

Ardex WPM444 Ardex (Ardex Australia)

Chemwatch: **41-2449**Version No: **4.1.1.1**

Safety Data Sheet according to WHS and ADG requirements

Chemwatch Hazard Alert Code: 2

Issue Date: **01/11/2019**Print Date: **30/11/2020**S.GHS.AUS.EN

SECTION 1 Identification of the substance / mixture and of the company / undertaking

Product Identifier				
Product name	Ardex WPM444			
Chemical Name	Not Applicable			
Synonyms	Not Available			
Chemical formula	Not Applicable			
Other means of identification	Not Available			

Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses Water-proofing membrane.

Details of the supplier of the safety data sheet

Registered company name	Ardex (Ardex Australia)				
Address	Powers Road Seven Hills NSW 2147 Australia				
Telephone	1800 224 070				
Fax	1300 780 102				
Website	Not Available				
Email	Not Available				

Emergency telephone number

Association / Organisation	Ardex (Ardex Australia)
Emergency telephone numbers	1800 224 070 (Mon-Fri, 9am-5pm)
Other emergency telephone numbers	Not Available

SECTION 2 Hazards identification

Classification of the substance or mixture

HAZARDOUS CHEMICAL. NON-DANGEROUS GOODS. According to the WHS Regulations and the ADG Code.

ChemWatch Hazard Ratings

	Min	Max	
Flammability	1		
Toxicity	0		0 = Minimum
Body Contact	0	1	1 = Low
Reactivity	0		2 = Moderate
Chronic	2		3 = High 4 = Extreme

Poisons Schedule	Not Applicable
Classification [1]	Carcinogenicity Category 2
Legend:	1. Classified by Chemwatch; 2. Classification drawn from HCIS; 3. Classification drawn from Regulation (EU) No 1272/2008 - Annex VI

Label elements

Ardex WPM444

Issue Date: 01/11/2019 Print Date: 30/11/2020

Hazard pictogram(s)



Signal word

Hazard statement(s)

H351 Suspected of causing cancer.

Precautionary statement(s) Prevention

P201	Obtain special instructions before use.
P281	Use personal protective equipment as required.
P281	Use personal protective equipment as required.

Precautionary statement(s) Response

P308+P313 | IF exposed or concerned: Get medical advice/attention.

Precautionary statement(s) Storage

P405 Store locked up.

Precautionary statement(s) Disposal

Dispose of contents/container to authorised hazardous or special waste collection point in accordance with any local regulation.

SECTION 3 Composition / information on ingredients

Substances

See section below for composition of Mixtures

Mixtures

CAS No	%[weight]	Name	
8052-42-4	30-60	bitumen (petroleum)	
Not Available	30-60	thermoplastic polymer	

SECTION 4 First aid measures

Description of first aid measures

If this product comes in contact with the eves:

Eye Contact

- Wash out immediately with fresh running water.
- Figure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids
- Seek medical attention without delay; if pain persists or recurs seek medical attention.
- Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.

Skin Contact

- - Immediately remove all contaminated clothing, including footwear.
- Flush skin and hair with running water (and soap if available).
- ▶ Seek medical attention in event of irritation.

Inhalation

- If fumes or combustion products are inhaled remove from contaminated area.
- Lay patient down. Keep warm and rested.
- Prostheses such as false teeth, which may block airway, should be removed, where possible, prior to initiating first aid procedures.
- Apply artificial respiration if not breathing, preferably with a demand valve resuscitator, bag-valve mask device, or pocket mask as trained. Perform CPR if necessary.
- ► Transport to hospital, or doctor.

Ingestion

- Immediately give a glass of water.
- First aid is not generally required. If in doubt, contact a Poisons Information Centre or a doctor.

Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

Burns: No attempt should be made to remove the bitumen (it acts as a sterile dressing). Cover the bitumen with tulle gras and leave for two days when any detached bitumen can be removed. Re-dress and leave for a further week. If necessary refer to a burns unit. [Manufacturer]

SECTION 5 Firefighting measures

Extinguishing media

- Foam.
- Dry chemical powder.
- BCF (where regulations permit).
- Carbon dioxide.

