HURST SCIENTIFIC

Safety Data Sheet
Ethyl Acetate

SECTION 1: Identification

GHS Product identifier

Product name	Ethyl Acetate
Product number	01141 02500A
Brand	Hurstchem

Other means of identification

Acetic acid ethyl ester, Vinegar Naphtha, Ethyl Ethanoate

Recommended use of the chemical and restrictions on use

Laboratory Solvent

Supplier's details

Name	Hurst Scientific
Address	2 Transit Place 6112 Forrestdale WA Australia
Telephone	1300 778 068
email	sales@hurstscientific.com.au

Emergency phone number

Australian Poisons Information Centre 131 126
Australian Emergency Services 000

SECTION 2: Hazard identification

General hazard statement

Classified as a Hazardous substance according to the Globally Harmonised System of Classification and Labelling of Chemicals (GHS) and Safe Work Australia criteria.

Classification of the substance or mixture

GHS classification in accordance with: UN GHS revision 8

- Flammable liquids, Cat. 2
- Serious eye damage/eye irritation, Cat. 2A
- Specific target organ toxicity following single exposure, Cat. 3

GHS label elements, including precautionary statements

Pictograms

1. Flame; 2. Exclamation mark

Signal word	**Danger**

Hazard statement(s)

H225	Highly flammable liquid and vapor
H319	Causes serious eye irritation
H336	May cause drowsiness or dizziness

Precautionary statement(s)

P261	Avoid breathing dust/fume/gas/mist/vapors/spray.
P240	Ground and bond container and receiving equipment.
P241	Use explosion-proof [electrical/ventilating/lighting/...] equipment.
P242	Use non-sparking tools.
P243	Take action to prevent static discharges.
P235	Keep cool.
P271	Use only outdoors or in a well-ventilated area.
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P370+P378	In case of fire: Use … to extinguish.
P337+P313	If eye irritation persists: Get medical advice/attention.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P312	Call a POISON CENTER/doctor/... if you feel unwell.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P405	Store locked up.
P501	Dispose of contents/container to …

Other hazards which do not result in classification
Classified as a Dangerous goods according to the ADG Code for the Transport of Dangerous Goods by Road and Rail (7th Edition).

SECTION 3: Composition/information on ingredients

Mixtures

Hazardous components

1. Ethyl acetate

Concentration	>= 99.5 - 100 %
EC no.	205-500-4
CAS no.	141-78-6
Index no.	607-022-00-5

- Flammable liquids, Cat. 2
- Specific target organ toxicity following single exposure, Cat. 3
- Serious eye damage/eye irritation, Cat. 2A

H225	Highly flammable liquid and vapor
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SECTION 4: First-aid measures

Description of necessary first-aid measures

If inhaled	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a Poison Centre or doctor/physician for advice. Give artificial respiration if victim is not breathing. Administer oxygen if breathing is difficult.
In case of skin contact	Remove and isolate contaminated clothing and shoes. Immediately flush skin and hair with running water (and soap, if available) for at least 15 minutes. If skin irritation occurs, get medical advice/attention. Wash contaminated clothing and shoes before reuse. *In case of burns, immediately cool affected skin for as long as possible with cold water. Do not remove clothing if adhering to skin.
In case of eye contact	Immediately flush eyes with running water for several minutes, holding eyelids open and occasionally lifting the upper and lower eyelids. Remove contact lenses if present and easy to do. Continue rinsing for at least 15 minutes. If eye irritation persists, get medical advice/attention.
If swallowed	Rinse mouth with water. Do NOT induce vomiting. Get medical advice/attention. Never give anything by mouth to an unconscious person.

Personal protective equipment for first-aid responders
Eye wash station, safety shower and First Aid kit.

Most important symptoms/effects, acute and delayed
Causes serious eye irritation. May cause drowsiness or dizziness.

SECTION 5: Fire-fighting measures

Suitable extinguishing media
Use dry chemical, Carbon dioxide (CO2), foam or water spray for extinction. Do not use straight streams. Alcohol resistant foam is the preferred firefighting medium but, if it is not available, normal foam can be used. *CAUTION: This product has a very low flash point: Use of water spray when fighting fire may be inefficient.

