Safety Data Sheet

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name: **PEP SET 3550 CATALYST**

Recommended Use of the Chemical and Restrictions on Use Catalyst.

Supplier: Ixom Operations Pty Ltd (Incorporated in Australia)
NZBN: 9429041465226
Street Address: 166 Totara Street
Mt Maunganui South
New Zealand

Telephone Number: +64 9 368 2700
Facsimile: +64 9 368 2710
Emergency Telephone: **0 800 734 607 (ALL HOURS)**

Please ensure you refer to the limitations of this Safety Data Sheet as set out in the "Other Information" section at the end of this Data Sheet.

2. HAZARDS IDENTIFICATION

Classified as a Dangerous Good according to NZS 5433:2012 Transport of Dangerous Goods on Land; DANGEROUS GOODS.

Classified as hazardous according to criteria in the Hazardous Substances (Minimum Degrees of Hazard) Notice 2017 and the Hazardous Substances (Classification) Notice 2017.

SIGNAL WORD: DANGER

Subclasses:
Subclass 3.1 Category C (medium hazard) - Flammable Liquids.
Subclass 6.1 Category D - Substances which are acutely toxic.
Subclass 6.1 Category E (respiratory tract irritant) - Substances that are respiratory tract irritants.
Subclass 6.1 Category E (aspiration hazard) - Substances which may pose an aspiration toxicity hazard.
Subclass 6.3 Category A - Substances that are irritating to the skin.
Subclass 6.4 Category A - Substances that are irritating to the eye.
Subclass 6.7 Category B - Substances that are suspected human carcinogens.
Subclass 6.9 Category B (Narcotic effects) - Substances that are narcotic.
Subclass 6.9 Category B - Substances that are harmful to human target organs or systems.
Subclass 9.1 Category B - Substances that are ecotoxic in the aquatic environment.
Subclass 9.3 Category C - Substances that are harmful to terrestrial vertebrates.

Additives, Process Chemicals and Raw Materials (Flammable, Toxic [6.7]) Group Standard 2017
Approval Number: HSR002502

Hazard Statement(s):
H226 Flammable liquid and vapour.
H302 Harmful if swallowed.
H304 May be fatal if swallowed and enters airways.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H335 May cause respiratory irritation.
H336 May cause drowsiness or dizziness.
H351 Suspected of causing cancer.
H373 May cause damage to organs through prolonged or repeated exposure.
H411 Toxic to aquatic life with long lasting effects.
H433 Harmful to terrestrial vertebrates.

Precautionary Statement(s):

Prevention:
P102 Keep out of reach of children.
P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
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.
P260 Do not breathe mist/vapours/spray.
P264 Wash hands thoroughly after handling.
P271 Use only outdoors or in a well-ventilated area.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P281 Use personal protective equipment as required.
P273 Avoid release to the environment.

Response:
P301+P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P331 Do NOT induce vomiting.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313 If eye irritation persists: Get medical advice/attention.
P304+P340 IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.
P312 Call a POISON CENTER or doctor/physician if you feel unwell.
P310 Immediately call a POISON CENTER or doctor/physician.
P302+P352 IF ON SKIN: Wash with plenty of soap and water.
P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P321 Specific treatment (see First Aid Measures on the Safety Data Sheet).
P332+P313 If skin irritation occurs: Get medical advice/attention.
P362 Take off contaminated clothing before re-use.
P308+P313 IF exposed or concerned: Get medical advice/attention.
P314 Get medical advice/attention if you feel unwell.
P370+P378 In case of fire: Use extinguishing media as outlined in Section 5 of this Safety Data Sheet for extinction.
P391 Collect spillage.

Storage:
P403+P233 Store in a well-ventilated place. Keep container tightly closed.
P403+P235 Store in a well-ventilated place. Keep cool.
P405 Store locked up.

Disposal:
P501 In case of a substance that is in compliance with a HSNO approval other than a Part 6A (Group Standards) approval, a label must provide a description of one or more appropriate and achievable methods for the disposal of a substance in accordance with the Hazardous Substances (Disposal) Notice 2017. This may also include any method of disposal that must be avoided.

Other Hazards:
Repeated exposure may cause skin dryness or cracking.

