

## SAFETY DATA SHEET (SDS)

**PRODUCT NAME : OIL - TITAN 220**

### 1. Identification of the Substance/Mixture and of the Company/Undertaking

#### Product identifier

Product name: Titan 220 Oil  
Other means of identification: None  
Item numbers: H110-31-222

#### Relevant identified uses of the substance or mixture and uses advised against

Identified uses: Industrial gear lubricant  
Uses advised against: Not available

#### Details of the supplier of the safety data sheet.

#### UK contact details

Edwards, Innovation Drive, Burgess Hill, West Sussex,  
RH15 9TW, United Kingdom

#### General enquiries

Tel: +44 (0)8459 212223  
Email: info@edwardsvacuum.com

#### US contact details

Edwards, 6416 Inducon Drive West, Sanborn,  
New York, 14132, USA

#### General enquiries

Toll Free: 1-800-848-9800

#### Emergency telephone number

Chemtrec: 1-800-424-9300

### 2. Hazards Identification

#### EMERGENCY OVERVIEW

The product, when properly handled according to good working and hygienic practices is not dangerous for human health and the environment.

Hazardous fumes may be evolved on burning or exposure to heat including oxides of carbon.

For short and long term exposure effects see Section 11 Toxicological data.

#### Classification of the substance or mixture

GHS classification: Mixture  
Classification according to  
Regulation (EC) No. 1272/2008: Not classified  
Classification according to  
Directive 1999/45/EC: Not classified

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### Label elements

Hazard pictograms: Not applicable  
Signal words: Not applicable  
Hazard statements: Not applicable  
Precautionary statements: Not applicable

### Other hazards

PBT criteria: Not applicable  
vPvB criteria: Not applicable  
Other hazards which do not result in a classification: None

### 3. Composition/Information on Ingredients

Ingredient	% Weight	CAS No	Hazard class*	Risk phrase / Hazard Statements*
No hazardous ingredients identified	Not applicable	Not Applicable	Not applicable	Not applicable

\*Hazard class, Risk phrase and Hazard Statements. These columns are only completed for ingredients which are classified as hazardous under EU Directive No 1272/2008 (as amended) and are present in sufficient concentration to make the overall substance hazardous. In all other situations, the column will be completed as "Not applicable".

### 4. First Aid Measures

#### Description of first aid measures

Eyes: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Continue to rinse for at least 15 minutes. Seek medical attention if symptoms persist.

Skin: Wash skin with soap and plenty of water. Seek medical attention if symptoms persist.

Ingestion/Oral: Give one to two glasses water to drink, and seek medical assistance. DO NOT give anything to drink to an unconscious person. Do not induce vomiting. Seek medical attention if symptoms persist.

Inhalation: Remove to fresh air. If breathing problems occur, a qualified individual should administer oxygen or artificial respiration as indicated. Seek immediate medical attention.

#### Most important symptoms and effect, both acute and delayed

##### Potential acute health effects:

Eyes: Irritation and redness.  
Skin: Irritation and redness.  
Ingestion / Oral: Not available.  
Inhalation: Inhalation of mists may cause irritation to upper respiratory tract and lungs.

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Over-exposure symptoms:

Eyes: Not available.  
Skin: Not available.  
Ingestion / Oral: Not available.  
Inhalation: Not available.

**Indication of any immediate medical attention and special treatment needed**

Not available.

### 5. Fire Fighting Measures

#### Extinguishing media

Suitable extinguishing media: Powder, alcohol resistant foam, dry chemical and Carbon Dioxide (CO<sub>2</sub>).  
Unsuitable extinguishing media: Water Jets.

#### Special hazards arising from the substance or mixture

Fire and explosion hazard: Not available.  
Hazardous combustion products: Hazardous fumes may be evolved on burning or exposure to heat including oxides of carbon.

#### Advice for fire-fighters

Special precautions for fire-fighters: Evacuate all non-emergency personnel to a safe area. Approach upwind from the fire and protect the intervention team with a water spray. Water spray should also be used to keep containers and the surrounding area cool.  
Special protective equipment for fire-fighters: Fire-fighters should wear a Self-Contained Breathing Apparatus (SCBA) which meets appropriate standards operated in positive pressure mode and full turn out gear.

For Flammability Properties - see Section 9.

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### 6. Accidental Release Measures

#### Personal precautions, protective equipment and emergency procedures

For non-emergency personnel: Evacuate non-essential staff, or those not equipped with personal protective equipment. Turn leaking containers leakerside up to prevent the escape of the product if safe to do so. Avoid inhalation and contact with skin and eyes. Be aware that the spilt product may create slippery conditions.

For emergency responders: Ensure adequate ventilation and keep container/spilt product away from open flames, hot surfaces and sources of ignition. Personal protective equipment as described in Section 8 must be used.

