



## WOLFBLOOD RACING CHAIN WAX with ADDITIVE

Please note this product has two components, Wax and Additive.

### Wax component

#### 1. IDENTIFICATION

**Material:** Wax pellets white translucent supplied in red foil pouch

**Supplier:** Hagen Automation Ltd

**Address:**

Hagen Automation, Greybern House, Templars Way, Sharnbrook, MK441PY United Kingdom

**Emergency Tel:** 0044 7739 854 883

**Website:** hagenautomation.com

#### 2. COMPOSITION

Monocrystalline Paraffin Wax

CAS number: 63231-60-7

#### 3. HAZARDS IDENTIFICATION

This product is not considered to be hazardous in the application in which it is intended and does not contain any hazardous components according to CLP Regulation 1272/2008/EC.

#### 4. FIRST AID MEASURES

**Eye:** Flush victim's eyes with water for 15 minutes, while holding the eyelids apart. Remove contact lenses if present and easy to do so. Continue rinsing. Get medical attention if irritation persists.

**Skin:** None normally required. For excessive unintentional exposures, wash skin with soap and water.

**Inhalation:** Remove to fresh air. Get medical attention if irritation or symptoms occur.

**Ingestion:** If small quantities are swallowed, rinse out mouth with water. Do not induce vomiting unless directed to by a doctor or physician. Get medical attention for large ingestions.

In contact with or splashed by hot liquid:

**Skin Contact:** Cool the skin immediately with cool water. Treat burns according to their severity. Obtain medical attention. Never try to remove the material with solvents.

**Contact with eyes:** Cool the area immediately with cold water. Seek advice of an ophthalmologist.

**Specific Treatment:** First Aider, decontamination, treatment of symptoms.

**Notes to doctor:** Treat symptomatically

#### 5. FIRE FIGHTING MEASURES

**5.1 Extinguishing media:** Foam, dry chemical, carbon dioxide, water mist.

**5.2 Special hazards arising from the substance or mixture:** Slight flammability hazard when exposed to heat or flames. During a fire, toxic gases (carbon monoxide, nitrous gases) may be generated by thermal decomposition or combustion.

**5.3 Advice for firefighters:** Only suitably trained personnel should attempt to tackle fires. Do not stay in the danger zone without respiratory protective equipment and PPE

## 6. ACCIDENTAL RELEASE MEASURES

**6.1 Personal Precautions:** Protective Equipment and Emergency Procedures:

Remove all sources of ignition. Wear appropriate personal protective equipment as specified in Section 8. Keep unnecessary personnel away. Spilt product maybe slippery!

**6.2 Environmental Precautions:** Do not flush into surface water or sanitary sewer system. Notify local authorities if product enters sewers or public waters.

**6.3 Methods and Material for Containment and Cleaning up:** Stop spill at source if safe to do so. Contain spill and remove into a suitable container or absorb with an inert absorbent and place in a suitable container.

**6.4 Reference to Other Sections:** Refer to Section 8 for Personal Protective Equipment and Section 13 for Disposal Information

## 7. HANDLING AND STORAGE

**7.1 Precautions for Safe Handling:** Keep away from heat, sparks and open flame. Use with adequate ventilation. Avoid contact with eyes, skin and clothing. Wash exposed skin thoroughly with soap and water after use. Wear appropriate personal protective equipment as specified in Section 8. Observe good industrial hygiene practices.

**7.2 Conditions for Safe Storage:** Including Any Incompatibilities: Store in a cool, dry, well-ventilated area. Keep container tightly closed. Store away from oxidizing agents and other incompatible materials. Keep away from open flames, sparks, and excessive heat. Store in containers made of stainless steel, HDPE, PET, or glass.

**7.3 Specific End Use(s):** Various uses including as a lubricant wax

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**8.1 Control Parameters:** TWA TLV (ACGIH): 2 mg/m<sup>3</sup> (paraffin wax fumes). 5 mg/m<sup>3</sup> (dust). However in all circumstances exposure should be kept as low as reasonably possible by good ventilation and safe working practices.