3. COMPOSITION AND INFORMATION ON INGREDIENTS

Components	CAS Number	Proportion	Hazard Codes
Solvent naphtha (petroleum)heavy arom.	64742-94-5	30-60%	H304
Naphthalene	91-20-3	1-<10%	H351 H302 H400 H410
4-(3-Phenylpropyl)pyridine	2057-49-0	to 100%	H302 H315 H317 H319 H335

4. FIRST AID MEASURES

For advice, contact a Poisons Information Centre (e.g. phone Australia 131 126; New Zealand 0800 764 766) or a doctor.

Inhalation:
Remove victim from area of exposure - avoid becoming a casualty. Remove contaminated clothing and loosen remaining clothing. Allow patient to assume most comfortable position and keep warm. Keep at rest until fully recovered. If patient finds breathing difficult and develops a bluish discolouration of the skin (which suggests a lack of oxygen in the blood - cyanosis), ensure airways are clear of any obstruction and have a qualified person give oxygen through a face mask. Apply artificial respiration if patient is not breathing. Seek immediate medical advice.

Skin Contact:
If skin or hair contact occurs, immediately remove any contaminated clothing and wash skin and hair thoroughly with running water and soap. If swelling, redness, blistering or irritation occurs seek medical assistance.

Eye Contact:
If in eyes, hold eyelids apart and flush the eye continuously with running water. Continue flushing until advised to stop by a Poisons Information Centre or a doctor, or for at least 15 minutes.

Ingestion:
Rinse mouth with water. If swallowed, do NOT induce vomiting. Give a glass of water. Never give anything by the mouth to an unconscious patient. Seek immediate medical assistance.

Indication of immediate medical attention and special treatment needed:
Treat symptomatically. Delayed pulmonary oedema may result.

5. FIRE FIGHTING MEASURES

Suitable Extinguishing Media:
Alcohol resistant foam is the preferred firefighting medium but, if it is not available, normal protein foam can be used.

Unsuitable Extinguishing Media:
Halones. Solid water jet/stream may scatter and spread the fire.

Hazchem or Emergency Action Code: · 3Y

Specific hazards arising from the chemical:
Flammable liquid. On burning will emit toxic fumes, including those of oxides of carbon , and hydrocarbons . May form flammable vapour mixtures with air. Vapour may travel a considerable distance to source of ignition and flash back. Environmentally hazardous.

Special protective equipment and precautions for fire-fighters:
Fire fighters to wear self-contained breathing apparatus and suitable protective clothing if risk of exposure to vapour or products of combustion. Keep containers cool with water spray. If safe to do so, remove containers from path of fire.

6. ACCIDENTAL RELEASE MEASURES

Emergency procedures/Environmental precautions:
Shut off all possible sources of ignition. Clear area of all unprotected personnel. Do not allow container or product to get into drains, sewers, streams or ponds. If contamination of sewers or waterways has occurred advise local emergency services.

Personal precautions/Protective equipment/Methods and materials for containment and cleaning up:
Slippery when spilt. Avoid accidents, clean up immediately. Wear protective equipment to prevent skin and eye contact and breathing in vapours. Work up wind or increase ventilation. Contain - prevent run off into drains and waterways. Use absorbent (soil, sand or other inert material). Collect and seal in properly labelled containers or drums for disposal. Use non-sparking tools.

7. HANDLING AND STORAGE

Precautions for safe handling: Avoid skin and eye contact and breathing in vapour. Flameproof equipment is necessary in all areas where this chemical is being used. Nearby equipment must be earthed. All potential sources of ignition (open flames, pilot lights, furnaces, spark producing switches and electrical equipment etc) must be eliminated both in and near the work area. Do NOT smoke. May form flammable vapour mixtures with air. Vapour may travel a considerable distance to source of ignition and flash back. Take precautionary measures against static discharges. When using do not eat, drink or smoke. Wash hands thoroughly after handling.

Conditions for safe storage, including any incompatibilities: Store in a cool, dry, well ventilated place. Store away from sources of heat or ignition. Store away from foodstuffs. Store away from incompatible materials described in Section 10. Keep containers closed when not in use - check regularly for leaks.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Workplace Exposure Standards: No value assigned for this specific material by the New Zealand Workplace Health & Safety Authority. However, Workplace Exposure Standard(s) for constituent(s):

Naphthalene: WES-TWA 10 ppm, 52 mg/m^3; WES-STEL 15 ppm, 79 mg/m^3

As published by the New Zealand Workplace Health & Safety Authority.

WES - TWA (Workplace Exposure Standard - Time Weighted Average) - The eight-hour, time-weighted average exposure standard is designed to protect the worker from the effects of long-term exposure.