Specific hazards arising from the chemical
Risk of violent reaction or explosion! Vapours may form explosive mixtures with air. Vapours may travel to source of ignition and flash back. Most vapours are heavier than air; They will spread along ground and collect in low or confined areas (sewers, basements, tanks). Vapour explosion hazard indoors, outdoors or in sewers! Containers may explode when heated. Many liquids are lighter than water. Fire will produce irritating, corrosive and/or toxic gases, including Carbon oxides.

Special protective actions for fire-fighters
Contain runoff from fire control or dilution water - Runoff may cause pollution. Runoff to sewer may create fire or explosion hazard! Wear positive pressure self-contained breathing apparatus (SCBA). Structural firefighters' protective clothing will only provide limited protection.

Further information
Hazchem code 3YE

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures
Wear protective gloves/protective clothing/eye protection/face protection and suitable respirator

Environmental precautions
pillages and decontamination runoff should be prevented from entering drains and watercourses.

Methods and materials for containment and cleaning up
Absorb with earth, sand or other non-combustible material. Use clean, non-sparking tools to collect material and place it in suitable containers for later disposal

SECTION 7: Handling and storage

Precautions for safe handling
Safety showers and eyewash facilities should be provided within the immediate work area for emergency use. Ensure adequate ventilation - Use only outdoors or in a well-ventilated area. Handle in accordance with good industrial hygiene and safety practice. Avoid breathing mist/vapours and contact with eyes, skin and clothing. Do not ingest. Wear protective gloves/protective clothing/eye protection/face protection and suitable respirator HIGHLY FLAMMABLE LIQUID & VAPOUR: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources - No smoking. Ground and bond container and receiving equipment. Use explosion-proof equipment and non-sparking tools. Take action to prevent static discharges.

Conditions for safe storage, including any incompatibilities
Store in a cool, dry and well-ventilated place, out of direct sunlight. Keep container tightly closed when not in use. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources - No smoking. Keep away from foodstuffs and incompatible materials, Store locked up.

Specific end use(s)
Keep in the original container.

SECTION 8: Exposure controls/personal protection

Control parameters

CAS: 141-78-6
Ethyl acetate
AU/SWA (Australia): 400 ppm; 1440 mg/m3 STEL inhalation; 200 ppm; 720 mg/m3 TWA inhalation

Appropriate engineering controls
A system of local and/or general exhaust is recommended to keep employee exposures as low as possible. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. *Use explosion-proof electrical/ventilating/lighting equipment.

Individual protection measures, such as personal protective equipment (PPE)

Eye/face protection
Wear appropriate eye protection to prevent eye contact. Recommended: Chemical goggles or face shield and safety glasses.

Skin protection
Wear appropriate personal protective clothing to prevent skin contact. Recommended: Impervious clothing; Flame retardant antistatic protective clothing. The type of protective equipment must be selected according to the concentration and amount of the hazardous substance(s) at the specific workplace.

Respiratory protection
In case of inadequate ventilation, wear respiratory protection. Recommended: Organic vapour respirator (refer to AS/NZS 1715 & 1716).

SECTION 9: Physical and chemical properties

Basic physical and chemical properties

Physical state	Liquid
Appearance	Colourless liquid.
Color	Clear
Odor	Ether-like, fruity
Odor threshold	No Data Available
Melting point/freezing point	-84°C
Boiling point or initial boiling point and boiling range	77°C
Flammability	Highly flammable liquid and vapour.
Lower and upper explosion limit/flammability limit	
Flash point	-4 °C [Closed cup]
Auto-ignition temperature	

Decomposition temperature	427°C
pH	No Data Available
Kinematic viscosity	
Solubility	80 g/L in water 25°C
Partition coefficient n-octanol/water (log value)	
Vapor pressure	98.3 hPa (@ 20 °C)
Evaporation rate	No Data Available
Density and/or relative density	0.9003
Relative vapor density	3.04 Air = 1

SECTION 10: Stability and reactivity

Reactivity
Reacts with strong oxidants; This generates fire and explosion hazard. Reacts violently with strong bases and strong acids. Attacks rubber and some forms of plastic.