Special hazards arising from the substrate or mixture

Fire Incompatibility

None known.

Page 3 of 7

Ardex WPM444

Issue Date: **01/11/2019**Print Date: **30/11/2020**

Advice for firefighters

Fire Fighting	 Alert Fire Brigade and tell them location and nature of hazard. Wear breathing apparatus plus protective gloves. Prevent, by any means available, spillage from entering drains or water courses. Use water delivered as a fine spray to control fire and cool adjacent area.
Fire/Explosion Hazard	 Hot organic vapours or mist are capable of sudden spontaneous combustion when mixed with air even at temperatures below their published autoignition temperatures. The temperature of ignition decreases with increasing vapour volume and vapour/air contact times and is influenced by pressure change. Ignition may occur under elevated-temperature process conditions especially in processes performed under vacuum subjected to sudden ingress of air or in processes performed at elevated pressure, where sudden escape of vapours or mists to the atmosphere occurs. Combustible. Slight fire hazard when exposed to heat or flame. Heating may cause expansion or decomposition leading to violent rupture of containers. On combustion, may emit toxic fumes of carbon monoxide (CO). Combustion products include: sulfur oxides (SOx) NOTE: Burns with intense heat. Produces melting, flowing, burning liquid and dense acrid black smoke. May emit poisonous fumes. May emit corrosive fumes.
HAZCHEM	Not Applicable

SECTION 6 Accidental release measures

Personal precautions, protective equipment and emergency procedures

See section 8

Environmental precautions

See section 12

Methods and material for containment and cleaning up

Minor Spills	 Clean up all spills immediately. Avoid breathing vapours/ aerosols/ or dusts and avoid contact with skin and eyes. Control personal contact with the substance, by using protective equipment. Contain and absorb spill with sand, earth, inert material or vermiculite.
Major Spills	 Clean up all spills immediately. Wear protective clothing, safety glasses, dust mask, gloves. Secure load if safe to do so. Bundle/collect recoverable product.

Personal Protective Equipment advice is contained in Section 8 of the SDS.

SECTION 7 Handling and storage

Precautions for safe handling	
Safe handling	 Avoid all personal contact, including inhalation. Wear protective clothing when risk of exposure occurs. Use in a well-ventilated area. Prevent concentration in hollows and sumps.
Other information	 Store in original containers. Keep containers securely sealed. Store in a cool, dry, well-ventilated area. Store away from incompatible materials and foodstuff containers.

Conditions for safe storage, including any incompatibilities

Suitable container	 Polyethylene or polypropylene container. Packing as recommended by manufacturer. Check all containers are clearly labelled and free from leaks.
Storage incompatibility	None known

SECTION 8 Exposure controls / personal protection

Control parameters

Occupational Exposure Limits (OEL)

INGREDIENT DATA

Source	Ingredient	Material name	TWA	STEL	Peak	Notes
Australia Exposure Standards	bitumen (petroleum)	Bitumen fumes	5 mg/m3	Not Available	Not Available	Not Available

Emergency Limits

Ingredient	Material name	TEEL-1	TEEL-2	TEEL-3
bitumen (petroleum)	Petroleum asphalt; (Bitumen)	30 mg/m3	330 mg/m3	2,000 mg/m3

Ingredient	Original IDLH	Revised IDLH
bitumen (petroleum)	Not Available	Not Available

Issue Date: 01/11/2019 Print Date: 30/11/2020

Exposure controls

Appropriate engineering

Engineering controls are used to remove a hazard or place a barrier between the worker and the hazard. Well-designed engineering controls can be highly effective in protecting workers and will typically be independent of worker interactions to provide this high level of protection. The basic types of engineering controls are:

Process controls which involve changing the way a job activity or process is done to reduce the risk.

Enclosure and/or isolation of emission source which keeps a selected hazard "physically" away from the worker and ventilation that strategically "adds" and "removes" air in the work environment.

