

SAFETY DATA SHEET TETRION WOOD HARDENER

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

1.1. Product identifier

Product name TETRION WOOD HARDENER

Product number TWH500

1.2. Relevant identified uses of the substance or mixture and uses advised against

1.3. Details of the supplier of the safety data sheet

Supplier TETROSYL EUROPE

79 rue du chemin vert

59.273 Fretin

TEL: 03 20 28 06 30

qualite@tetrosyl-france.com

Manufacturer TETROSYL LIMITED

Bury Lancashire England BL9 7NY 0161 764 5981 0161 797 5899 info@tetrosyl.com

1.4. Emergency telephone number

Emergency telephone +44 (0)161 764 5981 (24 hrs)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (SI 2019 No. 720)

Physical hazards Flam. Liq. 2 - H225

Health hazards Eye Irrit. 2 - H319 STOT SE 3 - H336

Environmental hazards Not Classified

2.2. Label elements

Hazard pictograms





Signal word Danger

Hazard statements H225 Highly flammable liquid and vapour.

H319 Causes serious eye irritation.

H336 May cause drowsiness or dizziness.

Precautionary statements

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children.

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No

smoking.

P233 Keep container tightly closed. P261 Avoid breathing vapour/spray.

P271 Use only outdoors or in a well-ventilated area.

P280 Wear eye and face protection.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove

contact lenses, if present and easy to do. Continue rinsing. P312 Call a POISON CENTRE/doctor if you feel unwell.

P313 Get medical advice/ attention.

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

P405 Store locked up.

P501 Dispose of contents/ container in accordance with local regulations. P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children.

Contains

ACETONE, BUTYL ACETATE -norm

2.3. Other hazards

Not applicable.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

ACETONE		60-100%
CAS number: 67-64-1	FC number: 200-662-2	

Classification

Flam. Liq. 2 - H225 Eye Irrit. 2 - H319 STOT SE 3 - H336

BUTYL ACETATE -norm 3-<5.0%

CAS number: 123-86-4 EC number: 204-658-1

Classification

Flam. Liq. 3 - H226 STOT SE 3 - H336

2-METHOXY-1-METHYLETHYL ACETATE 0.5-<1%

CAS number: 108-65-6 EC number: 203-603-9

Classification

Flam. Liq. 3 - H226

ISO-BUTANOL 0.5-<1%

CAS number: 78-83-1 EC number: 201-148-0

Classification

Flam. Liq. 3 - H226 Skin Irrit. 2 - H315 Eye Dam. 1 - H318 STOT SE 3 - H335, H336

XYLENE 0.5-<1%

CAS number: 1330-20-7 EC number: 215-535-7

Classification

Flam. Liq. 3 - H226 Acute Tox. 4 - H312 Acute Tox. 4 - H332 Skin Irrit. 2 - H315

ETHYLBENZENE 0.5-<1%

Classification

Flam. Liq. 2 - H225 Acute Tox. 4 - H332 STOT RE 2 - H373 Asp. Tox. 1 - H304

The full text for all hazard statements is displayed in Section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

Remove affected person from source of contamination. Effects may be delayed. Keep affected person under observation. Get medical attention. CAUTION! First aid personnel must be aware of own risk during rescue! Move affected person to fresh air at once. Keep affected person away from heat, sparks and flames. If breathing stops, provide artificial respiration. Place unconscious person on the side in the recovery position and ensure breathing can take place.

Inhalation

Remove affected person from source of contamination. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Keep affected person under observation. Get medical attention. Show this Safety Data Sheet to the medical personnel. Place unconscious person on their side in the recovery position and ensure breathing can take place. If breathing stops, provide artificial respiration.

Ingestion

Get medical attention immediately. Rinse mouth thoroughly with water. Give plenty of water to drink. Give milk instead of water if readily available. Keep affected person under observation. Do not induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention immediately. Show this Safety Data Sheet to the medical personnel. Never give anything by mouth to an unconscious person. Keep affected person away from heat, sparks and flames. Place unconscious person on their side in the recovery position and ensure breathing can take place.

Skin contact Remove contaminated clothing immediately and wash skin with soap and water. Rinse with

water. Use suitable lotion to moisturise skin. Get medical attention promptly if symptoms occur

after washing.

Eye contact Rinse immediately with plenty of water. Remove any contact lenses and open eyelids wide

apart. Continue to rinse for at least 15 minutes. Do not rub eye. Get medical attention if any

discomfort continues.

4.2. Most important symptoms and effects, both acute and delayed

General information The severity of the symptoms described will vary dependent on the concentration and the

length of exposure. Effects may be delayed. Keep affected person under observation.

