
1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

1.1 Product identifier

Product name **NAPHTHA**
Synonyms INPEX CONDENSATE

1.2 Uses and uses advised against

Uses PETROLEUM REFINING

1.3 Details of the supplier of the product

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

1.4 Emergency telephone numbers

Emergency 13 11 26 (PIC)
Emergency (08) 8983 8888

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

CLASSIFIED AS HAZARDOUS ACCORDING TO SAFE WORK AUSTRALIA CRITERIA

Physical Hazards

Flammable Liquids: Category 2

Health Hazards

Aspiration Hazard: Category 1
Skin Corrosion / Irritation: Category 2
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**

Pictograms**Hazard statements**

H225	Highly flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
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.

PRODUCT NAME NAPHTHA**Prevention statements**

P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
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.
P243	Take action to prevent static discharges.
P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P264	Wash thoroughly after handling.
P280	Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.

Response statements

P301 + P310	IF SWALLOWED: Immediately call a POISON CENTRE or doctor/physician.
P303 + P361 + P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
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 + P364	Take off contaminated clothing and wash it before reuse.
P370 + P378	In case of fire: Use appropriate media to extinguish.

Storage statements

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

Disposal statements

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

No information provided.

3. COMPOSITION/ INFORMATION ON INGREDIENTS

3.1 Substances / Mixtures

Ingredient	CAS Number	EC Number	Content
NATURAL GAS CONDENSATES (PETROLEUM)	64741-47-5	265-047-3	<90%
Containing			
HEXANE, BRANCHED AND LINEAR	92112-69-1	295-570-2	25 to 50%
PENTANE(S)	109-66-0	203-692-4	25 to 50%
ISOPENTANE (2-METHYLBUTANE)	78-78-4	201-142-8	10 to 30%
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%

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.

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.

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.

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.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters

Exposure standards

Ingredient	Reference	TWA		STEL	
		ppm	mg/m³	ppm	mg/m³
BENZENE	SWA [Proposed]	0.2	0.7	--	--
Benzene	SWA [AUS]	1	3.2	--	--
Pentane	SWA [AUS]	600	1770	750	2210
Pentane (all isomers)	SWA [Proposed]	1000	3000	--	--
Toluene	SWA [AUS]	50	191	150	574
Toluene	SWA [Proposed]	20	75	--	--
Xylene	SWA [AUS]	80	350	150	655
n-Hexane	SWA [AUS]	20	72	--	--

Biological limits

Ingredient	Reference	Determinant	Sampling Time	BEI
BENZENE	ACGIH BEI	S-Phenylmercapturic acid in urine	End of shift	25 µg/g creatinine
	ACGIH BEI	t,t-Muconic acid in urine	End of shift	500 µg/g creatine
N-HEXANE	ACGIH BEI	2,5-Hexanedione in urine (without hydrolysis)	End of shift	0.5 mg/L
TOLUENE	ACGIH BEI	o-Cresol in urine (with hydrolysis)	End of shift	0.3 mg/g creatinine
	ACGIH BEI	Toluene in urine	End of shift	0.03 mg/L
	ACGIH BEI	Toluene in blood	Prior to last shift of workweek	0.02 mg/L
XYLENE	ACGIH BEI	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.



9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance	AMBER LIQUID
Odour	HYDROCARBON ODOUR
Flammability	HIGHLY FLAMMABLE
Flash point	< -18°C
Boiling point	-30°C to 550°C
Melting point	NOT AVAILABLE
Evaporation rate	NOT AVAILABLE
pH	NOT AVAILABLE
Vapour density	2.5 (Air = 1)
Relative density	0.6 to 0.8
Solubility (water)	INSOLUBLE
Vapour pressure	37.8 kPa @ 20°C
Upper explosion limit	NOT AVAILABLE
Lower explosion limit	NOT AVAILABLE
Partition coefficient	NOT AVAILABLE
Autoignition temperature	280°C
Decomposition temperature	NOT AVAILABLE
Viscosity	< 1.1 cSt @ 40°C
Explosive properties	NOT AVAILABLE
Oxidising properties	NOT AVAILABLE
Odour threshold	NOT AVAILABLE

9.2 Other information

% Volatiles	95 vol % over Boiling Range
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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.

