Revision: 08.08.2013 -----+ 1 Identification of the substance/mixture and of the company/undertaking • Product identifier • Trade name: TITAN GT1 0W-20 1L PLA · Relevant identified uses of the substance or mixture and uses advised against No uses advised against identified. · Application of the substance / the preparation: Lubricant · Details of the supplier of the safety data sheet Manufacturer/Supplier: FUCHS EUROPE SCHMIERSTOFFE GMBH EXPORT DIVISION Friesenheimer Str. 19 D-68169 Mannheim Tel: ++49 (0)621/3701-0 (Switch Board) Fax: ++49 (0)621/3701-570 • Informing department: Product safety department Tel: +49 (0)621 3701-1333 or -1313 Fax: 0621/3701-7303 E-Mail: Produktsicherheit@fuchs-europe.de • Emergency telephone number: Tel: +49 (0)621 3701-1333 or +49 (0)621 3701-0 (Switch Board) 2 Hazards identification • #Classification# of the substance or mixture · Classification according to #Directive 67/548/EEC or Directive 1999/45/EC# By handling of mineral oil products and chemical products no particular hazard is known when normal precautions (item 7) and personal protective equipment (item 8) are kept. The product is not classified according to Directive 67/548/EEC or Directive 1999/45/EC · Information concerning particular hazards for human and environment: This product is water polluting; see item 12. The product does not have to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version. • #Label# elements · Labelling according to EU guidelines: Observe the normal safety regulations when handling chemicals or mineral oil products. The product is not subject to identification regulations under EC Directives until 2008/1272/EC (1. CLP-ATP). Local regulations must be kept. • Special labelling of certain preparations: Contains Calcium Phenate, Calcium sulfonate, Dialkyl dithiophosphate ester. May produce an allergic reaction. (Contd. on page 2) +-----GB-+

Revision: 08.08.2013 +----------+ Trade name: TITAN GT1 0W-20 1T, PTA +-----(Contd. of page 1) Safety data sheet available for professional user on request. • Other hazards  $\cdot$  Results of PBT and vPvB assessment PBT: Not applicable. vPvB: Not applicable. 3 Composition/information on ingredients · Chemical characterization: Mixtures · Description: Mixture of synthetic base oils with additives. Dangerous components / Hazard communications / Concentration range % Polyolefin amide alkenamide 2.5-5% R53 Aquatic Chronic 4, H413 Polymer Calcium Phenate 1-2.4% Xi R38; Xi R43 R53 Skin Irrit. 2, H315; Skin Sens. 1, H317; Aquatic Chronic 4, H413 phenol derivative 0.1-1% R53 Aquatic Chronic 4, H413 confidential Alkaryl amine 0.1-1% N R51/53 EINECS: 270-128-1 Thiophosphoric acid ester derivative 0.1-1% N R51/53 confidential phosphoric ester derivative 0.1-1% Xi R36/38; N R51/53 Aquatic Chronic 2, H411; Skin Irrit. 2, H315; Eye Irrit. 2, H319 confidential • Additional information For the wording of the listed risk phrases refer to section 16. -----4 First aid measures · Description of first aid measures • General information Change clothes and shoes contaminated or soaked by the product. Never put rags contaminated by the product into cloth-pockets. · After inhalation Seek medical treatment in case of complaints. • After skin contact Instantly wash with water and soap and rinse thoroughly. (Contd. on page 3) +-----GB-+

Revision: 08.08.2013

\_\_\_\_\_ -----+ Trade name: TITAN GT1 0W-20 1L PLA (Contd. of page 2) • After eye contact Rinse opened eye for several minutes under running water. · After swallowing Seek medical treatment.  $\cdot$  Information for doctor · Most important symptoms and effects, both acute and delayed No further relevant information available. · Indication of any immediate medical attention and special treatment needed No further relevant information available. \_\_\_\_\_ 5 Firefighting measures · Extinguishing media • Suitable extinguishing agents CO2, extinguishing powder or water spray. Fight larger fires with alcohol resistant foam or surfactant containing water jet. Use fire fighting measures that suit the environment. · For safety reasons unsuitable extinguishing agents Water with a full water jet.Special hazards arising from the substance or mixture No further relevant information available. • Advice for firefighters • Protective equipment: In case of fire fighting: wear self containing breathing apparatus ------6 Accidental release measures · Personal precautions, protective equipment and emergency procedures Particular danger of slipping on leaked/ spilled product. Environmental precautions: Do not allow to enter drainage system, surface or ground water. Prevent from spreading (e.g. by binding or oil barriers). Do not allow to enter the ground/ soil. • Methods and material for containment and cleaning up: Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Dispose of the material collected according to regulations. • Reference to other sections No dangerous materials are released. \_\_\_\_\_ \_\_\_\_\_ 7 Handling and storage • Handling · Precautions for safe handling Prevent formation of aerosols. Do not eat, drink or smoke when working with the product. Take usual precautions when handling mineral oil products or chemical products. (Contd. on page 4) +-----GB-+