**DNEL Values:** - No Data Available

**PNEC Values:** - No Data Available

**8.2 Exposure Controls:**

**Appropriate engineering measures:** Facilities storing or utilising this material should be equipped with an eyewash facility.

**Respiratory protection:** Inhalation of the vapour, fumes or mists should be avoided by safe working practices and good ventilation.

**Eye protection:** Wear appropriate eye goggles.

**Skin protection:** No special precautions are needed beyond clean working conditions and safe handling practices. Change heavily contaminated clothing.

**Hand protection:** Use impervious gloves [conforming to EN374] PVC is suitable for casual contact. If direct contact for more than 2 hours then use Neoprene or nitrile gloves.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Appearance:** Liquid at elevated temperatures

**Odour:** Waxy

**Odour threshold:** Not determined

**pH:** Neutral

**Melting point/ Congealing point:** ~64 °C  
**Boiling point/ range:** Initial boiling point >300 °C  
**Flash Point:** > 230 °C, (ASTM D93, COC)  
**Evaporation Point:** Not determined  
**Flammability (solid, gas):** May be combustible at high temperature  
**Explosion Limits:** Not determined  
**Vapour pressure:** Negligible  
**Vapour density:** Not determined  
**Relative density (at 15°C):** 0.83 – 0.86  
**Solubility in water:** <1 mg/l  
**Solubility in other solvents:** Petroleum Ether, Ethyl Acetate  
**Partition coefficient n-octanol/water:** Not determined  
**Auto-ignition temperature:** >230 °C.  
**Decomposition temperature:** Not determined  
**Viscosity (Kinematic, at 100°C):** 15cst  
**Explosive properties:** Not determined  
**Oxidizing properties:** Not determined

## 10. STABILITY AND REACTIVITY

**10.1 Reactivity:** This product is not reactive under normal storage and handling conditions.

**10.2 Chemical stability:** Under normal storage and handling conditions, this product is stable. May react with strong oxidising agents, especially at high temperatures.

**10.3 Possibility of hazardous reactions:** No specific hazardous reactions are expected.

**10.4 Conditions to avoid:** Extremes of temperature (preferably, store between 5 & 39 °C). The product is combustible when heated >300°C.

**10.5 Incompatible materials:** May react with strong oxidants (e.g. chlorates, peroxides).

**10.6 Hazardous decomposition products:** Thermal decomposition or incomplete combustion may produce carbon monoxide, nitrous gases and irritating fumes.

## 11. TOXICOLOGICAL INFORMATION

**11.1 Information on toxicological effects:** Paraffin waxes and Hydrocarbon waxes, microcrystalline.

CAS No 63231-60-7

### Acute Toxicity

Acute Toxicity (oral) LD50 >5000mg/kg

Acute Toxicity (dermal) LD50 >2000mg/kg bw

Acute Toxicity (inhalation) No data available

**Skin Corrosive / Irritation:** Material is unlikely to cause irritation

**Serious Eye Damage Irritation:** Fines can cause mechanical irritation

**Respiratory Sensitisation:** Fines can cause mechanical irritation

**Skin Sensitisation:** Non sensitising

**Repeated Dose Toxicity:** No effect

**Mutagenicity:** Negative

**Carcinogenicity:** No effect

**Reproductive Toxicity:** No data available

## 12. ECOLOGICAL INFORMATION

**12.1 Toxicity:** Paraffin waxes and Hydrocarbon waxes, microcrystalline. CAS No 63231-60-7

**Environmental Fate:** Not established

**Aquatic toxicity (fish):** LL50 >1000 mg/l 96hr - Oncorhynchus mykiss

**Aquatic toxicity (algae):** lbL50>1000 mg/l - Desmodesmus subspicatus

**Aquatic toxicity (invertebrate):** EL50 >10000 mg/l 24hr - Daphnia sp

**Mobility:** Data not available

**Biodegradation:** Readily biodegradable – OECD 301

**Bioaccumulation potential:** There is no indication that this material is a risk to the environment.

**Other Ecological information:** No other adverse effects are observed. Do not allow uncontrolled leakage of product into the environment.