WES - STEL (Workplace Exposure Standard - Short Term Exposure Limits) - The 15 minute average exposure standard. Applies to any 15 minute period in the working day and is designed to protect the worker against adverse effects of irritation, chronic or irreversible tissue change, or narcosis that may increase the likelihood of accidents. The WES-STEL is not an alternative to the WES-TWA; both short-term and eight-hour, time-weighted average exposures should be determined.

These Workplace Exposure Standards are guides to be used in the control of occupational health hazards. All atmospheric contamination should be kept to as low a level as is workable. These workplace exposure standards should not be used as fine dividing lines between safe and dangerous concentrations of chemicals. They are not a measure of relative toxicity.

Appropriate engineering controls:
Ensure ventilation is adequate and that air concentrations of components are controlled below quoted Workplace Exposure Standards. Vapour heavier than air - prevent concentration in hollows or sumps. DO NOT enter confined spaces where vapour may have collected. Keep containers closed when not in use.

If in the handling and application of this material, safe exposure levels could be exceeded, the use of engineering controls such as local exhaust ventilation must be considered and the results documented. If achieving safe exposure levels does not require engineering controls, then a detailed and documented risk assessment using the relevant Personal Protective Equipment (PPE) (refer to PPE section below) as a basis must be carried out to determine the minimum PPE requirements.

Individual protection measures, such as Personal Protective Equipment (PPE):
The selection of PPE is dependent on a detailed risk assessment. The risk assessment should consider the work situation, the physical form of the chemical, the handling methods, and environmental factors.

OVERALLS, SAFETY SHOES, CHEMICAL GOGGLES, GLOVES, RESPIRATOR.

Wear overalls, chemical goggles and impervious gloves. Use with adequate ventilation. If determined by a risk assessment an inhalation risk exists, wear an organic vapour/particulate respirator or an air supplied mask meeting the requirements of AS/NZS 1715 and AS/NZS 1716. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storage or re-use.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state:	Clear Liquid
Colour:	Light Yellow
Odour:	Hydrocarbon - like
Odour Threshold:	Not available
Solubility:	Immiscible with water.
Specific Gravity:	0.97 @25°C
Relative Vapour Density (air=1):	>1
Vapour Pressure (20 °C):	4.3 hPa
Flash Point (°C):	51.6 (Closed Cup)
Flammability Limits (%):	0.9%(V) - 6%(V)
Autoignition Temperature (°C):	Not available
Boiling Point/Range (°C):	53.3
pH:	Not available
Viscosity:	Not available

10. STABILITY AND REACTIVITY

Reactivity:	No information available.
Chemical stability:	Stable if stored and handled under recommended conditions.

Possibility of hazardous reactions:	Vapours may form explosive mixture with air. Hazardous polymerisation will not occur.
Conditions to avoid:	Avoid exposure to heat, sources of ignition, and open flame. Avoid contact with foodstuffs. Avoid aerosol formation.
Incompatible materials:	Incompatible with strong oxidising agents, chromic acid.
Hazardous decomposition products:	Oxides of carbon. Hydrocarbons.

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:

Ingestion:	Swallowing can result in nausea, vomiting and central nervous system depression. If the victim is showing signs of central system depression (like those of drunkeness) there is greater likelihood of the patient breathing in vomit and causing damage to the lungs. Breathing in vomit may lead to aspiration pneumonia (inflammation of the lung). Aspiration hazard - this material can enter lungs during swallowing or vomiting and cause lung inflammation and damage.
Eye contact:	An eye irritant.
Skin contact:	Contact with skin will result in irritation. Will have a degreasing action on the skin. Repeated or prolonged skin contact may lead to irritant contact dermatitis.
Inhalation:	Material is irritant to the mucous membranes of the respiratory tract (airways). Breathing in vapour can result in headaches, dizziness, drowsiness, and possible nausea. Breathing in high concentrations can produce central nervous system depression, which can lead to loss of co-ordination, impaired judgement and if exposure is prolonged, unconsciousness.

Acute toxicity:
Average Toxicity Estimate (ATE mix, oral): >300 - 2,000 mg/kg
Average Toxicity Estimate (ATE mix, dermal): >2,000 mg/kg

Skin corrosion/irritation:	Irritant. The product has not been tested; the classification is based on the components of the mixture.
Serious eye damage/irritation:	Irritant. The product has not been tested; the classification is based on the components of the mixture.
Respiratory or skin sensitisation:	No information available.