+	Trade name: TITAN GT1 0W-20 1L PLA
	<pre>(Contd. of page 3) Information about protection against explosions and fires: Do not heat up to temperatures close to the flash point. Conditions for safe storage, including any incompatibilities Storage Requirements to be met by storerooms and containers: No special requirements. Information about storage in one common storage facility: Store away from foodstuffs. Further information about storage conditions: Local regulations concerning handling and storage of water polluting products have to be followed.</pre>
+	Specific end use(s) No further relevant information available.
1	Exposure controls/personal protection Additional information about design of technical systems: No further data; see item 7.
•	Control parameters Components with critical values that require monitoring at the workplace: The product does not contain any relevant quantities of materials with TLVs / WELs that have to be monitored at the workplace. Additional information: The lists that were valid during the compilation were used as basis.
	Exposure controls Personal protective equipment General protective and hygienic measures The usual precautionary measures should be adhered to in handling the chemicals or the mineral oil products. Avoid close or long term contact with the skin. Use skin protection cream for preventive skin protection. Do not carry cleaning cloths impregnated with the product in trouser pockets. Breathing equipment: Not required. Protection of hands: Protective gloves (EN374) and protective skin cream. Material of gloves The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application. Penetration time of glove material The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed. (Contd. on page 5)

Revision: 08.08.2013 -----+ Trade name: TITAN GT1 0W-20 1T, PTA +-----(Contd. of page 4) • For the permanent contact gloves made of the following materials are suitable: Nitrile rubber, NBR Neoprene gloves • Not suitable are gloves made of the following materials: Butyl rubber, BR Natural rubber, NR • Eye protection: Safety glasses (EN 166) recommended during refilling. • Body protection: Protective work clothing. \_\_\_\_\_ 9 Physical and chemical properties · Information on basic physical and chemical properties • General Information • Appearance: • Form: Fluid • Colour: Brown • Smell: Characteristic Value/Range Unit Method • Change in condition Melting point/Melting range: Not determined
Boiling point/Boiling range: not applicable or not determined 250 ° C ISO 2592 • Flash point: • Ignition temperature: • Decomposition temperature: Not determined Self-inflammability: Product is not selfigniting. • Danger of explosion: Product is not explosive. at 15 ° C • Density 0.867 g/cm<sup>3</sup> DIN 51 757 • Solubility in / Miscibility with • Water: Not miscible or difficult to mix • Viscosity or Consistency-Class: at 40 ° C 45.6 mm<sup>2</sup>/s DIN 51 562 • kinematic: • Other information No further relevant information available. 10 Stability and reactivity • Reactivity · Chemical stability · Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications. (Contd. on page 6) +-----GB-+