**Results of PBT and vPvB assessment:** This substance does not fulfil the criteria for being classed as a PBT or vPvB substance.

### 13. DISPOSAL INFORMATION

**General:** Dispose of in a safe manner in accordance with local/national regulations

**Disposal method:** In accordance with local/national regulations may be taken to waste disposal site.

**Disposal of used packaging:** Use a licensed waste disposal contractor.

(EU Directives 2000/76/EC and 1999/31EC apply). European Waste Catalogue No. 050199/130899

### 14. TRANSPORT INFORMATION

**Transport:** Not classified as hazardous for transport.

**14.1 UN number:** Not Classified.

**14.2 UN Proper shipping name:** Not Classified

**14.3 Transport Hazard Class(es):** Not Classified

**14.4 Packing Group:** Not Classified

**14.5 Environmental Hazards:** None

**14.6 Special Precautions for user:** None

**14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC code:** Not Classified

### 15. REGULATORY INFORMATION

**EC Classification:** The material is not dangerous for transport or supply.

**Risk Phrases:** None

**Safety Phrases:** None

### 16. OTHER INFORMATION

Shelf life >12 months

#### References:

\* European agreement concerning the international carriage of dangerous goods by road (ADR) volumes I & II 1999

\* Commission Directive 93/112/EC of 10/12/93, ( O.J. No. 314 of 16/12/93 pg 38)

\* Council Directive 67/548/EEC and all appropriate A.T.P'S

#### IMPORTANT NOTE:

1. Before any product is used the label should be carefully read and current safety literature and information consulted.

2. The product information in this Data Sheet is to the best of Hagen Automation's knowledge correct as at the date of publication. User should contact Hagen Automation for updated advice and in any event satisfy themselves that the product is entirely suitable for their purpose.

#### Abbreviations & Acronyms

PNEC Predicted No Effect Level

DNEL Derived No Effect Level

LD50 Median Lethal Dose

LC50 Median Lethal Concentration

CAS No Chemical Abstract Services number

CLP Classification Labelling and Packaging Regulation

ES Exposure Scenario

EC European Commission

EC No European Chemical Number – EINECS - ELINCS

ECHA European Chemical Agency

EINECS European Inventory of Existing Commercial Chemical Substances

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ELINCS European List of Notified Chemical Substances.  
OECD Organisation for Economic Cooperation and Development  
DSD Dangerous Substances Directive.  
PBT Persistent Bio accumulative Toxic  
vPvB very Persistent very Bio accumulative



## Additive Component

### 1. IDENTIFICATION

Material: Mixed powder of Micronised PTFE and WS2  
Powdered Lubricant

Supplier: Hagen Automation Ltd

Address:

Hagen Automation, Greybern House, Templars Way, Sharnbrook, MK441PY United Kingdom  
Emergency Tel: 0044 7739 854 883

### 2. COMPOSITION:

Polytetrafluoroethylene CAS NUMBER 9002-84-0 - 60-80%

Tungsten disulphide CAS NUMBER 12138-09-9 - 20-40%

**Symptoms relating to use:** Not classified as Hazardous in normal usage.

### 3. HAZARDS IDENTIFICATION

Emergency Overview

WHMIS Classification

Not WHMIS controlled.

Not a dangerous substance according to GHS.

HMIS Classification

Health hazard: 0

Flammability: 0

Physical hazards: 0

Potential Health Effects:

Inhalation May be harmful if inhaled. May cause respiratory tract irritation.

Skin May be harmful if absorbed through skin. May cause skin irritation.

Eyes May cause eye irritation.

Ingestion May be harmful if swallowed.

3.1 The primary hazard associated with PTFE is the inhalation of fumes from overheating or burning. Heating PTFE above 300 degrees centigrade may produce a fine particulate fume

3.2 Polymer fume fever, a temporary flu-like condition with fever chills, nausea, shortness of breath, chest tightness, muscle or joint ache.