Personal protection





- Safety glasses with side shields.
- Chemical goggles Eye and face protection
 - Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. A written policy document, describing the wearing of lenses or restrictions on use, should be created for each workplace or task.

Skin protection

See Hand protection below

Wear safety footwear or safety gumboots, e.g. Rubber

Wear chemical protective gloves, e.g. PVC.

NOTE:

Hands/feet protection

- The material may produce skin sensitisation in predisposed individuals. Care must be taken, when removing gloves and other protective equipment, to avoid all possible skin contact.
- ▶ Contaminated leather items, such as shoes, belts and watch-bands should be removed and destroyed.

Body protection

See Other protection below

Other protection

- Overalls.
- P.V.C apron.
- Barrier cream.
- Skin cleansing cream

Respiratory protection

Type A-P Filter of sufficient capacity. (AS/NZS 1716 & 1715, EN 143:2000 & 149:2001, ANSI Z88 or national equivalent)

Where the concentration of gas/particulates in the breathing zone, approaches or exceeds the "Exposure Standard" (or ES), respiratory protection is required. Degree of protection varies with both face-piece and Class of filter; the nature of protection varies with Type of filter.

Required Minimum Protection Factor	Half-Face Respirator	Full-Face Respirator	Powered Air Respirator
up to 10 x ES	A-AUS P2	-	A-PAPR-AUS / Class 1 P2
up to 50 x ES	-	A-AUS / Class 1 P2	-
up to 100 x ES	-	A-2 P2	A-PAPR-2 P2 ^

^{^ -} Full-face

A(All classes) = Organic vapours, B AUS or B1 = Acid gasses, B2 = Acid gas or hydrogen cyanide(HCN), B3 = Acid gas or hydrogen cyanide(HCN), E = Sulfur dioxide(SO2), G = Agricultural chemicals, K = Ammonia(NH3), Hg = Mercury, NO = Oxides of nitrogen, MB = Methyl bromide, AX = Low boiling point organic compounds(below 65 degC)

SECTION 9 Physical and chemical properties

Information on basic physical and chemical properties

Appearance	Black sheeting in rolls with a mild bituminous odour; insoluble in water.		
Physical state	Manufactured	Relative density (Water = 1)	1.0-1.5 (bulk)
Odour	Not Available	Partition coefficient n-octanol / water	Not Available
Odour threshold	Not Available	Auto-ignition temperature (°C)	485 (bitumen)
pH (as supplied)	Not Applicable	Decomposition temperature	Not Available
Melting point / freezing point (°C)	>100 approx.	Viscosity (cSt)	Not Available
Initial boiling point and boiling range (°C)	470 (bitumen)	Molecular weight (g/mol)	Not Applicable
Flash point (°C)	230 (bitumen)	Taste	Not Available
Evaporation rate	Not Applicable	Explosive properties	Not Available
Flammability	Not Applicable	Oxidising properties	Not Available
Upper Explosive Limit (%)	Not Applicable	Surface Tension (dyn/cm or mN/m)	Not Applicable
Lower Explosive Limit (%)	Not Applicable	Volatile Component (%vol)	Not Applicable
Vapour pressure (kPa)	Not Applicable	Gas group	Not Available
Solubility in water	Immiscible	pH as a solution (1%)	Not Applicable
Vapour density (Air = 1)	Not Applicable	VOC g/L	Not Available

SECTION 10 Stability and reactivity

Reactivity

See section 7

Issue Date: 01/11/2019 Print Date: 30/11/2020

Chemical stability	Product is considered stable and hazardous polymerisation will not occur.
Possibility of hazardous reactions	See section 7
Conditions to avoid	See section 7
Incompatible materials	See section 7
Hazardous decomposition products	See section 5

SECTION 11 Toxicological information

Information on toxicological effects	
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Inhalation of vapours or aerosols (mists, fumes), generated by the material during the course of normal handling, may be damaging to the health of the individual.

There is some evidence to suggest that the material can cause respiratory irritation in some persons. The body's response to such irritation can cause further lung damage.

