SAFETY DATA SHEET

SECTION 1 PRODUCT AND COMPANY IDENTIFICATION

1.1 Product identifier

Product Name	**Plant Condensate (NAPHTHA)**
Synonym(s)	INPEX Onshore Condensate

1.2 Product identifier

Use(s)	PETROLEUM REFINING

1.3 Details of the supplier of the product

Supplier name	**INPEX OPERATIONS AUSTRALIA PTY LTD**
Address	Level 22, 100 St. Georges Terrace, Perth, WA, 6000, AUSTRALIA
Telephone	08 6213 6000

1.4 Emergency telephone number(s)

Emergency	08 8983 8888

SECTION 2 HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

CLASSIFIED AS HAZARDOUS ACCORDING TO SAFE WORK AUSTRALIA CRITERIA

GHS classification(s) Flammable Liquids: Category 2

Physical Hazards

Flammable Liquids: Category 2

Health Hazards

Aspiration Hazard:	Category 1
Skin Corrosion/Irritation:	Category 2
Specific Target Organ Toxicity (Single Exposure):	Category 3
Germ Cell Mutagenicity:	Category 1B
Carcinogenicity:	Category 1A
Toxic to Reproduction:	Category 1A
Specific Target Organ Toxicity (Repeated Exposure):	Category 2

Environmental Hazards

Not classified as an Environmental Hazard

2.2 GHS Label elements

Signal word **DANGER**

Pictogram(s)

Hazard statements(s)

H225	Highly flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H336	May cause drowsiness or dizziness.

H340	May cause genetic defects.
H350	May cause cancer.
H360	May damage fertility or the unborn child.
H373	May cause damage to organs through prolonged or repeated exposure.

Prevention statement(s)

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.
P243	Take precautionary measures against static discharge.
P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P264	Wash thoroughly after handling.
P271	Use only outdoors or in a well-ventilated area.
P280	Wear protective gloves/protective clothing/eye protection/face protection.

Response statement(s)

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.
P304 + P340	IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.
P308 + P313	IF exposed or concerned: Get medical advice/ attention.
P321	Specific treatment is advised - see first aid instructions.
P331	Do NOT induce vomiting.
P362	Take off contaminated clothing and wash before re-use.
P370 + P378	In case of fire: Use appropriate media for extinction.

Storage statement(s)

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

Disposal statement(s)

P501	Dispose of contents/container in accordance with relevant regulations.

2.3 Other Hazards
In high concentrations may cause asphyxiation. Contact with liquid may cause cold burns/frostbite.

SECTION 3 COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances/Mixtures

Ingredient	CAS No.	EC number	Content (Vol. %)
NATURAL GAS CONDENSATES (PETROLEUM)	64741-47-5	265-047-3	>90%
Containing			
HEXANE, Mixture of Isomers	92112-69-1	-	25 to 50%
ISOPENTANE	78-78-4	201-142-8	10 to 30 %
PENTANE(S)	109-66-0	203-692-4	25 to 50%
TOLUENE	108-88-3	203-625-9	1 to 5%
XYLENE	1330-20-7	215-535-7	1 to 5%
BENZENE	71-43-2	200-753-7	1 to 2%

SECTION 4 FIRST AID MEASURES

4.1 Description of first aid measures

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

Inhalation If inhaled, remove from contaminated area. To protect rescuer, use a Type A (Organic vapour) respirator or an Air-line respirator (in poorly ventilated areas). Apply artificial respiration if not breathing.

Skin If skin or hair contact occurs, remove contaminated clothing and flush skin and hair with running water. Continue flushing with water until advised to stop by a Poisons Information Centre or a doctor.

Ingestion For advice, contact a Poisons Information Centre on 13 11 26 (Australia Wide) or a doctor (at once). If swallowed, do not induce vomiting.

First aid facilities Eye wash facilities and safety shower should be available.

4.2 Most important symptoms and effects, both acute and delayed
See Section 11 for more detailed information on health effects and symptoms.

4.3 Immediate medical attention and special treatment needed
Treat symptomatically.

SECTION 5 FIRE FIGHTING MEASURES

5.1 Extinguishing media
Dry agent, carbon dioxide or foam. Prevent contamination of drains and waterways.

5.2 Special hazards arising from the substance or mixture
Highly flammable. May evolve carbon oxides and hydrocarbons when heated to decomposition. Eliminate all ignition sources including cigarettes, open flames, spark producing switches/tools, pilot lights, heaters, naked lights, mobile phones, etc when handling. Earth containers when dispensing fluids.