#### Environmental precautions:

Stop the leak if it is safe/possible to do so. Use dykes to prevent spreading. Avoid contaminating sewers, streams, rivers and other water courses with spilled product. Notify the appropriate authorities if significant contamination occurs.

#### Methods and material for containment and cleaning up

Put on the necessary personal protective equipment: refer to Section 8. Exercise caution; the area of the spill area may be slippery. Extinguish all ignition sources and evacuate the area. Absorb material onto vermiculite, dry sand, earth or similar inert absorbent. Place spilled material into covered container for disposal. Use a suitable cleaning solution to clean up any remaining product. Dispose of according to applicable local, state and federal regulations. Do not flush into surface water or sanitary sewer system.

#### Reference to other sections

Refer to Section 8 for information on personal protective equipment.

Refer to Section 13 for information on disposal considerations.

### 7. Handling and Storage

#### Precautions for safe handling

Ensure Personal Protective Equipment is used whenever handling the product, refer to Section 8. Avoid eating, drinking and smoking in areas where the product is used. Practice good hygiene. Wash hands after use and prior to consuming food and drink.

Make sure adequate ventilation is provided. Keep away from sources of heat and ignition.

#### Conditions for safe storage, including any incompatibilities

No special storage conditions required. DO NOT store together with food. Store in original, sealed containers protected from direct sunlight in a dry, cool, well ventilated area away from combustible and incompatible products (refer to Section 10). Keep away from sources of heat and ignition.

#### Specific end use(s)

Not available.

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### 8. Exposure Controls/Personal Protection

#### Control parameters

Ingredient	ACGIH - TLV	OSHA - PEL	Occupational Exposure Limits EH40 (UK)
None identified	Not applicable	Not applicable	Not applicable

No official Occupational Exposure Limits (OEL) or Workplace Exposure Limits (WEL) have been identified for the product. The following exposure limits are recommended:

Long Term Exposure Limit (LTEL): 5 mg/m<sup>3</sup> - 8 hr TWA

Short Term Exposure Limit (STEL): 10 mg/m<sup>3</sup>

#### Exposure controls

Appropriate engineering controls: Ensure adequate ventilation or local exhaust

Individual protection measures:

Eye/Face Protection: Safety glasses with side shields.

Hand/Skin Protection: Rubber, Latex or Plastic gloves.  
Wear long-sleeved clothing or overalls/coveralls and boots.

Respiratory Protection: Not available.

Hygiene Measures: Make sure eyewash and safety showers are located close to the work area.  
Wash face, hands and any exposed skin thoroughly after handling.  
Immediately remove all soiled and contaminated clothing.  
Do not eat, drink or smoke while handling the product.

Other/General Protection: None.

Environmental exposure controls:

Dispose of rinse water in accordance with local and national regulations.

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### 9. Physical and Chemical Properties

#### Information on basic physical and chemical properties

Appearance	Liquid	Melting point / freezing point	Not available	°C / °F
Odour	Not available	Initial boiling point and boiling range	> 320 / 608	°C / °F
Odour threshold	Not available	Flash point	200 / 392	°C / °F
pH	Not available	Upper/lower flammability or explosive limits	Not available	°C / °F
Evaporation rate	Not available	Vapour pressure	Not available	hPa
Flammability (solid, gas)	Not available	Vapour density	Not available	g/cm <sup>3</sup>
Solubility(ies)	Water insoluble	Relative density	Not available	g/cm <sup>3</sup>
Partition coefficient: n-octanol/water	Not available	Auto-ignition temperature	> 320 / 608	°C / °F
Explosive properties	Not available	Decomposition temperature	Not available	°C / °F
Oxidising properties	Not available	Viscosity	220	cSt

#### Other information

Not applicable.

### 10. Stability and Reactivity

Reactivity: None under normal conditions of use.

Chemical stability: Stable under normal conditions of use.

Possibility of hazardous reactions: None under normal conditions of use.

Conditions to avoid: Naked flames and sources of ignition.

Incompatible materials: Strong oxidising agents

Hazardous decomposition products: Hazardous fumes may be evolved on burning or exposure to heat including oxides of carbon.

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### 11. Toxicological Information

#### Information on toxicological effects

Acute toxicity:	Not available.
Irritation:	May cause transient irritation to eyes and skin. Inhalation of mists may cause irritation to upper respiratory tract and lungs.
Corrosivity:	Not available.
Sensitisation:	Not available.
Repeat dose toxicity:	Not available.
Carcinogenicity:	Not available.
Mutagenicity:	Not available.
Specific Target Organ Toxicity (STOT) - single exposure	Not available.
STOT - repeated exposure	Not available.
Aspiration hazard	Not available.
Toxicity for reproduction:	Not available.

