HURST SCIENTIFIC

Safety Data Sheet
Xylene Sulfur Free

SECTION 1: Identification

GHS Product identifier

Product name	Xylene Sulfur Free
Product number	XLS-2.5L, 5L, 10L, 20L
Brand	Hurstchem

Xylene

Synonyms – Dimethylbenzene, Xylol.

Recommended use of the chemical and restrictions on use

Laboratory Solvent

Supplier's details

Name	Hurst Scientific
Address	2/36 Hensbrook Loop 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.

Classified as a **Dangerous goods** according to the ADG Code for the Transport of Dangerous Goods by Road and Rail (7th Edition).

Classification of the substance or mixture

- Flammable liquids, Cat. 3
- Acute toxicity, dermal, Cat. 4
- Acute toxicity, inhalation, Cat. 4
- Aspiration hazard, Cat. 1

- Skin corrosion/irritation, Cat. 2
- Specific target organ toxicity, single exposure, Cat. 3
- Specific target organ toxicity, repeated exposure, Cat. 2

GHS label elements, including precautionary statements.

Pictograms

1. Flame; 2. Exclamation mark; 3. Health hazard

Signal word **Danger**

Hazard statement(s)

H226	Flammable liquid and vapor
H304	May be fatal if swallowed and enters airways.
H312	Harmful in contact with skin
H315	Causes skin irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H373	May cause damage to organs [organs] through prolonged or repeated exposure [route]
H336	May cause drowsiness or dizziness.
H402	Harmful to aquatic life

Precautionary statement(s)

P102	Keep out of reach of children.
P103	Read carefully and follow all instructions.
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P233	Keep container tightly closed.
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.
P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P264	Wash … thoroughly after handling.
P271	Use only outdoors or in a well-ventilated area.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection/hearing protection/ ...
P301+P316	IF SWALLOWED: Get emergency medical help immediately.
P302+P352	IF ON SKIN: Wash with plenty of water/...
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse affected areas with water [or shower].
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P316	Get emergency help immediately.
P317	Get medical help.
P331	Do NOT induce vomiting.
P332+P317	If skin irritation occurs: Get medical help.
P362	Take off contaminated clothing.
P370+P378	In case of fire: Use … to extinguish.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.

P235	Keep cool.
P405	Store locked up.
P501	Dispose of contents/container to …

SECTION 3: Composition/information on ingredients

Mixtures

1. XYLENES (MIXED) ISOMERS

Concentration	Balance
CAS no.	1330-20-7

2. ETHYLBENZENE

Concentration	10 - 30 %
CAS no.	100-41-4

SECTION 4: First-aid measures

Description of necessary first-aid measures

If inhaled	Evacuate to fresh air immediately. If there are signs of poisoning seek immediate medical attention or contact Poisons Information Centre. If unconscious place in recovery position, provide artificial respiration if breathing ceases. Seek immediate medical attention.
In case of skin contact	Remove contaminated clothing and wash affected area with soap and water thoroughly. If irritation develops, seek medical attention.
In case of eye contact	Flush eyes with gentle flowing water for at least 20 minutes. Seek medical attention.
If swallowed	DO NOT induce vomiting. Rinse mouth out thoroughly. Seek immediate medical attention.

Personal protective equipment for first-aid responders

Eye wash station, safety shower and First Aid kit.

Indication of immediate medical attention and special treatment needed, if necessary

Treat symptomatically based on judgement of doctor and individual reactions of patient.

SECTION 5: Fire-fighting measures

Suitable extinguishing media

Use Alcohol resistant foam, standard foam, Carbon Dioxide, or dry chemical.

Specific hazards arising from the chemical.

Toxic gases and smoke may evolve. May form flammable mixtures with air.

Special protective actions for fire-fighters

Wear SCBA (Self-Contained Breathing Apparatus) and full protective equipment.

Hazchem code: 3Y

SECTION 6: Accidental release measures

Personal precautions, protective equipment, and emergency procedures
Shut off all possible sources of ignition. Evacuate all unnecessary personnel. Increase ventilation to avoid inhalation of vapours. Wear appropriate protective clothing. If possible, contain the spill. Avoid walking through spilled product as it may be slippery when spilt. Absorb with vermiculite or similar inert substance and seal in properly labelled containers for disposal.
Methods and materials for containment and cleaning up
Absorb with vermiculite or similar and place into a suitably labelled container. Dispose of waste according to local authority guidelines. Do not contaminate drains or waterways.

SECTION 7: Handling and storage

Precautions for safe handling
Ensure an eye bath and safety shower are readily available for use. Observe good personal hygiene practices and recommended procedures. Wash thoroughly after handling. Take precautionary measures against static discharges by bonding and grounding equipment. Avoid contact with eyes, skin and clothing. Do not inhale product vapours. Avoid prolonged or repeated exposure. Operations should be carried out in an efficient fume hood or equivalent system.

Conditions for safe storage, including any incompatibilities.
Store in a cool, dry, well-ventilated, fire-proof area away from direct sunlight. Keep containers tightly sealed when not in use. Inspect regularly for deficiencies such as damage or leaks. Protect against physical damage. Ground and bond storage containers. Store away from incompatible materials.