5.3 Advice for firefighters
Evacuate area and contact emergency services. Toxic gases may be evolved in a fire situation. Remain upwind and notify those downwind of hazard. Wear full protective equipment including Self Contained Breathing Apparatus (SCBA) when combating fire. Use waterfog to cool intact containers and nearby storage areas.

5.4 Hazchem code.
3YE
3 Normal Foam (protein based foam that is not alcohol resistant).
Y Risk of violent reaction or explosion. Wear full fire kit and breathing apparatus. Contain spill and run-off.
E Evacuation of people in and around the immediate vicinity of the incident should be considered.

SECTION 6 ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures
Wear Personal Protective Equipment (PPE) as detailed in section 8 of the SDS. Clear area of all unprotected personnel. Ventilate area where possible. Contact emergency services where appropriate.

6.2 Environmental precautions
Prevent product from entering drains and waterways.

6.3 Methods of cleaning up
Contain spillage, then cover / absorb spill with non-combustible absorbent material (vermiculite, sand, or similar), collect and place in suitable containers for disposal. Eliminate all sources of ignition.

6.4 Reference to other sections
See Sections 8 and 13 for exposure controls and disposal.

SECTION 7 HANDLING AND STORAGE

7.1 Precautions for safe handling
Avoid contaminating soil or releasing this material into sewage and drainage systems and bodies of water. Use of safe work practices are recommended to avoid eye or skin contact and inhalation. Observe good personal hygiene, including washing hands before eating. Prohibit smoking in areas of use.
Electrostatic charge may accumulate and create a hazardous condition when handling this material. To minimize this hazard, bonding and grounding may be necessary but may not, by themselves, be sufficient. Review all operations which have the potential of generating and accumulating an electrostatic charge and/or a flammable atmosphere (including tank and container filling, splash filling, tank cleaning, sampling, gauging, switch loading, filtering, mixing, agitation, and vacuum truck operations) and use appropriate mitigating procedures.

7.2 Conditions for safe storage, including any incompatibilities
Store in a cool, dry, well ventilated area, removed from oxidising agents, acids, alkalis, heat or ignition sources, foodstuffs, out of direct sunlight and out of the reach of children. Ensure containers are adequately labelled, protected from physical damage and sealed when not in use. Check regularly for leaks or spills. Large storage areas should have appropriate fire protection.

7.3 Specific end uses No information provided.

SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Exposure standards

Ingredient	Reference	TWA		STEL	
		ppm	mg/m³	ppm	mg/m³
Benzene	SWA [AUS]	1	3.2	--	--
Hexane, other isomers	SWA [AUS]	500	1760	1000	3500
Pentane	SWA [AUS]	600	1770	750	2210
Toluene	SWA [AUS]	50	191	150	574
Xylene	SWA [AUS]	80	--	150	--
n-Hexane	SWA [AUS]	20	72	--	--

Biological limits

No biological limit values have been entered for this product.

Ingredient	Determinant	Sampling Time	BEI
BENZENE	S-Phenylmercapturic acid in urine	End of shift	25 µg/g creatinine
	t,t-Muconic acid in urine	End of shift	500 µg/g creatine
N-HEXANE	2,5-Hexanedione in urine (without hydrolysis)	End of shift at end of	0.4 mg/L
TOLUENE	o-Cresol in urine	End of shift	0.02 mg/L
	Toluene in urine	End of shift	0.03 mg/L
	Toluene in blood	Prior to last shift of	0.02 mg/L
XYLENE	Methylhippuric acids in urine	End of shift	1.5 g/g creatinine

8.2 Exposure controls

Engineering controls Avoid inhalation. Use in well ventilated areas. Where an inhalation risk exists, mechanical explosion proof extraction ventilation is recommended. Flammable/explosive vapours may accumulate in poorly ventilated areas. Vapours are heavier than air and may travel some distance to an ignition source and flash back. Maintain vapour levels below the recommended exposure standard.

PPE

Eye/ Face Wear protective equipment to prevent eye contact. Selection of protective equipment may include safety glasses, chemical goggles, face shields, or a combination depending on the work and operations conducted.

Hands Wear Polyvinyl Alcohol (PVA) or Viton gloves.

Body Wear coveralls or long sleeved clothing and boots.

