



# SAFETY DATA SHEET

## DEFEND (TDISE)

Infosafe No.: LQ9LV  
ISSUED Date : 08/08/2019  
ISSUED by: WORX PLUS UNIT TRUST

### 1. IDENTIFICATION

**GHS Product Identifier**

DEFEND (TDISE)

**Company Name**

WORX PLUS UNIT TRUST (ABN 19 445 818 014)

**Address**

5/176 Canterbury Rd Bayswater Nth  
VIC Australia

**Telephone/Fax Number**

Tel: 1300 897 873

**Emergency phone number**

131 126

**Recommended use of the chemical and restrictions on use**

Penetrating/Impregnating sealer.

**Disclaimer**

Although the information and recommendations set forth in this SDS are presented in good faith and are believed to be correct as of the date of this SDS, Worx Plus Unit Trust, makes no representations as to the completeness or accuracy thereof. Information is supplied on the conditions that the persons receiving and using it will make their own determination as to the suitability for their purpose prior to use. In no event will Worx Plus Unit Trust or any affiliate thereof be responsible for damages of any nature whatsoever resulting from the use or reliance on the information set forth in the SDS.

### 2. HAZARD IDENTIFICATION

**GHS classification of the substance/mixture**

Classified as Hazardous according to the Globally Harmonised System of Classification and Labelling of Chemicals (GHS) including Work, Health and Safety Regulations, Australia.

Classified as Dangerous Goods according to the Australian Code for the Transport of Dangerous Goods by Road and Rail. (7th edition)

Flammable Liquids: Category 3

Aspiration Hazard: Category 1

Hazardous to the Aquatic Environment - Long-Term Hazard: Category 2

**Signal Word (s)**

DANGER

**Hazard Statement (s)**

AUH066 Repeated exposure may cause skin dryness or cracking.

H226 Flammable liquid and vapour.

H304 May be fatal if swallowed and enters airways.

H411 Toxic to aquatic life with long lasting effects.

**Pictogram (s)**

Environment, Flame, Health hazard



**Precautionary statement – Prevention**

- P210 Keep away from heat/sparks/open flames/hot surfaces. – No smoking.
- P233 Keep container tightly closed.
- P240 Ground/bond container and receiving equipment.
- P241 Use explosion-proof electrical/ventilating/lighting/equipment.
- P242 Use only non-sparking tools.
- P243 Take precautionary measures against static discharge.
- P273 Avoid release to the environment.
- P280 Wear protective gloves/protective clothing/eye protection/face protection.

**Precautionary statement – Response**

- P301+P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
- P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
- P331 Do NOT induce vomiting.
- P370+P378 In case of fire: Use carbon dioxide, dry chemical or water spray for extinction.
- P391 Collect spillage.

**Precautionary statement – Storage**

- P403+P235 Store in a well-ventilated place. Keep cool.
- P405 Store locked up.

**Precautionary statement – Disposal**

- P501 Dispose of contents/container to an approved waste disposal plant.

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

**Ingredients**

Name	CAS	Proportion
2,2,4,6,6-Pentamethylheptane	13475-82-6	25-50 %
Hydrocarbons, C10-C12, isoalkanes, < 2% aromatics (EC# 923-037-2)	-	25-50 %
Naphtha (petroleum), heavy alkylate	64741-65-7	0-<10 %
Ingredients determined not to be hazardous		Balance

**4. FIRST-AID MEASURES**

**Inhalation**

If inhaled, remove affected person from contaminated area. Keep at rest until recovered. If symptoms develop and/or persist seek medical attention.

**Ingestion**

Do NOT induce vomiting. Wash out mouth and lips with water. Where vomiting occurs naturally have affected person place head below hip level in order to reduce risk of aspiration. Seek immediate medical attention.

**Skin**

Remove all contaminated clothing immediately. Wash affected area thoroughly with soap and water. Wash contaminated clothing before reuse or discard. Seek medical attention.

**Eye contact**

If in eyes, hold eyelids apart and flush the eyes continuously with running water. Remove contact lenses. Continue flushing for several minutes until all contaminants are washed out completely. If symptoms develop and/or persist seek medical attention.

**First Aid Facilities**

Eyewash, safety shower and normal washroom facilities.

**Advice to Doctor**

Treat symptomatically.

**Other Information**

For advice in an emergency, contact a Poisons Information Centre (Phone Australia 131 126) or a doctor at once.

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**5. FIRE-FIGHTING MEASURES**

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**Suitable Extinguishing Media**

Carbon dioxide, dry chemical or water sprays.