Chronic effects:

Mutagenicity:	No information available.
Carcinogenicity:	Suspected of causing cancer.
Reproductive toxicity:	No information available.
Specific Target Organ Toxicity (STOT) - single exposure:	May cause respiratory irritation. May cause drowsiness and dizziness.
Specific Target Organ Toxicity (STOT) - repeated exposure:	May cause damage to organs through prolonged or repeated exposure.
Aspiration hazard:	May be fatal if swallowed and enters airways.

12. ECOLOGICAL INFORMATION

Ecotoxicity Avoid contaminating waterways.

Persistence/degradability: No information available.

Bioaccumulative potential: No information available.

Mobility in soil: No information available.

Aquatic toxicity: Toxic to aquatic organisms. May cause long lasting harmful effects to aquatic life.

48hr EC50 (Daphnia magna): 1.09-3.4 mg/L (for Naphthalene)
96hr LC50 (rainbow trout): 0.91-2.82 mg/L (for Naphthalene)

13. DISPOSAL CONSIDERATIONS

Disposal methods:
Refer to local government authority for disposal recommendations. Dispose of contents/container in accordance with local/regional/national/international regulations.

14. TRANSPORT INFORMATION

Road and Rail Transport
Classified as a Dangerous Good according to NZS 5433:2012 Transport of Dangerous Goods on Land; DANGEROUS GOODS.

UN No: 1993
Transport Hazard Class: 3 Flammable Liquid
Packing Group: III
Proper Shipping Name or Technical Name: FLAMMABLE LIQUID, N.O.S. (CONTAINS AROMATIC PETROLEUM NAPHTHA)
Hazchem or Emergency Action Code: · 3Y

Marine Transport
Classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea; DANGEROUS GOODS.

UN No: 1993
Transport Hazard Class: 3 Flammable Liquid
Packing Group: III
Proper Shipping Name or Technical Name: FLAMMABLE LIQUID, N.O.S. (CONTAINS AROMATIC PETROLEUM NAPHTHA)

IMDG EMS Fire: F-E
IMDG EMS Spill: S-E

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

UN No:	1993
Transport Hazard Class:	3 Flammable Liquid
Packing Group:	III
Proper Shipping Name or Technical Name:	FLAMMABLE LIQUID, N.O.S. (CONTAINS AROMATIC PETROLEUM NAPHTHA)

15. REGULATORY INFORMATION

Classification:
Classified as hazardous according to criteria in the Hazardous Substances (Minimum Degrees of Hazard) Notice 2017 and the Hazardous Substances (Classification) Notice 2017.

Subclasses:
Subclass 3.1 Category C (medium hazard) - Flammable Liquids.
Subclass 6.1 Category D - Substances which are acutely toxic.
Subclass 6.1 Category E (respiratory tract irritant) - Substances that are respiratory tract irritants.
Subclass 6.1 Category E (aspiration hazard) - Substances which may pose an aspiration toxicity hazard.
Subclass 6.3 Category A - Substances that are irritating to the skin.
Subclass 6.4 Category A - Substances that are irritating to the eye.
Subclass 6.7 Category B - Substances that are suspected human carcinogens.
Subclass 6.9 Category B (Narcotic effects) - Substances that are narcotic.
Subclass 6.9 Category B - Substances that are harmful to human target organs or systems.
Subclass 9.1 Category B - Substances that are ecotoxic in the aquatic environment.
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H433 Harmful to terrestrial vertebrates.

16. OTHER INFORMATION

Supplier Safety Data Sheet; 03/ 2011.
PEP SET is a registered trademark.

This safety data sheet has been prepared by Ixom Operations Pty Ltd (Toxicology & SDS Services).

Reason(s) for Issue:
Reissue of an obsolete SDS

This SDS summarises to our best knowledge at the date of issue, the chemical health and safety hazards of the material and general guidance on how to safely handle the material in the workplace. Since Ixom Operations Pty Ltd cannot anticipate or control the conditions under which the product may be used, each user must, prior to usage, assess and control the risks arising from its use of the material.

If clarification or further information is needed, the user should contact their Ixom representative or Ixom Operations Pty Ltd at the contact details on page 1.

Ixom Operations Pty Ltd's responsibility for the material as sold is subject to the terms and conditions of sale, a copy of which is available upon request.