3.3 The symptoms are often delayed 4 to 24 hours after exposure. These signs are generally temporary, lasting 24-48 hours and resolve without further complications.

3.4 However, some individuals with repeat episodes of polymer fume have reported persistent pulmonary effects. Exposure to decomposition products from PTFE heated above 400 degrees C may cause pulmonary inflammation, haemorrhage or oedema.

3.5 These more serious consequences of exposure may occur from extreme thermal decomposition of PTFE which can liberate fume particles, and toxic gases especially under condition of poor ventilation or confined spaces.

3.6 These decomposition products may initially produce chest tightness or pain, chills, fever, nausea, with shortness of breath, cough, wheezing and progression into pulmonary oedema.

#### 4. FIRST AID MEASURES

Inhalation - if symptoms of pulmonary involvement develop, remove from exposure and seek medical attention.

Skin contact - if irritation occurs, thoroughly wash affected area with mild soap and water and prevent further contact, contact medical help if irritation persists.

Eye contact - if irritation occurs, flush with copious amounts of Water, contact medical help if irritation persists.

Ingestion - if substantial quantities are swallowed, give person (if conscious) a large quantity of water to drink, induce vomiting, and seek medical attention. Never give anything by mouth to an unconscious person.

#### 5. FIRE FIGHTING MEASURES

Flash Point: N/A

Flammability Limits: N/A

No Fire Hazard, Use extinguishing agents suitable for surrounding fire.

##### 5.1 Suitable Extinguishing Media:

Use alcohol foam, or dry chemicals to extinguish.

Unsuitable extinguishing media: Water

##### 5.2 Special Hazards Arising from the Substance or Mixture:

Exposure to high temperatures may release flammable hydrocarbons that can accumulate in confined areas and present a fire or explosion hazard. Burning may release hydrocarbons, and oxides of carbon. Additionally, sulphur dioxide and tungsten trioxide may be formed.

##### 5.3 Advice for Fire-Fighters:

Firefighters should wear full emergency equipment and approved positive pressure self-contained breathing apparatus for all fires involving chemicals. No Unusual fire or explosion hazards.

#### 6. ACCIDENTAL RELEASE MEASURES

Note: Very slippery, proceed with caution!

If Spilled or Released: Ventilate area of spill, clean up using methods which avoid dust generation,

such as Vacuuming with appropriate filter, wet dust mop, or wet clean up.

Precautionary measures regarding persons: Remove source of ignition. Avoid formation and deposition of dust. Ensure effective ventilation.

Use the PPE (Personal Protective Equipment) as per chapter 8

(European Union: Note German Technical Regulation on Dangerous Substances No. 200/201)

6.1 Reference to Other Sections:

Refer to Section 8 for Personal Protective Equipment and Section 13 for Disposal information

## 7. HANDLING AND STORAGE

Maintain good housekeeping procedures to prevent accumulation of dust. Use clean-up methods which minimise dust generation.

Storage: Keep in sealed containers in a dry place.

(European Union: Observe the rules contained in the VCI concept for separate/common storage.

Observe official regulations. Storage class as per VCI: 11)

7.1 Specific End Use(s):

Powdered Lubricant. Lubricant additive.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Respiratory Protection: Use an appropriate approved respirator to with filter type P according to DIN EN 143. If airborne dust levels exceed the TLV, appropriate requirements set forth in 29 CFR 1910.134 should be met.

Wash thoroughly after handling and before eating, smoking and end of work shift. Do not shake clothing to remove dust. Avoid inhalation, ingestion and direct skin contact

Ventilation: Use local exhaust which is adequate to limit exposure levels below TLV.