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity	This product may be regarded as potentially harmful and due care taken when handling, however the classification requirements are not met.
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Information available for the ingredients:

Ingredient	Oral LD50	Dermal LD50	Inhalation LC50
NATURAL GAS CONDENSATES (PETROLEUM)	--	--	600 mg/m ³ (rat)
N-HEXANE	25 g/kg (rat)	3000 mg/kg (rabbit)	48000 ppm/4 hours (rat)
PENTANE	> 2,000 mg/kg (rat)	--	> 25.3 mg/l/4hrs (rat)
ISOPENTANE (2-METHYLBUTANE)	> 2000 mg/kg (rat)	--	> 20 mg/L (rat)
TOLUENE	5580 mg/kg (rat)	5000 mg/kg (rabbit)	25.7 - 30 mg/L/4hrs (rat)
XYLENE	> 2000 mg/kg (rat) (AICIS)	> 1700 mg/kg (rabbit)	20 mg/L/4h (rat) (AICIS)
BENZENE	930 mg/kg (rat)	> 9400 mg/kg (rabbit, guinea pig)	9980 ppm/7hrs (mouse)

Skin	Causes skin irritation. Contact may result in irritation, redness, pain and rash.
Eye	Contact may result in irritation, lacrimation, pain and redness.
Sensitisation	Not classified as causing skin or respiratory sensitisation.
Mutagenicity	May cause genetic defects. The mutagenic potential is primarily attributed to benzene, which can induce chromosomal aberrations, and certain PAHs, which are known to interact with DNA.
Carcinogenicity	May cause cancer. Benzene is classified as carcinogenic to humans (IARC Group 1). Ethylbenzene is classified as possibly carcinogenic to humans (IARC Group 2B).
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. Repeated exposure to n-Hexane may result in peripheral nerve damage (numbness in hands and feet). The repeated exposure toxicity of ethylbenzene has been evaluated in animals in subchronic and chronic inhalation studies, subchronic oral toxicity studies and numerous specialised investigations. Overall, ethylbenzene poses a moderate repeated exposure toxicity hazard with consistent targeted effects to the liver, kidney and hearing (ECHA Registration Dossier). Repeated exposure to benzene may result in loss of appetite, tremors, anaemia (bone marrow depression), liver and kidney damage.
Aspiration	Aspiration into the lungs may result in chemical pneumonitis and pulmonary oedema.

12. ECOLOGICAL INFORMATION

12.1 Toxicity

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

If released to the atmosphere, benzene will exist in the vapour phase and be 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.

13. DISPOSAL CONSIDERATIONS

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.

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 UN Number	3295	3295	3295
14.2 Proper Shipping Name	HYDROCARBONS, LIQUID, N.O.S. (contains natural gas condensate, toluene, benzene)	HYDROCARBONS, LIQUID, N.O.S. (contains natural gas condensate, toluene, benzene)	HYDROCARBONS, LIQUID, N.O.S. (contains natural gas condensate, toluene, benzene)
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

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	Safe Work Australia criteria is based on the Globally Harmonised System (GHS) of Classification and Labelling of Chemicals (GHS Revision 7).
Inventory listings	AUSTRALIA: AIIC (Australian Inventory of Industrial Chemicals) All components are listed on AIIC, or are exempt.

16. OTHER INFORMATION

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

Report status

This document has been compiled by RMT on behalf of the manufacturer, importer or supplier of the product and serves as their Safety Data Sheet ('SDS').

It is based on information concerning the product which has been provided to RMT by the manufacturer, importer or supplier or obtained from third party sources and is believed to represent the current state of knowledge as to the appropriate safety and handling precautions for the product at the time of issue. Further clarification regarding any aspect of the product should be obtained directly from the manufacturer, importer or supplier.

While RMT has taken all due care to include accurate and up-to-date information in this SDS, it does not provide any warranty as to accuracy or completeness. As far as lawfully possible, RMT accepts no liability for any loss, injury or damage (including consequential loss) which may be suffered or incurred by any person as a consequence of their reliance on the information contained in this SDS.

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