#### Information on likely routes of exposure

Not available.

#### Symptoms related to the physical, chemical and toxicological characteristics

Eye Effects:	Transient irritation.
Skin Effects:	Transient irritation.
Ingestion/Oral Effects:	Not available.
Inhalation Effects:	Inhalation of mists may cause irritation to upper respiratory tract and lungs.

#### Delayed and immediate effects as well as chronic effects from short and long-term exposure

Not available.

#### Other information

Not available.

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### 12. Ecological Information

There are no known incidents of ecological damage, nor would be this be expected in normal use.

#### Acute Toxicity

Not available.

#### Persistence and Degradability

Expected to biodegrade slowly.

#### Bioaccumulative Potential

None expected.

#### Mobility in soil

Not available.

#### Results of PBT and vPvB assessment

PBT: Not available.

vPvB: Not available.

#### Other adverse effects

The product will form a floating layer on liquid surfaces, which will not dissolve to any great extent. The product is expected to be of very low toxicity to aquatic organisms, but has the potential to physically foul aquatic organisms.

### 13. Disposal Considerations

#### Waste treatment methods

Product: If recycling is not practical, dispose of the product in accordance with all local and national regulations.

Packaging: Empty containers can be landfilled, when in accordance with local and national regulations.



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### 14. Transport Information

This product is not classified as dangerous under transport regulations.

Parameter	ADR/RID	IMDG	IATA	Canadian TDG	United States DOT
UN number	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
UN proper shipping name	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
Transport hazard class	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
Packing group	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
Environmental hazards	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
Special precautions for user	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code

Not available.

### 15. Regulatory Information

Safety, health and environment regulations/legislation specific for the substance or mixture

#### European

Not available.

#### United States

Not available.

#### Canadian

Not available.

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### 16. Other Information

This SDS is compiled in accordance with ANSI Z400.1, Regulation (EC) No 1907/2006 (as amended by Regulation No 453/2010) concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) and the Globally Harmonized System of Classification and Labelling of Chemicals (GHS).

#### Full text of abbreviated statements and phrases

Not applicable.

#### NFPA / HMIS hazard codes

NFPA Hazard codes		HMIS Hazard codes		Rating System
Health	Not available	Health	Not available	0 = No Hazard
Flammability	Not available	Flammability	Not available	1 = Slight Hazard
Instability	Not available	Reactivity	Not available	2 = Moderate Hazard
				3 = Serious Hazard
				4 = Severe Hazard

#### Sources of information for this data sheet

- Batoyle Freedom Group Titan 220 Safety Data Sheet; Revision 02; Revision Date 18.02.03.

#### Glossary

**ACGIH** - American Conference of Governmental Industrial Hygienists; **ADR** - European Agreement concerning the International Carriage of Dangerous Goods by Road; **ANSI** - American National Standards Institute; **Canadian TDG** - Canadian Transportation of Dangerous Goods; **CAS** - Chemical Abstracts Service; **Chemtrec** - Chemical Transportation Emergency Center (US); **CLV** - Ceiling Limit Value; **DSL** - Domestic Substances List; **EC** - Effective Concentration; **EH40 (UK)** - HSE Guidance Note EH40 Occupational exposure limits; **EPCRA** - Emergency Planning and Community Right-to-Know Act; **GHS** - Globally Harmonized System of Classification and Labelling of Chemicals; **HMIS** - Hazardous Material Information Service; **IATA** - International Air Transport Association; **IMDG** - International Maritime Dangerous Goods; **LC** - Lethal Concentration; **LD** - Lethal Dose; **LTEL** - Long Term Exposure Limit; **NFPA** - National Fire Protection Association; **OSHA** - Occupational Safety and Health Administration, US department of Labour; **OEL** - Occupational Exposure Limits (OEL); **PBT** - Persistent, Bioaccumulative and Toxic; **vPvB** - Very Persistent, Very Bioaccumulative; **PEL** - Permissible exposure limit; **RID** - European Agreement concerning the International Carriage of Dangerous Goods by Rail; **SARA (Title III)** - Superfund Amendments and Reauthorization Act; **SARA 313** - Superfund Amendments and Reauthorization Act, Section 313; **SCBA** - Self-Contained Breathing Apparatus; **STEL** - Short Term Exposure Limit; **TLV** - Threshold Limit Value; **TSCA** - Toxic Substances Control Act Public Law 94-469; **TWA** - Time-Weighted Average; **US DOT** - US Department of Transportation; **WHMIS** - Workplace Hazardous Materials Information System.

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### Revisions:

- August 2013 - Initial release conforming to Regulation (EC) No 1907/2006 (as amended by Regulation No 453/2010) and GHS.
- January 2016 - Contact details updated. Revision date not changed to preserve 2-yearly SDS review date.

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