SAFETY DATA SHEET

Review Date: 21st April 2017

SECTION 1. Identification of the hazardous chemical and of the supplier

1.1 Product identifier

Commercial name	:	**GRANTT MARINE OUTBOARD TC-W3**
Chemical name	:	Lubricating oil
Product use	:	Engine Oil

1.2 Other means of identification

SDS Number	:	E366XXX/HB2010/028

1.3 Recommended and restrictions on use

This product is specially designed for use in most water cooled 2-cycle outboard motors. Please refer to the Original Equipment Manufacturer (OEM) recommendation on the suitability of using this lubricant product.

1.4 Details of supplier

Company	:	**UMW GRANTT INTERNATIONAL SDN. BHD.**
Address	:	Jalan Utas 15/7, 40200 Shah Alam Selangor Darul Ehsan, Malaysia
Phone	:	(+60) 3 5163 5000
Fax	:	(+60) 3 5512 0634

SECTION 2. Hazard identification

2.1 Classification of the substance/mixture

Hazard classification	:	THIS PRODUCT IS NOT CLASSIFIED AS A HAZARDOUS CHEMICAL.

Label elements

Symbol	:	NOT CLASSIFIED
Signal word	:	NOT CLASSIFIED
Hazard statement	:	NOT CLASSIFIED

Precautionary statements

Prevention	:	No precautionary statement.
Response	:	No precautionary statement.
Storage	:	No precautionary statement.
Disposal	:	No precautionary statement.

SECTION 3. Composition and information of ingredients

Component	CAS No	% Weight
HIGHLY REFINED PETROLEUM OILS	64742-65-0	> 60
MIXTURE	NA	< 40

SECTION 4. First-aid measures

4.1 Description of first-aid measures

Inhalation : Move victim to an area of fresh air. Administer oxygen with rescue breathing or CPR if necessary. Get medical attention.

Skin contact : Remove contaminated clothing. Flush skin with water and follow by washing with soap and water. Seek medical care or transport to the nearest medical facility for additional treatment.

Eye contact : Flush with plenty of water. If irritation occurs, call for medical attention.

Ingestion : Do not induce vomiting. In general no treatment is necessary unless large quantities are ingested. However, get medical attention.

4.2 Most important symptoms/effect, acute and delayed

Inhalation : Inhalation of vapours or mists can cause irritation

Skin contact : Irritating to the skin with prolonged exposure

Eye contact : Irritating to the eyes.

Ingestion : Accidental intake of large amounts causes irritation of the gastrointestinal tract, nausea, vomiting and diarrhea.

4.3 Indication of immediate medical attention and special treatment needed

Pre-existing eye, skin and respiratory disorders will aggravated by repeated exposure to this product**.** Seek medical attention.

SECTION 5. Fire-fighting measures

5.1 Extinguishing media

Suitable extinguishing media : Water fog, alcohol foam, dry chemical or carbon dioxide (CO_2)

Unsuitable extinguishing media : Direct / jet stream of water

5.2 Specific hazard arising from chemical

Combustion products : CO_2, H_2O, CO (in the absence of air), SO_2, NO_X

Special measures : Not required.

Special hazards : N/A

5.3 Advice for firefighters

Do not enter confined fire space without full fire resistant bunker gear including a positive pressure, NIOSH approved, self-contained breathing apparatus.

Material may ignite when preheated.

SECTION 6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions: Avoid prolonged contact with product or contaminated clothes. Avoid inhalation of vapors.

Personal protection: wear appropriate personal protective equipment during cleaning. Refer to SECTION 8.

6.2 Environmental precautions

Prevent spills into drainages, waterways or water sources. Environmental (coast, soils, etc.) contamination hazard if released due to oily consistency and causes damage to flora and fauna upon contact.

6.3 Methods and material for containment and cleaning

FOR LARGE SPILLS: Remove with vacuum truck or pump to storage / salvage vessels.
FOR SMALL SPILLS: Soak up residue with an absorbent such as clay, sand or other suitable material. Place in non-leaking container and seal tightly for proper disposal.