<ul> <li>Possibility of hazardous reactions No dangerous reactions known</li> <li>Conditions to avoid No further relevant information available.</li> <li>Hazardous decomposition products: No dangerous decomposition products: No dangerous decomposition products known</li> <li>Toxicological information</li> <li>Information on toxicological effects</li> <li>Acute toxicity:</li> <li>Primary irritant effect:</li> <li>on the skin: No irritant effect known.</li> <li>Additional toxicological information:</li> <li>Sensitization: No sensitizing effect known.</li> <li>Additional toxicological information: The product is not subject to classification according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version.</li> <li>When used and handled according to specifications, the product does not have any harmful effects according to our actual informations.</li> <li>Toxicity Aquatic toxicity: No further relevant information available.</li> <li>Persistence and degradability No further relevant information available.</li> <li>Behaviour in environmental systems:</li> <li>Bioaccumulative potential No data available</li> <li>Mobility in soil No further relevant information available.</li> <li>Ecotoxical effects: Defaviour in sewage processing plants: The product swims on the water surface.</li> <li>Additional ecological information:</li> <li>General notes: According to the criteria of the EU-classification and labelling "dangerous for environment" (3/21/EWG) the substance/ the product h to be classified as non-hazardous for the environment.</li> <li>Gernar Nater Endangering Class 2 (Self-assessment): hazardous for water.</li> <li>Do not allow product to reach ground water, water bodies or sewage system.</li> </ul>		Trade name: TITAN GT1 0W-20	1L PLA
<ul> <li>Information on toxicological effects</li> <li>Acute toxicity:</li> <li>Primary irritant effect:</li> <li>on the skin: No irritant effect known.</li> <li>Sensitization: No sensitizing effect known.</li> <li>Additional toxicological information:</li> <li>The product is not subject to classification according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version.</li> <li>When used and handled according to specifications, the product does not have any harmful effects according to our actual informations.</li> <li>Toxicity <pre>Aquatic toxicity: No further relevant information available.</pre> <pre>Persistence and degradability No further relevant information available.</pre> Behaviour in environmental systems: Bioaccumulative potential No data available  Mobility in soil No further relevant information available. Ecotoxical effects: Behaviour in sewage processing plants: The product swims on the water surface. Additional ecological information: General notes: According to the criteria of the EU-classification and labelling "dangerous for environment"(93/21/EWG) the substance/ the product he to be classified as non-hazardous for the environment. German Water Endangering Class 2 (Self-assessment): hazardous for water. Do not allow product to reach ground water, water bodies or sewage</li></ul>	•	No dangerous reactions known Conditions to avoid No further relevan Incompatible materials: No further rel Hazardous decomposition products:	evant information available.
<ul> <li>Acute toxicity:</li> <li>Primary irritant effect:</li> <li>on the skin: No irritant effect known.</li> <li>Sensitization: No sensitizing effect known.</li> <li>Additional toxicological information:</li> <li>The product is not subject to classification according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version.</li> <li>When used and handled according to specifications, the product does not have any harmful effects according to our actual informations.</li> <li>Toxicity <pre>Aquatic toxicity: No further relevant information available.</pre> <pre>Persistence and degradability No further relevant information available.</pre> Behaviour in environmental systems: Behaviour in sewage processing plants: The product swims on the water surface. Additional ecological information: General notes: According to the criteria of the EU-classification and labelling "dangerous for environment"(93/21/EWG) the substance/ the product he to be classified as non-hazardous for the environment. <pre>German Water Endangering Class 2 (Self-assessment): hazardous for water.</pre> </li></ul>	11	Toxicological information	
<ul> <li>Toxicity Aquatic toxicity: No further relevant information available.</li> <li>Persistence and degradability No further relevant information available.</li> <li>Behaviour in environmental systems:</li> <li>Bioaccumulative potential No data available</li> <li>Mobility in soil No further relevant information available.</li> <li>Ecotoxical effects:</li> <li>Behaviour in sewage processing plants: The product swims on the water surface.</li> <li>Additional ecological information:</li> <li>General notes: According to the criteria of the EU-classification and labelling "dangerous for environment"(93/21/EWG) the substance/ the product has to be classified as non-hazardous for the environment.</li> <li>German Water Endangering Class 2 (Self-assessment): hazardous for water.</li> <li>Do not allow product to reach ground water, water bodies or sewage system.</li> </ul>	•	Acute toxicity: Primary irritant effect: on the skin: No irritant effect known. on the eye: No irritant effect known. Sensitization: No sensitizing effect k Additional toxicological information: The product is not subject to classifi calculation method of the General EU C Preparations as issued in the latest v When used and handled according to spe	cation according to the lassification Guidelines for ersion. cifications, the product does
<pre>Aquatic toxicity: No further relevant information available. Persistence and degradability No further relevant information available. Behaviour in environmental systems: Bioaccumulative potential No data available Mobility in soil No further relevant information available. Ecotoxical effects: Behaviour in sewage processing plants: The product swims on the water surface. Additional ecological information: General notes: According to the criteria of the EU-classification and labelling "dangerous for environment"(93/21/EWG) the substance/ the product has to be classified as non-hazardous for the environment. German Water Endangering Class 2 (Self-assessment): hazardous for water. Do not allow product to reach ground water, water bodies or sewage system.</pre>	 12	Ecological information	
Danger to drinking water if even small quantities leak into soil. • Results of PBT and vPvB assessment PBT:		Aquatic toxicity: No further relevant information availal Persistence and degradability No further relevant information availal Behaviour in environmental systems: Bioaccumulative potential No data available Mobility in soil No further relevant is Ecotoxical effects: Behaviour in sewage processing plants: The product swims on the water surface Additional ecological information: General notes: According to the criteria of the EU-cl. "dangerous for environment"(93/21/EWG) to be classified as non-hazardous for German Water Endangering Class 2 (Self water. Do not allow product to reach ground w system. Danger to drinking water if even small Results of PBT and vPvB assessment	ole. nformation available. assification and labelling the substance/ the product has the environment. -assessment): hazardous for ater, water bodies or sewage

