

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 03.06.2014

Version number 10

Revision: 03.06.2014

SECTION 1: Identification of the substance/mixture and of the company/undertaking

- **1.1 Product identifier**
- **Trade name: DEITYGEAR MANGA90**
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**
No further relevant information available.
- **Application of the substance / the preparation : LiPo battery**
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
TNK
Mr Devy Malhéüde
C.E.O. - Founder
18, Rue du Bois-Moussay
93240 Stains
France
dm@tnk.fr
www.tnk.fr
Tel: +33(0)1.78.35.16.55
- **1.4 Emergency telephone number:**
France (ORFILA 24h/24) - Tel : +33 (0)1 45 42 59 59
Ireland - Tel : 00 353 1 8092568 - 00 353 1 8379964 (24h/24)
EU Tel : 112

SECTION 2: Hazards identification

- **2.1 Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008 :**
The product is not classified according to the CLP regulation.
- **Classification according to Directive 67/548/EEC or Directive 1999/45/EC : Not applicable.**
- **Information concerning particular hazards for human and environment:**
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.
- **Classification system:**
The classification is according to the latest editions of the EU-lists, and extended by company and literature data.
- **2.2 Label elements**
- **Labelling according to Regulation (EC) No 1272/2008** Not classified as hazardous for transport
- **Hazard pictograms** Not classified as hazardous for transport
- **Signal word** Not classified as hazardous for transport
- **Hazard statements** Not classified as hazardous for transport
- **2.3 Other hazards**
Do not short circuit, puncture, incinerate, crush, immerse, force discharge or expose to temperatures above 100°C. Risk of fire or explosion. The rechargeable lithium batteries described in this Product Safety Data Sheet are sealed units which are not hazardous.
when used according to the recommendations of the manufacturer.
Under normal conditions of use, the electrode materials and the electrolyte they contain are not exposed to the outside, provided the battery integrity is maintained and seals remain intact. Risk of exposure only in case of abuse (mechanical, thermal, electrical) which leads to the activation of safety valves and/or the rupture of the battery container. Electrolyte leakage, electrode materials reaction with moisture/water or battery vent/explosion/fire may follow, depending upon the circumstances.
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

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SECTION 3: Composition/information on ingredients

- **3.2 Chemical characterization: Mixtures**
- **Description:** Solid battery composed by :

- **Dangerous components:**

CAS: 7439-93-2

EINECS: 231-102-5

Index number: 003-001-00-4

RTECS: OJ 5540000

lithium

C R34; F R14/15

Water-react. 1, H260; Skin Corr. 1B, H314

- **Additional information:** For the wording of the listed risk phrases, refer to section 16.

SECTION 4: First aid measures

- **4.1 Description of first aid measures**
- **General information:**
No special measures required.
in other cases, refer to chapters: 5,6,7,8.
- **After excessive inhalation:**
in case of rupture of the battery :
Supply fresh air; consult a doctor in case of complaints.
- **After skin contact:** Generally the product does not irritate the skin.
- **After eye contact:**
in case of rupture of the battery :
Rinse opened eye for several minutes under running water.
- **After swallowing:** If symptoms persist consult a doctor.
- **4.2 Most important symptoms and effects, both acute and delayed :**
No further relevant information available.
- **4.3 Indication of any immediate medical attention and special treatment needed :**
No further relevant information available.

SECTION 5: Firefighting measures

- **5.1 Suitable extinguishing agents:**
CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **5.2 Special hazards arising from the substance or mixture :**
Under certain fire conditions, traces of other toxic gases cannot be excluded.
- **5.3 Advice for firefighters**
- **Protective equipment:**
in case of rupture of the battery :
Wear fully protective suit.

SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures :**
in case of rupture of the battery :
Remove persons from danger area.
Keep away from ignition sources.
- **6.2 Environmental precautions:** Do not allow product to reach sewage system or any water course.
- **6.3 Methods and material for containment and cleaning up:** Pick up mechanically.
- **6.4 Reference to other sections :**
See Section 7 for information on safe handling.
See Section 8 for information on personal protective equipment.

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See Section 13 for disposal information.

SECTION 7: Handling and storage

- **7.1 Precautions for safe handling** : No special measures required.
- **Information about fire - and explosion protection:**



Keep ignition sources away - Do not smoke.

Protect from heat.

- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** Store in a cool location.
- **Information about storage in one common storage facility:**
Do not store together with oxidizing and acidic materials.
- **Further information about storage conditions:**
Protect from humidity and water.
Protect from heat and direct sunlight.
Protect from frost.
- **Maximum storage temperature:** 50°C
- **Minimum storage temperature:** 5°C
- **7.3 Specific end use(s)** : No further relevant information available.