SECTION 7. Handling and storage

7.1 Precautions for safe handling

Wash with soap and water before eating, drinking, smoking, applying cosmetics or using toilet. Launder contaminated clothing before reuse. Avoid heat, open flame, including pilot lights and strong oxidizing agents. Use explosion-proof ventilation to prevent vapor accumulation. Ground all handling equipment to prevent sparking.

7.2 Conditions for safe storage, including any incompatibilities

Storage: Keep in tightly closed and labelled container. Store at ambient temperature with adequate ventilation. Keep away from open flames.

Container warning: Keep container closed when not in use. Containers, even those that have been emptied, can contain explosive vapors. Do not cut, drill, grind, weld, smoke or perform similar operations which can produce flames or sparks on or near containers.

Incompatible materials: Strong oxidizing substance.

SECTION 8. Exposure controls and personal protection

8.1 Control parameters

Mineral oil mists

TLV/TWA (ACGIH), VLA/ED (INSHT)	: 5 mg/m^3
TLV/STEL (ACGIH), VLA/EC (INSHT)	: 10 mg/m^3
UK: OEL-TWA (COSHH)	: 5 mg/m^3
OEL-STEL	: 10 mg/m^3

DNEL	N/A
PNEC	N/A

8.2 Appropriate engineering control

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value.

8.3 Individual protection measures

Personal Protective Equipment (PPE)

Respiratory Protection:

If engineering controls do not maintain airborne concentrations to a level which is adequate to protect worker health, an approved respirator must be worn. Respirator selection, use and maintenance should be in accordance with the requirements of the OSHA Respiratory Protection Standard, 29 CFR 1910.134.

Types of respirator(s) to be considered in the selection process include:

For Mist	:	Air Purifying, R or P style NIOSH approved respirator.
For Vapors	:	Air Purifying, R or P style pre-filter & organic cartridge, NIOSH approved respirator. Self-contained breathing apparatus for use in environments with unknown concentrations or emergency situations.

Eye Protection:

Goggle / Face shield to protect from splashes.

Skin Protection:

Use protective clothing which is chemically resistant to this material. Selection of protective clothing depends on potential exposure conditions and may include gloves, boots, suits and other items.

Published literature, test data and/or glove and clothing manufacturers indicate the best protection is provided by: Neoprene, or Nitrile Rubber

SECTION 9. Physical and chemical properties

Appearance	:	Blue
Odour	:	Slight hydrocarbon
Odour threshold	:	Data not available
pH	:	Data not available
Melting point/ freezing point	:	Data not available
Initial boiling point and boiling range	:	Data not available
Flash point	:	101 (ASTM D92 [C.O.C])
Pour point	:	L – 42 °C (ASTM D97)
Evaporation rate	:	Data not available
Flammability (solid/gas)	:	Data not available
Upper/lower flammability or explosion limit	:	Data not available
Vapour pressure	:	Data not available
Vapour density	:	Data not available
Relative density	:	Data not available
Density	:	0.8591 kg/l @ 30 °C (ASTM D4052)
Solubility (ies)	:	Insoluble
Partition co-efficient: n-octanol/water	:	Data not available
Auto-ignition temperature	:	Data not available
Decomposition temperature	:	Data not available
Viscosity @ 40°C	:	51.2 cSt (ASTM D7042)
Viscosity @ 100°C	:	8.4 cSt (ASTM D7042)
Viscosity index	:	137 (ASTM D2270)

SECTION 10. Stability and reactivity

10.1 Reactivity: Not applicable

10.2 Chemical stability: Stable product at room temperature

10.3 Possibility of hazardous reactions: The strong oxidants react in contact with oils and organic matter in general.

10.4 Condition to avoid: Exposure to open flames

10.5 Incompatible materials: Strong oxidizing substance

10.6 Hazardous decomposition products: The incomplete combustion of the product can produce CO and other asphyxiating substances

SECTION 11. Toxicological information

11.1 Routes of exposure: Skin, Eyes, Ingestion and Inhalation

11.2 Acute Toxicity and Effects

Oral Toxicity	: Low toxicity: LD_{50} > 2000 mg/kg, Rat
Dermal Toxicity	: Low toxicity: LD_{50} > 2000 mg/kg, Rabbit
Inhalation	: Inhalation with vapours or mist can cause irritation
Eye Irritation	: Irritating to the eyes
Skin Irritation	: Irritating to the skin with prolonged exposure