Inhalation of vapours may cause drowsiness and dizziness. This may be accompanied by sleepiness, reduced alertness, loss of reflexes, lack of co-ordination, and vertigo.

Acute exposure to bitumen/asphalt vapours may cause coughing, chest tightness, muscle weakness, dizziness, tiredness, poor concentration, and even nausea and vomiting.

Inhaled

Workers exposed to hot blown bitumens show bronchitis, inflammation of the nose, mouth, pharynx and larynx; symptoms include cough, phlegm, burning of the throat and chest, hoarseness, headache and nasal discharge.

Concentrations of asphalt in the workplace ranges from virtually zero in areas of good mechanical ventilation to 40 mg/m3 where there is very

Inhaling high concentrations of mixed hydrocarbons can cause narcosis, with nausea, vomiting and lightheadedness. Low molecular weight (C2-C12) hydrocarbons can irritate mucous membranes and cause incoordination, giddiness, nausea, vertigo, confusion, headache, appetite loss, drowsiness, tremors and stupor.

Hydrogen sulfide poisoning can cause increased secretion of saliva, nausea, vomiting, diarrhoea, giddiness, headache, vertigo, memory loss, palpitations, heartbeat irregularities, weakness, muscle cramps, confusion, sudden collapse, unconsciousness and death due to paralysis of breathing (at levels above 300 parts per million). The "rotten egg" odour is not a good indicator of exposure since odour fatigue occurs and odour is lost at over 200 ppm.

Ingestion

The material has NOT been classified by EC Directives or other classification systems as "harmful by ingestion". This is because of the lack of corroborating animal or human evidence.

Skin Contact

There is some evidence to suggest that this material can cause inflammation of the skin on contact in some persons. Entry into the blood-stream, through, for example, cuts, abrasions or lesions, may produce systemic injury with harmful effects. Examine the skin prior to the use of the material and ensure that any external damage is suitably protected. Molten material is capable of causing burns

Eye

There is some evidence to suggest that this material can cause eye irritation and damage in some persons. Workers exposed to fumes of blown bitumens developed inflammation of the cornea and conjunctiva.

Chronic

Long term low level exposure to hydrogen sulfide may produce headache, fatigue, dizziness, irritability and loss of sexual desire. These symptoms may also result when exposed to hydrogen sulfide at high concentration for a short period of time Substance accumulation, in the human body, may occur and may cause some concern following repeated or long-term occupational exposure.

There has been concern that this material can cause cancer or mutations, but there is not enough data to make an assessment. There is limited evidence that, skin contact with this product is more likely to cause a sensitisation reaction in some persons compared to the general population

Ardex WPM444	TOXICITY	IRRITATION
	Not Available	Not Available
	TOXICITY	IRRITATION
bitumen (petroleum)	Not Available	Eye: no adverse effect observed (not irritating) ^[1]
		Skin: no adverse effect observed (not irritating) ^[1]
Legend:	Value obtained from Europe ECHA Registered Substances - Acute toxicity 2.* Value obtained from manufacturer's SDS. Unless otherwise	

specified data extracted from RTECS - Register of Toxic Effect of chemical Substances

BITUMEN (PETROLEUM)

Asthma-like symptoms may continue for months or even years after exposure to the material ends. This may be due to a non-allergic condition known as reactive airways dysfunction syndrome (RADS) which can occur after exposure to high levels of highly irritating compound. Main criteria for diagnosing RADS include the absence of previous airways disease in a non-atopic individual, with sudden onset of persistent asthma-like symptoms within minutes to hours of a documented exposure to the irritant. Other criteria for diagnosis of RADS include a reversible airflow pattern on lung function tests, moderate to severe bronchial hyperreactivity on methacholine challenge testing, and the lack of minimal lymphocytic inflammation, without eosinophilia. No significant acute toxicological data identified in literature search.

WARNING: This substance has been classified by the IARC as Group 2B: Possibly Carcinogenic to Humans.