SECTION 8: Exposure controls/personal protection

- **Additional information about design of technical facilities:** No further data; see section 7.
- **8.1 Control parameters**
- **Ingredients with limit values that require monitoring at the workplace:**
The product does not contain any significant quantities of materials with critical values that have to be monitored at the workplace.
- **Additional information:**
As a basis for the production of this document, the most current valid lists were used.
- **8.2 Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**
The usual precautionary measures are to be adhered to when handling chemicals.
- **Respiratory protection:** Not required.
- **Protection of hands:** Not required.
- **Gloves material** : -
- **Eye protection:** Not required.
- **Body protection:**
In case of rupture of the battery :
Use protective suit.

SECTION 9: Physical and chemical properties

- **9.1 Information on basic physical and chemical properties**
- **General Information**
- **Appearance:**
- **Form:** Solid
- **Colour:** According to product specification

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· Odour:	Characteristic
· Change in condition Melting point/Melting range: Undetermined. Boiling point/Boiling range: Undetermined.	
· Flash point:	Not applicable.
· Ignition temperature:	Not applicable.
· Self-igniting:	Product is not self igniting.
· Danger of explosion:	Heating may cause an explosion.
· Density:	Not determined.
· Solubility in / Miscibility with water:	Insoluble.
· 9.2 Other information :	No further relevant information available.

SECTION 10: Stability and reactivity

- **10.1 Reactivity**
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:**
No decomposition if used according to specifications.
To avoid thermal decomposition do not overheat.
Stable at environment temperature.
- **10.3 Possibility of hazardous reactions :**
in case of rupture of the battery :
Forms heat.
- **10.4 Conditions to avoid :** No further relevant information available.
- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:** Lithium

SECTION 11: Toxicological information

- **11.1 Information on toxicological effects**
- **Acute toxicity:**
- **Primary irritant effect:**
- **On the skin:**
No irritant effect.
Irritation possible spill
- **On the eyes:**
No irritant effect.
Irritation possible spill
- **Sensitization:** No sensitizing effects known.
- **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.
When used and handled according to specifications, the product does not have any harmful effects to our experience and the information provided to us.

SECTION 12: Ecological information

- **12.1 Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **12.2 Persistence and degradability :** No further relevant information available.

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- **12.3 Bioaccumulative potential** : No further relevant information available.
- **12.4 Mobility in soil** : No further relevant information available.
- **Additional ecological information:**
- **General notes:** Generally not hazardous for water.
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **12.6 Other adverse effects** : No further relevant information available.

SECTION 13: Disposal considerations

- **13.1 Waste treatment methods**
- **Recommendation** : Contact waste processors for recycling information.
- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.

SECTION 14: Transport information

- | | |
|---|--|
| · 14.1 UN-Number
· ADR, IMDG, IATA | UN3480 |
| · 14.2 UN proper shipping name
· ADR
· IMDG, IATA | 3480 LITHIUM ION BATTERIES
LITHIUM ION BATTERIES |
| · 14.3 Transport hazard class(es)
· ADR | |
|  | |
| · Class
· Label | 9 (M4) Miscellaneous dangerous substances and articles.
9 |
| · IMDG, IATA | |
|  | |
| · Class
· Label | 9 Miscellaneous dangerous substances and articles.
9 |
| · 14.4 Packing group
· ADR, IMDG, IATA | II |
| · 14.5 Environmental hazards:
· Marine pollutant: | No |
| · 14.6 Special precautions for user
· EMS Number: | Warning: Miscellaneous dangerous substances and articles.
F-A,S-I |
| · 14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code | Not applicable. |

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· Transport/Additional information:**· ADR****· Limited quantities (LQ)** 0**· Transport category** 2**· Tunnel restriction code** E**· UN "Model Regulation":** UN3480, LITHIUM ION BATTERIES, 9, II**SECTION 15: Regulatory information****· 15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.**SECTION 16: Other information**

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· Relevant phrases*H260 In contact with water releases flammable gases which may ignite spontaneously.**H314 Causes severe skin burns and eye damage.**R14/15 Reacts violently with water, liberating extremely flammable gases.**R34 Causes burns.***· Abbreviations and acronyms:***ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)**IMDG: International Maritime Code for Dangerous Goods**IATA: International Air Transport Association**GHS: Globally Harmonized System of Classification and Labelling of Chemicals**EINECS: European Inventory of Existing Commercial Chemical Substances**ELINCS: European List of Notified Chemical Substances**CAS: Chemical Abstracts Service (division of the American Chemical Society)*