In case of overexposure, organic solvents may depress the central nervous system causing

dizziness and intoxication, and at very high concentrations unconsciousness and death. Vapours may cause headache, fatigue, dizziness and nausea. Vapours in high concentrations are anaesthetic. Symptoms following overexposure may include the following: Headache.

Fatigue. Dizziness. Central nervous system depression.

Ingestion May cause discomfort if swallowed. May cause stomach pain or vomiting. May cause nausea,

headache, dizziness and intoxication. May cause chemical burns in mouth and throat. Central nervous system depression. Fumes from the stomach contents may be inhaled, resulting in

the same symptoms as inhalation.

Skin contact Prolonged contact may cause redness, irritation and dry skin.

Eye contact Irritation, burning, lachrymation, blurred vision after liquid splash.

4.3. Indication of any immediate medical attention and special treatment needed

Notes for the doctor No specific recommendations. If in doubt, get medical attention promptly.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media Extinguish with the following media: Foam, carbon dioxide or dry powder. Water. Use fire-

extinguishing media suitable for the surrounding fire.

Unsuitable extinguishing

media

Do not use water jet as an extinguisher, as this will spread the fire.

5.2. Special hazards arising from the substance or mixture

Specific hazards Vapours may form explosive mixtures with air. Vapours are heavier than air and may travel

along the floor and accumulate in the bottom of containers. Vapours may be ignited by a spark, a hot surface or an ember. The product is highly flammable. Forms explosive mixtures with air. Vapours are heavier than air and may spread near ground and travel a considerable distance to a source of ignition and flash back. Vapours are heavier than air and may spread near ground and travel a considerable distance to a source of ignition and flash back.

Hazardous combustion

products

Oxides of carbon. Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours.

5.3. Advice for firefighters

Protective actions during

firefighting

Avoid breathing fire gases or vapours. Keep up-wind to avoid fumes. Risk of re-ignition after fire has been extinguished. Risk of explosion. Cool containers exposed to flames with water until well after the fire is out. Containers close to fire should be removed or cooled with water. Do not allow water to contact any leaked material.

Special protective equipment

for firefighters

Leave danger zone immediately.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions

Wear protective clothing as described in Section 8 of this safety data sheet. Use suitable respiratory protection if ventilation is inadequate. Take precautionary measures against static discharges. No smoking, sparks, flames or other sources of ignition near spillage. Do not breathe vapour. Avoid contact with skin and eyes. In case of spills, beware of slippery floors and surfaces.

6.2. Environmental precautions

Environmental precautions

Do not discharge into drains or watercourses or onto the ground. Avoid the spillage or runoff entering drains, sewers or watercourses. Avoid discharge to the aquatic environment.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up

For waste disposal, see Section 13. Stop leak if possible without risk. Absorb spillage with non-combustible, absorbent material. Collect and place in suitable waste disposal containers and seal securely. Eliminate all sources of ignition. No smoking, sparks, flames or other sources of ignition near spillage. Provide adequate ventilation. Provide adequate ventilation. Contain spillage with sand, earth or other suitable non-combustible material. Avoid the spillage or runoff entering drains, sewers or watercourses. Cover large spillages with alcohol-resistant foam.

6.4. Reference to other sections

Reference to other sections

Wear protective clothing as described in Section 8 of this safety data sheet. For waste disposal, see section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions

Read and follow manufacturer's recommendations. Eliminate all sources of ignition. Keep away from heat, sparks and open flame. Vapours may accumulate on the floor and in low-lying areas. Static electricity and formation of sparks must be prevented. Do not eat, drink or smoke when using the product. Avoid inhalation of vapours/spray and contact with skin and eyes. Good personal hygiene procedures should be implemented. Provide adequate ventilation. Avoid inhalation of vapours. Use approved respirator if air contamination is above an acceptable level. Mechanical ventilation or local exhaust ventilation may be required.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions

Keep away from heat, sparks and open flame. Keep container tightly closed. Keep containers upright. Keep only in the original container. Avoid contact with oxidising agents. Do not store near heat sources or expose to high temperatures. Store away from the following materials: Oxidising materials.

Storage class

Flammable liquid storage.

7.3. Specific end use(s)

Specific end use(s) The identified uses for this product are detailed in Section 1.2.

SECTION 8: Exposure controls/Personal protection

8.1. Control parameters

Occupational exposure limits

No exposure limits known for ingredient(s).