Chemical stability
Stable under normal conditions of use.

Possibility of hazardous reactions
No information available.

Conditions to avoid
Incompatible/reactive with strong oxidisers, alkalis and acids.

Incompatible materials
Incompatible/reactive with strong oxidisers, alkalis and acids.

Hazardous decomposition products
Fire/decomposition will produce irritating, corrosive and/or toxic gases, including Carbon oxides.

SECTION 11: Toxicological information

Information on toxicological effects

Acute toxicity
Low acute toxicity by the oral route. Low acute toxicity by the dermal route. Low acute toxicity by the inhalation route.

Skin corrosion/irritation
Non-irritating/slight skin irritant. Repeated exposure may cause skin dryness or cracking.

Serious eye damage/irritation
Causes serious eye irritation.

Respiratory or skin sensitization
Not likely to be skin sensitising.

Germ cell mutagenicity
No mutagenic or genotoxic potential.

Carcinogenicity
Not likely to be a human carcinogen.

Reproductive toxicity
Not considered to have any specific reproductive and developmental effects.

Specific target organ toxicity (STOT) - single exposure
May cause drowsiness or dizziness.

Specific target organ toxicity (STOT) - repeated exposure
Not considered to cause serious damage to health from repeated exposure.

Aspiration hazard
No information available.

Additional information
Ingestion Acute toxicity (Oral):- LD50, Rat: 5,620 mg/kg

Other Acute toxicity (Dermal):- LD50, Rabbit (male): >20,000 mg/kg

Carcinogen Category None

SECTION 12: Ecological information

Toxicity
Aquatic toxicity:- LC50, Fish (Pimephales promelas): 230 mg/L (96 h)

Persistence and degradability
The material is readily biodegradable.

Bioaccumulative potential
No information available.

Mobility in soil
No information available.

SECTION 13: Disposal considerations

Disposal methods

Product disposal
Dispose of in accordance with local authority guidelines.

Packaging disposal
Dispose of in accordance with local authority guidelines.

Other disposal recommendations
Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable.

SECTION 14: Transport information

UN Number	1173
Hazchem emergency action code (EAC)	3YE
UN Proper Shipping Name	Acetone
Transport hazard class(es)	3
Packing group	II

Environmental hazards
18 Liquids - Highly Flammable, Toxic And/Or Corrosive

Special precautions for user
No Data Available

SECTION 15: Regulatory information

Chemical Safety Assessment
General Information Poisons Schedule (Aust) ETHYL ACETATE is listed in Appendix B of the SUSMP: Substances considered not to require control by scheduling (Low toxicity; Any use). Poisons Schedu;e (Aust) Not Scheduled

SECTION 16: Other information

Further information/disclaimer

This SDS is prepared in accordance with the Safe Work Australia, Preparation of Safety Data Sheets for Hazardous Chemicals Code of Practice, (2011). The information contained within is believed to be accurate at the date of preparation/review. Hurst Scientific makes no claims of the accuracy or completeness of the information and excludes all liability for any loss or damage related to the supply or use of the information in this material safety data sheet. It is recommended the user make their own determinations as to the suitability of the information provided to the application in which the product is to be used.

Preparation information

References

1. Safe Work Australia, Preparation of Safety Data Sheets for Hazardous Chemicals Code of Practice, (2011).
2. Safe Work Australia, National Code of Practice for the Labelling of Workplace Hazardous Chemicals (2015).
3. Safe Work Australia, Workplace Exposure Standards for Airborne Contaminants (2013)
4. National Transport Commission Australian Code for the Transport of Dangerous Goods by Road and Rail (ADG Code); Canprint: Canberra (2007), Volume 1, 7th Edition.
5. Standards Australia, Dangerous Goods Initial Emergency Response Guide: Australian Handbook (SAA/SNZ HB76); Homebush (2004).