Gloves: Recommended

Eye Protection: Recommended

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance & Odour: GREYISH POWDER, NO ODOR

PH value: 2 @ 20o C 100 g/l (aqueous suspension)

Boiling Point: N/A

Melting Point: 321 °C (610 °F)

Vapor Pressure (mm HG): N/A

Vapor Density (air=1): N/A

Solubility in Water: INSOLUBLE

Specific Gravity: (H2O=1) 7.4

Percent Volatile by Volume: 0

Evaporation Rate: N/A

How Best Monitored: AIR SAMPLE

Non-Hazardous Ingredients

Material: TUNGSTEN DISULFIDE

Percent by Weight: 20-40%

ACGIH TLV: 5MG/M3 (Limit is for insoluble compounds as W)

Material: PTFE

Percent by weight 60-80%

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## 10. STABILITY AND REACTIVITY

Stability: Stable

Conditions to avoid: N/A

Incompatible Materials to Avoid: Contact with strong acids may generate Hydrogen Sulphide

Hazardous Decomposition Products: Oxides of Sulphur and Tungsten may be evolved at extreme temperatures.

Hazardous decomposition products Combustion will generate smoke, carbon monoxide, carbon dioxide may produce formaldehyde under decomposition by fire.

## 11. TOXICOLOGICAL INFORMATION

**Inhalation** Not expected to prevent a significant inhalation hazard under anticipated conditions of normal use. Inhalation of mists or vapours at elevated temperatures may cause respiratory irritation.

**Dermal** Repeated or prolonged exposure may have a defatting effect or cause dermatitis.

**Ocular** Redness, pain may occur.

Toxicological tests:

Acute toxicity:

LD50 Oral, rat: > 2000 mg/Kg

LC50 inhalation, rat > 5.25 mg/l, 4 h of exposure

Irritating/Corrosive effects:

Irritation of eyes/rabbit: slightly irritant

Irritation of the skin/rabbit: non-irritant

Mutagenic effect: Salmonella typhimurium: No Indication of mutagenic effects.

## 12. ECOLOGICAL INFORMATION

**On Product** Prevent entry to sewers and public water ways.

**Ecological Effects** Not soluble in water, so only minimally bio-degradable

Aquatic toxicity:

Acute fish toxicity: 96 h LC50 (Brachydanio rerio): > 485 µg/l

(Maximum produceable concentration in the case of a weighed portion of 100 mg/l)

Acute toxicity for daphnia: 48 h EC50 (Daphnia magna): > 510 µg/l

(Maximum produceable concentration in the case of a weighed portion of 100 mg/l)

Toxicity for algae:

72 h EbCo (Scenedesmus subspicatus): > 330 µg/l

72 h ErCo (Scenedesmus subspicatus): > 330 µg/l

(Maximum produceable concentration in the case of a weighed portion of 100 mg/l)

Toxicity to bacteria: 3 h EC50 (activated sludge): 8972 mg/l

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**General** Dispose of in a safe manner in accordance with local/national regulations

**Disposal method** In accordance with local/national regulations may be taken to waste disposal site.

**Disposal of used packaging** Use a licensed waste disposal contractor.

## 14. TRANSPORT INFORMATION

Transport: Not classified as hazardous for transport.



## 15. REGULATORY INFORMATION

EC Classification: The material is not dangerous for transport or supply.

Risk Phrases

None

Safety Phrases:

None

## 16. OTHER INFORMATION

Shelf Life > 12 months

### References:

- \* European agreement concerning the international carriage of dangerous goods by road (ADR) volumes I & II 1999
- \* Commission Directive 93/112/EC of 10/12/93, ( O.J. No. 314 of 16/12/93 pg 38)
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CLP Classification Labelling and Packaging Regulation  
ES Exposure Scenario  
EC European Commission  
EC No European Chemical Number – EINECS - ELINCS  
ECHA European Chemical Agency  
EINECS European Inventory of Existing Commercial Chemical Substances  
ELINCS European List of Notified Chemical Substances.  
OECD Organisation for Economic Cooperation and Development  
DSD Dangerous Substances Directive.  
PBT Persistent Bio accumulative Toxic  
vPvB very Persistent very Bio accumulative