ACETONE

Long-term exposure limit (8-hour TWA): WEL 500 ppm 1210 mg/m³ Short-term exposure limit (15-minute): WEL 1500 ppm 3620 mg/m³

BUTYL ACETATE -norm

Long-term exposure limit (8-hour TWA): WEL 150 ppm 724 mg/m³ Short-term exposure limit (15-minute): WEL 200 ppm 966 mg/m³

2-METHOXY-1-METHYLETHYL ACETATE

Long-term exposure limit (8-hour TWA): WEL 50 ppm(Sk) 274 mg/m3(Sk) Short-term exposure limit (15-minute): WEL 100 ppm(Sk) 548 mg/m3(Sk)

ISO-BUTANOL

Long-term exposure limit (8-hour TWA): WEL 50 ppm 154 mg/m³ Short-term exposure limit (15-minute): WEL 75 ppm 231 mg/m³

XYLENE

Long-term exposure limit (8-hour TWA): WEL 50 ppm 220 mg/m³ Short-term exposure limit (15-minute): WEL 100 ppm 441 mg/m³ Sk

ETHYLBENZENE

Long-term exposure limit (8-hour TWA): WEL 100 ppm 441 mg/m³ Short-term exposure limit (15-minute): WEL 125 ppm 552 mg/m³ Sk

WEL = Workplace Exposure Limit. Sk = Can be absorbed through skin. Sk = Can be absorbed through the skin.

8.2. Exposure controls

Protective equipment













Appropriate engineering controls

Use explosion-proof general and local exhaust ventilation. Avoid inhalation of vapours. Observe any occupational exposure limits for the product or ingredients. All handling should only take place in well-ventilated areas.

Eye/face protection

Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. Unless the assessment indicates a higher degree of protection is required, the following protection should be worn: Tight-fitting safety glasses.

Hand protection

Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible. The most suitable glove should be chosen in consultation with the glove supplier/manufacturer, who can provide information about the breakthrough time of the glove material. It should be noted that liquid may penetrate the gloves. Frequent changes are recommended.

Other skin and body protection

Wear suitable protective clothing as protection against splashing or contamination.

Hygiene measures

Provide eyewash station. Wash promptly with soap and water if skin becomes contaminated. When using do not eat, drink or smoke. Contaminated clothing should be placed in a closed container for disposal or decontamination.

Respiratory protection

If ventilation is inadequate, suitable respiratory protection must be worn. Check that the respirator fits tightly and the filter is changed regularly. Wear a respirator fitted with the following cartridge: Gas filter, type AX.

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SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance Colourless to pale yellow liquid.

Colourless.

Odour Acetone. Ketonic.

pH pH (concentrated solution): 7

Melting point -94°C

Initial boiling point and range 56°C @

Flash point -17°C Closed cup.

Evaporation rate 2 (diethyl ether = 1)

Upper/lower flammability or

explosive limits

Lower flammable/explosive limit: 2.5 Upper flammable/explosive limit: 13

Vapour pressure 24.66 kPa @ °C

Vapour density 2.0

Relative density 0.845 @ 20°C

Solubility(ies) 100 @ °C Soluble in water. Miscible with the following materials: Organic solvents.

Partition coefficient : -0.24/0.58

Auto-ignition temperature 540°C

Decomposition Temperature Not determined. **Viscosity** <100 cP @ 20°C

9.2. Other information

Other informationNone.Molecular weight58.09Saturation concentration589

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity Vapours may form explosive mixtures with air.

10.2. Chemical stability

Stability Stable at normal ambient temperatures and when used as recommended.

10.3. Possibility of hazardous reactions

Possibility of hazardous

Not relevant.

reactions

10.4. Conditions to avoid

Conditions to avoid Avoid heat, flames and other sources of ignition. Avoid exposure to high temperatures or

direct sunlight.

10.5. Incompatible materials

Materials to avoid Strong oxidising agents.

10.6. Hazardous decomposition products

Hazardous decomposition None at ambient temperatures. Oxides of carbon. Thermal decomposition or combustion may

products liberate carbon oxides and other toxic gases or vapours.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity - oral

Summary Based on available data the classification criteria are not met.

Notes (oral LD₅₀) Acetone

Acute toxicity - dermal

Summary Based on available data the classification criteria are not met.

ATE dermal (mg/kg) 41,904.76

Acute toxicity - inhalation

Summary Based on available data the classification criteria are not met.

ATE inhalation (gases ppm) 171,428.57

ATE inhalation (vapours mg/l) 419.05

ATE inhalation (dusts/mists

mg/l)

57.14

Skin corrosion/irritation

Summary Based on available data the classification criteria are not met.

Serious eye damage/irritation

Summary Based on available data the classification criteria are not met.

Respiratory sensitisation

Summary Based on available data the classification criteria are not met.

Skin sensitisation

Summary Based on available data the classification criteria are not met.

Germ cell mutagenicity

Summary Based on available data the classification criteria are not met.