Respiratory Determine if airborne concentrations are below the recommended occupational exposure limits. If airborne concentrations are above the acceptable limits, wear an approved respirator that provides adequate

protection from this material, such as: Air-Purifying Respirator for Organic Vapours (Type A).
Use a positive pressure air-supplying respirator in circumstances where air-purifying respirators may not provide adequate protection.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance	COLOURLESS LIQUID
Odour	HYDROCARBON ODOUR
Flammability	HIGHLY FLAMMABLE
Boiling point	< 30°C
Melting point	NOT AVAILABLE
Evaporation rate	NOT AVAILABLE
pH	NOT AVAILABLE
Vapour density	NOT AVAILABLE
Specific gravity	0.65 to 0.75
Solubility (water)	INSOLUBLE
Vapour pressure	NOT AVAILABLE
Upper explosion limit	NOT AVAILABLE
Lower explosion limit	NOT AVAILABLE
Partition coefficient	NOT AVAILABLE
Autoignition temperature	NOT AVAILABLE
Decomposition temperature	NOT AVAILABLE
Viscosity	NOT AVAILABLE
Explosive properties	NOT AVAILABLE
Oxidising properties	NOT AVAILABLE
Odour threshold	NOT AVAILABLE

9.2 Other Information

% Volatiles	95 vol % over Boiling Range

SECTION 10 STABILITY AND REACTIVITY

10.1 Reactivity

Highly flammable liquid and vapour

10.2 Chemical stability

Stable under normal ambient and anticipated storage, and handling conditions of temperature and pressure.

10.3 Possibility of hazardous reactions
Polymerization is not expected to occur.

10.4 Conditions to avoid
Avoid heat, sparks, open flames and other ignition sources.

10.5 Incompatible materials
Incompatible with oxidising agents (e.g., chlorates, hypochlorites, nitrates, peroxides), strong acids(e.g., nitric acid), alkalis (e.g., hydroxides), heat and ignition sources.

10.6 Hazardous decomposition products
May evolve carbon oxides and hydrocarbons when heated to decomposition and emit acrid smoke and irritating fumes.

SECTION 11 TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity Harmful if swallowed, in contact with skin or if inhaled.

Information available for the ingredients:

Ingredient	Oral LD50	Dermal LD50	Inhalation LC50
NATURAL GAS	--	--	600 mg/m³ (rat)
N-HEXANE	25 g/kg (rat)	3000 mg/kg (rabbit)	48000 ppm/4 hours (rat)
ISOPENTANE	> 2000 mg/kg (rat)	--	> 20 mg/L (rat)
PENTANE	--	--	364 g/m³/4 hours (rat)
TOLUENE	5580 mg/kg (rat)	5000 mg/kg (rabbit)	25.7 - 30 mg/L/4hrs (rat)
XYLENE	> 2000 mg/kg (rat) (NICNAS)	> 1700 mg/kg (rabbit)	5000 ppm (rat)
BENZENE	930 mg/kg (rat)	48 mg/kg (mouse)	9980 ppm (mouse)

Skin Irritating to the skin. Contact may result in drying and defatting of the skin, rash and dermatitis.

Eye Causes serious eye irritation. Contact may result in irritation, lacrimation, pain and redness.

Sensitisation Not classified as causing skin or respiratory sensitisation.

Mutagenicity May cause genetic defects. Several studies have demonstrated induction of both numerical and structural chromosomal aberrations, sister chromatid exchanges and micronuclei in experimental animals and humans after in vivo benzene exposure.

Carcinogenicity May cause cancer. Benzene is classified as carcinogenic to humans (IARC Group 1). Ethylbenzene which has been classified as a Group 2B carcinogen (possibly carcinogenic to humans)

Reproductive Over exposure to toluene may damage fertility or the unborn child

STOT – single exposure Over exposure may result in irritation of the nose and throat, coughing, nausea and headache. High level exposure may result in dizziness, drowsiness, breathing difficulties and unconsciousness.

STOT – repeated exposure	Repeated exposure to toluene may result in central nervous system (CNS), liver and kidney damage
Aspiration	Aspiration into the lungs may result in chemical pneumonitis and pulmonary oedema.

SECTION 12 ECOLOGICAL INFORMATION

12.1 Toxicity
This material is expected to be toxic to aquatic organisms. However, this has not been fully tested.

12.2 Persistence and degradability
Rapid volatilisation is expected in soil and water, with volatilisation being an important fate process of the condensate. Vapour-phase condensate will be degraded in the atmosphere via photo-oxidation.