	Not applicable.	
	vPvB:	
	Not applicable.	
•	Other adverse effects No	further relevant information available.
.3	Disposal considerations	
	PVB:         Not applicable.         Souther adverse effects No further relevant information available.         Disposal considerations         Waste treatment methods         Recommendation         Smaller quantities have to be disposed in line with local legislation.         When storing used products, ensure that the waste categories and nixing instructions are observed.         Delivery of waste products only to offically authorized collectors.         Burgen waste catalogue         30 20 6: synthetic engine, gear and lubricating oils         Incleaned packagings:         Recommendation:         Recommendation:         Recommendation:         Recommendation:         Recommendation:         Recommendation:         Recommendation:         Recommendation:         Recommendation:         NP or per cleaning. Small one-way packagings have to be lisposed according to the local regulations.         WC 15 01 02 e.g. 15 01 04.         Chara -         NN-Number         DR -         LDR -	
•	Recommendation	
	When storing used produc	ts, ensure that the waste categories and
		s only to offically authorized collectors.
•		o goor and lubrigating sile
	13 02 00. synthetic engin	e, year and tubricating olls
	Uncleaned packagings:	
		ings thoroughly. They can be recycled after
.4	Transport information	
	INI Number	
	ADN	-
	IMDG	_
	IATA	_
	ADR	_
	ADN	_
	IMDG	_
	IATA	_
	Transport hazard class(es	
	ADR	
•	Class	-
•	ADN/R Class:	-
•	IMDG	
•	Class	-
•	IATA	
•	Class	-
•	Packing group	
•	ADR	-
•	IMDG	-
•	IATA	-
•	Environmental hazards:	
	Marine pollutant:	No
•	Marine porrucane.	

Revision: 08.08.2013

-----+ Trade name: TITAN GT1 0W-20 1T, PLA (Contd. of page 7) • Special precautions for user Not applicable. • Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code Not applicable. • Transport/Additional information: No dangerous good acc. to dangerous goods/ transport directions. +----\_\_\_\_\_ 15 Regulatory information  $\cdot$  Safety, health and environmental regulations/legislation specific for the substance or mixture · National regulations • German Water Hazard Class: Water Endangering Class 2 (Self-assessment): hazardous for water. · Other regulations, limitations and prohibitive regulations Substances of very high concern (SVHC) according to REACH, Article 31 out of the recent list: none \_\_\_\_\_ 16 Other information All ingredients are listed in the European Inventories. These data are based on our present knowledge. However, they shall not constitute a quarantee for any specific product features and shall not establish a legally valid contractual relationship. This data sheet is a safety data sheet according to 1907/2006/EC, article 31. For products which are not subject to classification according to EU lists this data sheet is made on a voluntary base. • Relevant phrases H315 Causes skin irritation. H317 May cause an allergic skin reaction. H319 Causes serious eye irritation. H411 Toxic to aquatic life with long lasting effects. H413 May cause long lasting harmful effects to aquatic life. R36/38 Irritating to eyes and skin. R38 Irritating to skin. May cause sensitisation by skin contact. R43 R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. May cause long-term adverse effects in the aquatic environment. R53 · Department issuing safety data sheet: FUCHS EUROPE SCHMIERSTOFFE GMBH Export Division Product Safety Departement · Contact: Product Safety Departement: Tel: +49(0)621 3701-1333 (Contd. on page 9) \_\_\_\_\_GB-+

+	Trade name: TITAN GT1 0	W-20	1L PLA	
+     	Validity: With this latest edition valid any longer. Changed items are marked		(Contd. of page 8 former editions are not	)