse cautiously with water for at least 15 minutes. Get medical treatment. If skin contact : Wash hands thoroughtly after handling. Remove contaminated clothing and the substance. Get medical treatment, if you feel unwell. Store in cool, dry, well-ventilated location. Keep away from heat and all possible source of ignition(temperature below 40°C)and keep away from sunlight.
	•Follow all regulation in your country.
<disposal></disposal>	•Follow all regulation in your country.
3. CONPOSITION/INFORMATIO	N ON INGRREDIENTS
Substance/Mixture :	Mixture
Chemical Product Name :	AEROSOL TYPE DRY LUBRICANT

Chem Composition

·		CAS.No.	Chemical formulae	Composition Mass%
Hydrofluoroether		Confidential	Confidential	$60\sim70\%$
Polytetrafluoroethylene		9002-84-0	(C2F4)n	< 5%
Fluorine polymer		Confidential	Confidential	< 1%
Liquefied petroleum	Propane	74-98-6	Unspecified	$30 \sim 40\%$
(Propellant)	Butane	106-97-8, 75-28-5	Unspecified	50 ~ 40%

4. FIRST AID MEASURES

Eye Contact	: Gently rinse the affected eyes with clean water for at least 15 minutes.
	And refer for medical attention.
Skin contact	: Remove all contamination with clothes and wash the affected area with
	water and soap. If irritation persists, or abnormal conditions are found,
	arrange examination and treatment by a physician.
Inhalation	: In case of large inhalation, remove the victim from the contamination to fresh
	air. Keep the victims warm and quiet. If breathing is weak, irregular or has
	stopped, administer artificial respiration.
	Arrange examination and treatment by a physician as soon as possible. In
	case of vapor, gas, remove the victim from the contamination to fresh air and
	arrange examination and treatment by a physician as soon as possible.
Ingestion	: Rinse mouth with water and dilute with water. Do not induce vomiting as this
	may increase the risk of aspiration of the liquid into the lungs causing
	chemical pneumonitis.
Most important signs	: The thermal decomposition vapors of fluorinated polymers may cause polymer fume fever
and condition	with flu-like symptoms in humans, especially when smoking contaminated tobacco.
	Symptoms usually appear after several hours and resolve within 1-2 days.

5. FIRE FIGHTING MEASURES	
Fire-Fighting:	
	1. Shut off fuel to fire.
	2. In case of small fire, use dry chemical powder or carbon dioxide.
	3. In case of large fire, foam spray is effective to stop flow-in of air.
	4. Watering may enlarge fire and increase risks.
	5. Water the neighbors for cooling.
	6. Keep personnel removed from and upwind fire.
	7. Firefighters should wear proper protective equipment.
	8. Evacuate personnel to safe area.
Special hazards with regards to	
Fire-Fighting measures:	Toxic gases (Tetrafluoroethylene, Hexafluoropropylene, Perfluoroisobutylene) will foam upon
	combustion. Pay attention to burst of container due to heat.
Extinguishing media:	Dry chemical powder, form or carbon dioxide.
6. ACCIDENTAL RELEASE MEA	
Personal precautions,protective e	equipment and emergency procedures:
	1. Provide advice related to accidental spills and release of the substance
	or mixture such as: the wearing of suitable protective equipment
	(including personal protective equipment, see Section 8 of the SDS)
	to prevent any contamination of skin, eyes and personal clothing;
	2. Provide advice related to accidental spills and release of the substance or
	mixture such as: removal of ignition sources and provision of sufficient ventilation;
	3. Provide advice related to accidental spills and release of the substance
	or mixture such as: emergency procedures such as the necessity to evacuate
	the danger area or to consult an expert.
Environmental precautions:	Provide advice on any environmental precautions related to accidental spills
F	and release of the substance or mixture, such as keeping away from drains,
	surface and ground water.
Methods and materials for contain	-
	1. Provide appropriate advice on how to contain and clean up a spill.
	Appropriate containment techniques may include:
	bunding, covering ofdrains; and capping procedures.
	2. Appropriate clean up procedures may include: equipment required for
	containment/clean up (include the use of non-sparking tools and equipment
	where applicable).

Provide any other issues relating to spills and releases. For example, including advice oninappropriate containment or clean up techniques.

7. HANDLING AND STORAGE	
Handling:	
Precautions for safe handling :	1. For personal protection see section 8. Protect from contamination. When opening containers, avoid breathing vapors that may be emanating. Avoid breathing dust. Avoid contamination of cigarettes or tobacco with dust from this material.
	 Provide appropriate exhaust ventilation at dryers, machinery and at places where dust or volatiles can be generated. In case of insufficient ventilation, wear suitable respiratory equipment. Do not use a torch to clean this material from equipment without local exhaust ventilation and respirator. Wash hands and face before breaks and immediately after handling the product.
	Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapors).
STORAGE Conditions for safe storage, including any incompatibilities :	Keep container tightly closed in a dry and well-ventilated place. Protect from contamination. Stable under recommended storage conditions.