**Unsuitable Extinguishing Media**

Full water jet

**Hazards from Combustion Products**

Under fire conditions this product may emit toxic and/or irritating fumes, smoke and gases including carbon monoxide and carbon dioxide.

**Specific Hazards Arising From The Chemical**

Flammable liquid and vapour. Vapour/air mixtures may ignite explosively. Flashback along the vapour trail may occur. Runoff to sewer may create fire or explosion hazard. Flammable vapor-air-mixture are more heavy than air. Inflammation over far distance is possible.

**Hazchem Code**

3Y

**Decomposition Temperature**

Not available

**Precautions in connection with Fire**

Fire fighters should wear full protective clothing and self-contained breathing apparatus (SCBA) operated in positive pressure mode. In case of fire the product may be violently or explosively reactive. Use water spray to disperse vapours. This product should be prevented from entering drains and watercourses.

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**6. ACCIDENTAL RELEASE MEASURES**

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**Emergency Procedures**

Wear appropriate personal protective equipment and clothing to prevent exposure. Extinguish or remove all sources of ignition and stop leak if safe to do so. Increase ventilation. Evacuate all unprotected personnel. If possible contain the spill. Place inert absorbent, non-combustible material onto spillage. Use clean non-sparking tools to collect the material and place into suitable labelled containers for subsequent recycling or disposal. Dispose of waste according to the applicable local and national regulations. If contamination of sewers or waterways occurs inform the local water and waste management authorities in accordance with local regulations.

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**7. HANDLING AND STORAGE**

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**Precautions for Safe Handling**

Avoid contact with skin and eyes. Wear overalls, impervious gloves and safety glasses. Use in designated areas with local exhaust ventilation (vapours are heavier than air), away from sparks, flames and other ignition sources. Use approved flammable liquid storage containers in the work area. Prevent release of vapours and mists into workplace air. Keep containers tightly closed. Take precautionary measures against static discharges. Do not empty into drains. Ensure a high level of personal hygiene is maintained when using this product, that is, always wash hands before eating, drinking, smoking or using the toilet facilities.

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

Store in a cool, dry, well-ventilated area away from sources of ignition, oxidising agents, strong acids, foodstuffs, and clothing. Keep containers closed when not in use, securely sealed and protected against physical damage. Protect from heat and direct solar radiation. Inspect regularly for deficiencies such as damage or leaks. Have appropriate fire extinguishers available in and near the storage area. Take precautions against static electricity discharges. Use proper grounding procedures. Ensure that storage conditions comply with applicable local and national regulations.

For information on the design of the storeroom, reference should be made to Australian Standard AS1940 - The storage and handling of flammable and combustible liquids.

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**8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

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### **Occupational exposure limit values**

No exposure standards have been established for this material, however, the TWA exposure standards for refined mineral oil mist is 5 mg/m<sup>3</sup>. As with all chemicals, exposure should be kept to the lowest possible levels.

TWA (Time Weighted Average): The average airborne concentration of a particular substance when calculated over a normal eight-hour working day, for a five-day week.

Source: Safe Work Australia

### **Biological Limit Values**

No biological limits allocated.

### **Appropriate Engineering Controls**

This substance is hazardous and should be used with a local exhaust ventilation system, drawing vapours away from workers' breathing zone. A flame-proof exhaust ventilation system is required. If the engineering controls are not sufficient to maintain concentrations of vapours/mists below the exposure standards, suitable respiratory protection must be worn. Refer to relevant regulations for further information concerning ventilation requirements.

### **Respiratory Protection**

If engineering controls are not effective in controlling airborne exposure then an approved respirator with a replaceable vapor/mist filter should be used. Refer to relevant regulations for further information concerning respiratory protective requirements.

Reference should be made to Australian Standards AS/NZS 1715, Selection, Use and Maintenance of Respiratory Protective Devices; and AS/NZS 1716, Respiratory Protective Devices, in order to make any necessary changes for individual circumstances.

### **Eye Protection**

Safety glasses with side shields, chemical goggles or full-face shield as appropriate should be used. Final choice of appropriate eye/face protection will vary according to individual circumstances. Eye protection devices should conform to relevant regulations.

Eye protection should conform with Australian/New Zealand Standard AS/NZS 1337 (series) - Eye Protectors for Industrial Applications.