The non-vapour-phase material is not expected to be readily biodegradable. It may cause long-term adverse effects in the aquatic environment. However, the product has not been fully tested.

12.3 Bioaccumulative potential
No information provided.

12.4 Mobility in soil
Limited information was available at the time of this review.

12.5 Other adverse effects
Benzene is listed on the National Inventory of Pollutants - Threshold Category 1, use of 10 tonnes/year. If released to the atmosphere it will exist in the vapour phase and subject to photo-oxidation. In soil, it is subject to rapid volatilisation. Benzene is also highly mobile and may leach to groundwater. Subject to rapid volatilisation from water. Biodegradable. Toxic to aquatic organisms.

SECTION 13 DISPOSAL INFORMATION

13.1 Waste treatment methods

Waste Disposal This material and its container must be disposed of in a safe way. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers

Legislation Dispose of in accordance with relevant local legislation.

SECTION 14 TRANSPORT INFORMATION

CLASSIFIED AS A DANGEROUS GOOD BY THE CRITERIA OF THE ADG CODE

	LAND TRANSPORT (ADG)	SEA TRANSPORT (IMDG/IMO)	AIR TRANSPORT (IATA/ICAO)
14.1 Number	3295	3295	3295
14.2 Proper Shipping name	HYDROCARBONS, LIQUID, N.O.S.	HYDROCARBONS, LIQUID, N.O.S.	HYDROCARBONS, LIQUID, N.O.S.
14.3 Transport hazard class	3	3	3
14.4 Packing Group	I	I	I

14.5 Environmental hazards

Not a Marine Pollutant

14.6 Special precautions for user

Hazchem Code 3YE
GTEPG 3A1
EMS F-E, S-D

SECTION 15 REGULATORY INFORMATION

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

Poison schedule	Classified as a Schedule 7 (S7) Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP).
Classifications	Safework Australia criteria is based on the Globally Harmonised System (GHS) of Classification and Labelling of Chemicals.
Inventory listing(s)	**AUSTRALIA: AICS (Australian Inventory of Chemical Substances)** All components are listed on AICS or are exempt.

SECTION 16 OTHER INFORMATION

Date of Issue/ Date of Revision: 04/02/2022

Date of Previous Issue: 08/05/2020

Version: 3

Additional information

PERSONAL PROTECTIVE EQUIPMENT GUIDELINES:
The recommendation for protective equipment contained within this report is provided as a guide only. Factors such as form of product, method of application, working environment, quantity used, product concentration and the availability of engineering controls should be considered before final selection of personal protective equipment is made.

HEALTH EFFECTS FROM EXPOSURE:
It should be noted that the effects from exposure to this product will depend on several factors including: form of product; frequency and duration of use; quantity used; effectiveness of control measures; protective equipment used and method of application. Given that it is impractical to prepare a report which would encompass all possible scenarios, it is anticipated that users will assess the risks and apply control methods where appropriate.

Abbreviations

ACGIH	American Conference of Governmental Industrial Hygienists
CAS#	Chemical Abstract Service number - used to uniquely identify chemical compounds
CNS	Central Nervous System
EC No.	EC No - European Community Number
EMS	Emergency Schedules (Emergency Procedures for Ships Carrying Dangerous Goods)
GHS	Globally Harmonized System
GTEPG	Group Text Emergency Procedure Guide
IARC	International Agency for Research on Cancer
LC50	Lethal Concentration, 50% / Median Lethal Concentration
LD50	Lethal Dose, 50% / Median Lethal Dose
mg/m^3	Milligrams per Cubic Metre
OEL	Occupational Exposure Limit
pH	Relates to hydrogen ion concentration using a scale of 0 (high acidic) to 14 (highly alkaline).

ppm	Parts Per Million
STEL	Short-Term Exposure Limit
STOT-RE	Specific target organ toxicity (repeated exposure)
STOT-SE	Specific target organ toxicity (single exposure)
SUSMP	Standard for the Uniform Scheduling of Medicines and Poisons
SWA	Safe Work Australia
TLV	Threshold Limit Value
TWA	Time Weighted Average

Disclaimer

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. Neither this company, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described here we cannot guarantee that these are the only hazards that exist.

[End of SDS]