8. EXPOSURE CONTROLS/PERS	SONAL DEOTECTION
Engineering measures : 1	. For prolong works inside, provide ventilation equipment or close the source of ignition.
2	. For use of large quantity outside, electric equipment shall be of explore-proof and earthed.
3	. Make available in work area emergency shower, hand wash, eye wash and clearly indicate
	the location thereof.
Control parameters :	No relevant information found
Personal protective equipment (PP	Е)
Eye/face protection :	Specify the type of eye protection and/or face shield required, based on the
	hazard of the substance or mixture and potential for contact;
Skin protection :	Specify the protective equipment to be worn (e.g. type of gloves, boots,
	bodysuit) based on the hazards associated with the substance or mixture
	and the potential for contact;
Respiratory protection :	Specify appropriate types of respiratory protection based on the hazard and
	potential for exposure, including air-purifying respirators and the proper
	purifying element (cartridge or canister) or breathing apparatus;
Thermal hazards :	When specifying protective equipment to be worn for materials that represent
	a thermal hazard, special consideration should be given to the construction
	of the PPE.

Consistent with good occupational hygiene practices, personal protective equipment (PPE) should be used in conjunction with other control measures, including engineering controls, ventilation and isolation. See also Section 5 – Fire- fighting measures of the SDS for specific fire/chemical PPE advice.

9. PHYSICAL AND CHEMICAL PROPERTIES	
Physical state, form :	Liquid
Color :	Milky white
Odor :	Few ether smells
pH:	None
Boiling point :	No data
Melting point:	No data
Flash point :	No data
Auto-ignition point :	No data
Exposition characteristic	
exposition limit:	UPPER:9.5vol %, LOWER:1.8vol % (LPG)
Density:	Nearly 1.5
Solubility in organic solvent :	Insoluble
Solubility in water :	Insoluble
10. STABILITY/REACTIVITY	

10. STADILITY/REACTIVIT	I
Reactivity	: Stable under normal conditions.
Conditions to avoid	: To avoid thermal decomposition, do not overheat. Abnormally long processing time or high t
	emperatures can produce irritating and toxic fumes. Stable under normal conditions.
Incompatibility	: Finely divided aluminum Powdered metals, potent oxidizers like fluorine (F2), and, related
	compounds, Contact with incompatible materials can cause fire and explosion.
Hazardous Decomposition	: Hazardous thermal decomposition products:: Hydrogen fluoride, Carbonyl fluoride
Products	, acid fluorides
Hazardous reactions	: During drying, cleaning and molding, small amounts of hazardous gases and / or particulate
	matter may be released. These may irritate eyes, nose and throat.
	Large molten masses may give off hazardous gases.

11. TOXICOLOGICAL INFORMATION

Corrosively and irritant			
properties :	No relevant information found		
Allergenic and sensitizing :	No relevant information found		
effects			
Acute toxicity :	COMPOSITION	Oral mouse LD50	1
	Polytetrafluoroethylene	Over 1,250 mg/kg	1
Chronic toxicity :	No relevant information found		
Carcinogenic effects :	No relevant information found		
Mutagenic effects : No relevant information found			
Effects on the preproductive system			
:	No relevant information found		
Teratogenic effects :	No relevant information found		
Other information :	Other information : Other relevant information on adverse health effects should be included		cluded
	even when not required by the G	HS classification criteria.	
12 ECOLOCICAL INFORMATION	N		

12. ECOLOGICAL INFORMATION

Bio degradibility :	This substance is not biodegradable.
Bio accumulation :	No relevant information found
Fish toxicity:	No relevant information found

13. DISPOSAL CONSIDERATIONS

1. Do not throw the container into fire.

2. Do not dump into sewers, on the ground or into any body of water.

3. Disposal shall be in accordance with the concerned rules and regulation.

4. Follow all regulation in your country.

14. TRANSPORT INFORMATION

UN Class : Class 2 ,Division 2.1 Flammable gases UN Number : 1950 AEROSOLS (maximum 1 liter) Specific precautionary transport measures and conditions. Follow all regulation in your country.

15. REGULATORY INFORMATION

Follow all regulation in your country.

16. OTHER INFORMATION

All materials may present unknown hazard and should be used in caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards which exist.

Complied by : Shimano Inc.

Disclaimer

The information above is believed to be accurate and represents the best information currently available to us. We have reviewed any information contained herein which we received from sources outside SHIMANO INC.. However, no warranty or representation, express or implied is made as to the accuracy or completeness of the data and information contained in this data sheet.

It is the user's obligation to evaluate and use this product safely and to comply with all applicable laws and regulations.

No statement made in this data sheet shall be construed as a permission, recommendation or authorization given or implied to practice any patented invention without a valid license.

SHIMANO INC. shall not be responsible for any damage or injury resulting from abnormal use of the material, from any failure to adhere to recommendations, or from any hazards inherent in the nature of the material.