### **Hand Protection**

Wear gloves of impervious material (permanent contact: fluorocarbon rubber (Viton), Vitoject. Splash contact: nitrile rubber, chloroprene rubber, butyl rubber, fluorocarbon rubber (Viton), Camatril, Camapren, Butoject, Vitogect. Not suitable: Natural rubber, Leather glove). Final choice of appropriate gloves will vary according to individual circumstances. i.e. methods of handling or according to risk assessments undertaken. Occupational protective gloves should conform to relevant regulations.

Reference should be made to AS/NZS 2161.1: Occupational protective gloves - Selection, use and maintenance.

### **Body Protection**

Suitable protective workwear, e.g. cotton overalls buttoned at neck and wrist is recommended. Chemical resistant apron is recommended where large quantities are handled.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Properties	Description	Properties	Description
Form	Liquid	Appearance	Liquid
Colour	Colourless	Odour	Characteristic
Decomposition Temperature	Not available	Melting Point	Not available
Boiling Point	180 °C	Solubility in Water	Not miscible or difficult to mix.
pH	Not applicable	Vapour Pressure	1 hPa (20°C)
Vapour Density (Air=1)	Not available	Evaporation Rate	Not available
Viscosity	11 s (20 °C) (DIN 53211/4)	Partition Coefficient: n-octanol/water	Not available
Density	0.77 g/cm <sup>3</sup> (20 °C)	Flash Point	41 °C
Flammability	Flammable	Auto-Ignition Temperature	Ignition: 354 °C Product is not selfigniting.
Flammable Limits - Lower	0.6 (Vol-%)	Flammable Limits - Upper	7.0 (Vol-%)
Explosion Properties	Product is not explosive. However, formation of explosive air/vapour mixtures are possible.		

### Other Information

Organic solvents: 90.9 %

## 10. STABILITY AND REACTIVITY

### Chemical Stability

Stable under normal conditions of storage and handling.

### Reactivity and Stability

Reacts with strong oxidising agents. Forms flammable gases/fumes.

### Conditions to Avoid

Heat, open flames, solar radiation and other sources of ignition.

### Incompatible materials

Strong oxidising agents.

### Hazardous Decomposition Products

Under fire conditions this product may emit toxic and/or irritating fumes, smoke and gases including: carbon dioxide and carbon monoxide.

### Possibility of hazardous reactions

Reacts with incompatible materials.

## 11. TOXICOLOGICAL INFORMATION

### Toxicology Information

Toxicity data for material and ingredients given below.

#### Acute Toxicity - Oral

2,2,4,6,6-pentamethylheptan

LD50(rat): >5,000 mg/kg

Hydrocarbons, C10-C12, Isoalkanes, <2% aromatics

LD50 (rat): >5,000 mg/kg

Naphtha (petroleum), heavy alkylate

LD50 (rat): >6,000 mg/kg

**Acute Toxicity - Inhalation**

ATE value (estimate): > 113 mg/l/4h (rat)

**Acute Toxicity - Dermal**

Naphtha (petroleum), heavy alkylate

LD50 (rabbit): >3,000 mg/kg

**Ingestion**

May be fatal if swallowed and enters airways. Small amounts of liquid aspirated into the respiratory system during ingestion or from vomiting may cause severe pulmonary injury that may lead to death. May cause irritation to the mouth, throat, esophagus and stomach with symptoms of nausea, abdominal discomfort, vomiting and diarrhoea.

**Inhalation**

Inhalation of mists and vapours may cause respiratory irritation.

**Skin**

May be irritating to skin. The symptoms may include redness, itching and swelling. Repeated exposure may cause skin dryness or cracking.

**Eye**

May be irritating to eyes. The symptoms may include redness, itching and tearing.

**Respiratory sensitisation**

Not expected to be a respiratory sensitiser.

**Skin Sensitisation**

Not expected to be a skin sensitiser.

**Germ cell mutagenicity**

Not considered to be a mutagenic hazard.

**Carcinogenicity**

Not considered to be a carcinogenic hazard.

**Reproductive Toxicity**

Not considered to be toxic to reproduction.

**STOT-single exposure**

Not expected to cause toxicity to a specific target organ.

**STOT-repeated exposure**

Not expected to cause toxicity to a specific target organ.

**Aspiration Hazard**

May be fatal if swallowed and enters airways.

## 12. ECOLOGICAL INFORMATION

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**Ecotoxicity**

Toxic to aquatic life with long lasting effects.

**Persistence and degradability**

Not available

**Mobility**

Not available

**Bioaccumulative Potential**

Not available

**Other Adverse Effects**

Not available

**Environmental Protection**

Do not discharge this material into waterways, drains and sewers.