SECTION 12. Ecological information

12.1 Eco toxicity
Dangerous to aquatic life in high concentrations (spills).

12.2 Persistence and degradability
The material is oily, viscous and floats on water. It presents a high physical contamination potential, mainly in sea-spill; destroys small aquatic organisms upon contact and make living difficult for lower organisms, not allowing the sunlight to reach underlying marine ecosystems, affecting its normal development. Not readily biodegradable.

12.3 Bioaccumulative potential
Contains components with the potential to bioaccumulate and causes long-term adverse effects in the aquatic environment.

12.4 Mobility in soil
Not applicable

12.5 Other adverse effects
Not applicable

SECTION 13. Disposal information

RCRA Information
Under RCRA, it is the responsibility of the user of the material to determine, at the time of the disposal, whether the material meets RCRA criteria for hazardous waste. This is because material uses, transformations, mixtures, processes, etc. may affect the classification. Refer to the latest EPA, state and local regulations regarding proper disposal.

SECTION 14. Transportation information

UN number	:	Data not applicable
UN proper shipping name	:	Data not applicable
Transport hazard class (es)	:	Data not applicable
Packing group (if applicable)	:	Data not applicable
Environmental hazard	:	Data not applicable
Transport in bulk (according to Annex II of MARPOL 73/78 and the IBC code)	:	Data not applicable
Special precautions	:	Data not applicable

ADR : This material is not classified as dangerous under ADR regulations.
RID : This material is not classified as dangerous under RID regulations.
IMDG : This material is not classified as dangerous under IMDG regulations.
IATA : This material is not classified as dangerous under IATA regulations.

SECTION 15. Regulatory information

Federal Regulatory Status

OSHA Classification
Under normal conditions of use or in a foreseeable emergency, this product does not meet the definition of a hazardous chemical when evaluated according to the OSHA Hazard Communication Standard.

WHMIS Classification
Not a controlled substance.

Ozone Depleting Substances (40 CFR 82 Clean Air Act)
This material does not contain nor was it directly manufactured with any Class I or Class II ozone depleting substances.

Superfund Amendment & Reauthorization Act (SARA) Title III
There are no components in this product on the SARA 302 list.

SARA Toxic Release Inventory (TRI) (313)
There are no components in this product on the SARA 313 list.

Toxic Substances Control Act (TSCA) Status
All component(s) of this material is (are) listed on the EPA/TSCA Inventory of Chemical Substances.

State Regulation
This material is not regulated by local state Chemical List. However for details on your regulation requirements you should contact the appropriate agency in your state.

SECTION 16. Other information

Date of preparation / revision : April 2017

Glossary:

TLV: Threshold Limit Value	CAS: Chemical Abstract Service
TWA: Time Weighted Average	API: American Petroleum Institute
STEL: Short-term Exposure Level	RCRA: Resource Conservation and Recovery Act
DNEC: Derived No Effect Level	PNEC: Primary Navy Enlisted Classification
EPA: Environmental Protection Agency	TSCA: Toxic Substances Control Act
ACGIH: American Conference of Governmental Industrial Hygienists.	INSHT: Instituto Nal. de Seguridad e Higiene en el Trabajo
VLA-ED: Valor Límite Ambiental – Exposición Diaria	VLA-EC: Valor Límite Ambiental – Exposición Corta
IARC: International Agency for Research on Cancer	OSHA: Occupational Safety and Health Administration
LD50: Lethal Dose Medium	LC50: Lethal Concentration Medium
WHMIS: Workplace Hazardous Materials Information System	NIOSH: National Institute for Occupational Safety and Health

Legislation consulted:
ADR : European Agreement concerning the international carriage of dangerous goods by road.
RID : Regulation on the international transport of dangerous goods on the railway.
IDMG : International Maritime Dangerous Goods regulation.
IATA : International Air Transport Association regulation pertaining to air shipment.