Carcinogenicity

Summary Based on available data the classification criteria are not met.

Reproductive toxicity

Summary Based on available data the classification criteria are not met.

Specific target organ toxicity - single exposure

Summary Based on available data the classification criteria are not met.

Specific target organ toxicity - repeated exposure

Summary Based on available data the classification criteria are not met.

Aspiration hazard

Summary Based on available data the classification criteria are not met.

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General information Prolonged and repeated contact with solvents over a long period may lead to permanent

health problems. The product contains small amounts of organic solvents. Extensive use of the product in areas with inadequate ventilation may result in the accumulation of hazardous

vapour concentrations.

Inhalation Gas or vapour is harmful on prolonged exposure or in high concentrations.

Ingestion May cause internal injury. May cause nausea, headache, dizziness and intoxication. Harmful:

may cause lung damage if swallowed. Pneumonia may be the result if vomited material

containing solvents reaches the lungs.

Skin contact Repeated exposure may cause skin dryness or cracking.

Eye contact Irritating to eyes. Symptoms following overexposure may include the following: Redness.

Pain. Vapour or spray in the eyes may cause irritation and smarting.

Acute and chronic health

hazards

This chemical can be hazardous when inhaled and/or touched. This product is corrosive. This product may cause skin and eye irritation. Prolonged contact may cause burns. May cause

severe internal injury. Vapour from this product may be hazardous by inhalation.

Route of exposure Inhalation Ingestion. Skin and/or eye contact Skin absorption

Medical symptoms Central nervous system depression. Drowsiness, dizziness, disorientation, vertigo.

Medical considerations Aspiration hazard if swallowed. Entry into the lungs following ingestion or vomiting may cause

chemical pneumonitis.

SECTION 12: Ecological information

Ecotoxicity The product components are not classified as environmentally hazardous. However, large or

frequent spills may have hazardous effects on the environment.

12.1. Toxicity

Acute aquatic toxicity

Acute toxicity - fish

Acetone

LC₅₀, 96 hours: >100mg/l mg/l, Fish

Acute toxicity - aquatic

invertebrates

EC₅o, 48 hours: >100mg/l mg/l, Daphnia magna

Acute toxicity - aquatic plants IC₅₀, 72 hours: >100mg/l mg/l, Algae

12.2. Persistence and degradability

Persistence and degradability The product is readily biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative potential The product does not contain any substances expected to be bioaccumulating.

Partition coefficient : -0.24/0.58

12.4. Mobility in soil

Mobility The product is soluble in water.

Adsorption/desorption

coefficient

Not available.

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB

assessment

This substance is not classified as PBT or vPvB according to current UK criteria.

12.6. Other adverse effects

Other adverse effects Not available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

General information Waste is classified as hazardous waste. Dispose of waste to licensed waste disposal site in

accordance with the requirements of the local Waste Disposal Authority. Do not puncture or

incinerate, even when empty.

Disposal methodsConfirm disposal procedures with environmental engineer and local regulations. Containers

should be thoroughly emptied before disposal because of the risk of an explosion. Empty containers must not be punctured or incinerated because of the risk of an explosion. Reuse or

recycle products wherever possible.

SECTION 14: Transport information

14.1. UN number

UN No. (ADR/RID) 1993

UN No. (IMDG) 1993

UN No. (ICAO) 1993

14.2. UN proper shipping name

Proper shipping name

FLAMMABLE LIQUID, N.O.S. (ACETONE, XYLENE)

(ADR/RID)

Proper shipping name (IMDG) FLAMMABLE LIQUID, N.O.S. (ACETONE, XYLENE)

Proper shipping name (ICAO) FLAMMABLE LIQUID, N.O.S. (ACETONE, XYLENE)

Proper shipping name (ADN) FLAMMABLE LIQUID, N.O.S. (ACETONE, XYLENE)

14.3. Transport hazard class(es)

ADR/RID class 3

ADR/RID label 3

IMDG class 3

ICAO class/division 3

Transport labels



14.4. Packing group

ADR/RID packing group II

IMDG packing group

ICAO packing group

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant

No.

14.6. Special precautions for user

EmS F-E, S-E

Emergency Action Code 3YE

Hazard Identification Number 33

(ADR/RID)

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

SECTION 16: Other information

Revision comments NOTE: Lines within the margin indicate significant changes from the previous revision.

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Revision 21

Supersedes date 24/01/2022 SDS status Approved.

Hazard statements in full H225 Highly flammable liquid and vapour.

H226 Flammable liquid and vapour. H312 Harmful in contact with skin. H315 Causes skin irritation.

H319 Causes serious eye irritation.

H332 Harmful if inhaled.

H336 May cause drowsiness or dizziness.