**Acute Toxicity - Fish**

2,2,4,6,6-pentamethylheptane

LC50(Oncorhynchus mykiss): >1,000 mg/l/96h

**Acute Toxicity - Daphnia**

2,2,4,6,6-pentamethylheptane

EC50 (Daphnia magna):>1,000 mg/l/48h

**Acute Toxicity - Algae**

2,2,4,6,6-pentamethylheptane

IC50 (Pseudokirchneriella subcapitata): >1,000 mg/l/72h

## 13. DISPOSAL CONSIDERATIONS

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**Disposal considerations**

Dispose of waste according to applicable local and national regulations. Labels should not be removed from containers until they have been cleaned. Advise flammable nature. Empty containers may contain flammable residues. Do not cut, puncture or weld on or near containers. Contaminated containers must not be treated as household waste. Containers should be cleaned by appropriate methods and then re-used or disposed of by landfill or incineration as appropriate. Do not incinerate closed containers.

Wastes including emptied containers are controlled wastes and should be disposed of in accordance with all applicable local and national regulations. Do not allow into drains or watercourses or dispose of where ground or surface waters may be affected.

## 14. TRANSPORT INFORMATION

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**Transport Information**

This material is a Class 3 - Flammable Liquid according to The Australian Code for the Transport of Dangerous Goods by Road and Rail. (7th edition)

Class 3 - Flammable Liquids are incompatible in a placard load with any of the following:

- Class 1: Explosives

- Division 2.1: Flammable Gases.

(Division 2.1 and Class 3 are incompatible in transport if both are in tanks or other receptacles with a capacity individually exceeding 500 L)

- Division 2.3: Toxic Gases

- Division 4.2: Spontaneously Combustible Substances

- Division 5.1: Oxidising substances

- Division 5.2: Organic Peroxides

- Class 6: Toxic or Infectious Substances

(where the flammable liquid is nitromethane)

- Class 7: Radioactive materials unless specifically exempted

Marine Transport (IMO/IMDG):

Classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea.

Class/Division: 3

UN No: 3295

Proper Shipping Name: HYDROCARBONS LIQUID, N.O.S (Contains 2,2,4,6,6-Pentamethylheptane and Hydrocarbons, C10-C12, isoalkanes, < 2% aromatics)(Marine Pollutant: Hydrocarbons, C10-C12, isoalkanes, < 2% aromatics)

Packing Group: III

EMS : F-E, S-D

Special Provisions: 223

Air Transport (ICAO/IATA):

Classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air.

Class/Division: 3

UN No: 3295

Proper Shipping Name: hydrocarbons liquid, n.o.s (Contains 2,2,4,6,6-Pentamethylheptane and Hydrocarbons, C10-C12, isoalkanes, < 2% aromatics)

Hazard Labels: Flammable Liquid

Packaging Group: III

Packaging Instructions (passenger & cargo): 355

Packaging Instructions (cargo only): 366

Special provisions: A3, A324

**U.N. Number**

3295

**UN proper shipping name**

HYDROCARBONS, LIQUID, N.O.S.(Contains 2,2,4,6,6-Pentamethylheptane and Hydrocarbons, C10-C12, isoalkanes, &lt; 2% aromatics)

**Transport hazard class(es)**

3

**Packing Group**

III

**Hazchem Code**

3Y

**IERG Number**

14

**IMDG Marine pollutant**

Yes

**Transport in Bulk**

Not available

**Special Precautions for User**

Not available

## 15. REGULATORY INFORMATION

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**Regulatory information**

Classified as Hazardous according to the Globally Harmonised System of Classification and Labelling of Chemicals (GHS) including Work, Health and Safety Regulations, Australia.

Classified as a Scheduled Poison according to the Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP).

**Poisons Schedule**

S5

## 16. OTHER INFORMATION

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**Date of preparation or last revision of SDS**

SDS Created: August 2019

**References**

Preparation of Safety Data Sheets for Hazardous Chemicals Code of Practice.

Standard for the Uniform Scheduling of Medicines and Poisons.

Australian Code for the Transport of Dangerous Goods by Road & Rail.

Model Work Health and Safety Regulations, Schedule 10: Prohibited carcinogens, restricted carcinogens and restricted hazardous chemicals.

Workplace exposure standards for airborne contaminants.

Adopted biological exposure determinants, American Conference of Industrial Hygienists (ACGIH).

Globally Harmonised System of Classification and Labelling of Chemicals.

**Contact Person/Point**

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