SECTION 8: Exposure controls/personal protection

National exposure standards	**Xylene:** **TWA: 80ppm (350mg/m3)** **STEL: 150ppm (655mg/m3)** **Ethyl Benzene:** **TWA: 100ppm (434mg/m3)** STEL: 125ppm (543 mg/m3)
Biological Limit Values	Not allocated for this product.

Appropriate engineering controls
A system of local exhaust is recommended to keep employee exposures as low as possible, because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. Use explosion proof ventilation to control airborne concentrations below the exposure guidelines/limits.

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

Respiratory protection
Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Always use a NIOSH or European Standard EN 149 approved respirators when necessary.

Eye/face protection
Safety glasses or goggles.

Skin protection
Chemical-resistant gloves and laboratory coat.

SECTION 9: Physical and chemical properties

Basic physical and chemical properties

Physical state	Liquid
Appearance	Clear colourless liquid
Odor	Aromatic odour
Melting point/freezing point	-48°C

Boiling point or initial boiling point and boiling range	136-145°C
Flammability	Flammable liquid
Lower and upper explosion limit/flammability limit	1-7.1% by volume in air
Flash point	23-27°C (Abel)
Auto-ignition temperature	432-530°C
pH	N/A
Solubility	0.175kg/m3 in water
Vapor pressure	4.5kPa (@ 500C)
Density and/or relative density	0.871
Relative vapor density	3.7

SECTION 10: Stability and reactivity

Reactivity
Non-reactive under recommended conditions for use and storage.

Chemical stability
Stable under recommended conditions for use, storage, and temperature.

Possibility of hazardous reactions
Polymerisation not expected occur.

Conditions to avoid.
Elevated temperatures and ignition sources.

Incompatible materials
Strong oxidising agents.

Hazardous decomposition products
Toxic gases and smoke may evolve.

SECTION 11: Toxicological information

No adverse health effects expected if the product is handled in accordance with this Safety Data Sheet and the product label. Symptoms or effects that may arise if the product is mishandled and overexposure occurs are:
Acute Effects
Inhalation: Harmful if inhaled. Material is an irritant to mucous membranes and respiratory tract.
Skin contact: Harmful in contact with skin. Can be absorbed through the skin with resultant toxic effects. Contact with skin will result in irritation.
Ingestion: Swallowing can result in nausea, vomiting and irritation of the gastrointestinal tract. May cause lung damage if swallowed. Small amounts of liquid aspirated into the respiratory system during ingestion or vomiting may cause bronchopneumonia or pulmonary oedema.
Eye contact: May be an eye irritant.
Inhalation: This material has been classified as a Category 4 Hazard. Acute toxicity estimate (based on ingredients): 10 - 20 mg/L.
Skin contact: This material has been classified as a Category 4 Hazard. Acute toxicity estimate (based on ingredients): 1,000 - 2,000 mg/Kg.
Ingestion: **No classification.**

Skin corrosion/irritation
This material has been classified as a Category 2 Hazard (reversible effects to skin).

Serious eye damage/irritation
This material has been classified as not corrosive or irritating to eyes.

Respiratory or skin sensitization

Inhalation: this material has been classified as “not a respiratory sensitiser”.
Skin: this material has been classified as “not a skin sensitiser”.

Germ cell mutagenicity
No classification.

Carcinogenicity
Not classified according to the IARC monographs.

Reproductive toxicity
No classification.

Specific target organ toxicity (STOT) - single exposure.
This material has been classified as a Category 3 Hazard. Exposure via inhalation may result in respiratory irritation.

Specific target organ toxicity (STOT) - repeated exposure.
This material has been classified as a Category 2 Hazard.

Aspiration hazard
This material has been classified as Aspiration Hazard – Category 1

SECTION 12: Ecological information

Toxicity
No information available.

Persistence and degradability
No information available.

Bioaccumulate potential
No information available.

Mobility in soil
No information available.

Other adverse effects
Environmental fate (exposure) Do not contaminate drains and waterways.

SECTION 13: Disposal considerations

Product disposal
Refer to local authority guidelines. Advise flammable nature. Should be suitable for disposal by licensed contractor.

Packaging disposal
Refer to local authority guidelines. Advise flammable nature. Should be suitable for disposal by licensed contractor.

Other disposal recommendations
Special precautions Nil.

SECTION 14: Transport information

UN Number	1307
Hazchem emergency action code (EAC)	3Y
UN Proper Shipping Name	Xylenes
Transport hazard class(es)	3
Packing group	III

Special precautions for user
Not to be loaded with explosives (Class 1), flammable gases (Class 2.1), if both are in bulk, toxic gases (Class 2.3), spontaneously combustible substances (Class 4.2), oxidising agents (Class 5.1), organic peroxides (Class 5.2), toxic substances (Class 6.1), infectious substances (Class 6.2) or radioactive substances (Class 7). Exemptions may apply.

SECTION 15: Regulatory information

Safety, health, and environmental regulations specific for the product in question

Australian Inventory of Chemical Substances (AICS)

Chemical Safety Assessment
- **Poison Schedule: S6**
- **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.
- **STEL (Short Term Exposure Limit):** The average airborne concentration over a 15-minute period which should not be exceeded at any time during a normal eight-hour workday.

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).