Acute Toxicity	×	Carcinogenicity	~
Skin Irritation/Corrosion	×	Reproductivity	×
Serious Eye Damage/Irritation	×	STOT - Single Exposure	×
Respiratory or Skin sensitisation	×	STOT - Repeated Exposure	×
Mutagenicity	×	Aspiration Hazard	×

Legend:

X - Data either not available or does not fill the criteria for classification

🥓 – Data available to make classification

Ardex WPM444

Issue Date: 01/11/2019 Print Date: 30/11/2020

Toxicity

	Endpoint	Test Duration (hr)	Species	Value	Source
Ardex WPM444	Not Available	Not Available	Not Available	Not Available	Not Available
	Endpoint	Test Duration (hr)	Species	Value	Source
bitumen (petroleum)	LC50	96	Fish	>1-mg/L	2
	EC50	72	Algae or other aquatic plants	>1-mg/L	2
	NOEL	504	Crustacea	>=1-mg/L	2
Legend:	V3.12 (QSAR	n 1. IUCLID Toxicity Data 2. Europe ECHA Register) - Aquatic Toxicity Data (Estimated) 4. US EPA, Ecc (Japan) - Bioconcentration Data 7. METI (Japan) - E	otox database - Aquatic Toxicity Data 5. EC		

DO NOT discharge into sewer or waterways.

Persistence and degradability

Ingredient	Persistence: Water/Soil	Persistence: Air
	No Data available for all ingredients	No Data available for all ingredients

Bioaccumulative potential

Ingredient	Bioaccumulation
	No Data available for all ingredients

Mobility in soil

Ingredient	Mobility
	No Data available for all ingredients

SECTION 13 Disposal considerations

Waste treatment methods

Containers may still present a chemical hazard/ danger when empty.
 Return to supplier for reuse/ recycling if possible.

Product / Packaging disposal

Otherwise:

- If container can not be cleaned sufficiently well to ensure that residuals do not remain or if the container cannot be used to store the same product, then puncture containers, to prevent re-use, and bury at an authorised landfill.
- Where possible retain label warnings and SDS and observe all notices pertaining to the product.

SECTION 14 Transport information

Labels Required

Marine Pollutant	NO
HAZCHEM	Not Applicable

Land transport (ADG): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

Air transport (ICAO-IATA / DGR): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

Sea transport (IMDG-Code / GGVSee): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

Transport in bulk according to Annex II of MARPOL and the IBC code

Not Applicable

SECTION 15 Regulatory information

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

bitumen (petroleum) is found on the following regulatory lists

Australian Inventory of Industrial Chemicals (AIIC)

International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs

International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs - Group 2B: Possibly carcinogenic to humans

National Inventory Status

National Inventory	Status		
Australia - AIIC / Australia Non-Industrial Use	Yes		
Canada - DSL	Yes		
Canada - NDSL	No (bitumen (petroleum))		
China - IECSC	Yes		

Chemwatch: 41-2449 Version No: 4.1.1.1

Page 7 of 7 Ardex WPM444

Issue Date: **01/11/2019**Print Date: **30/11/2020**

National Inventory Status Europe - EINEC / ELINCS / NLP Japan - ENCS No (bitumen (petroleum)) Korea - KECI Yes New Zealand - NZIoC Yes Philippines - PICCS Yes USA - TSCA Yes Taiwan - TCSI Yes Mexico - INSQ Yes Vietnam - NCI Yes Russia - ARIPS

SECTION 16 Other information

Revision Date	01/11/2019
Initial Date	27/02/2014

No = One or more of the CAS listed ingredients are not on the inventory and are not exempt from listing(see specific ingredients in brackets)

Yes = All CAS declared ingredients are on the inventory

SDS Version Summary

Legend:

Version	Issue Date	Sections Updated
3.1.1.1	23/03/2016	Classification
4.1.1.1	01/11/2019	One-off system update. NOTE: This may or may not change the GHS classification

Other information

Classification of the preparation and its individual components has drawn on official and authoritative sources as well as independent review by the Chemwatch Classification committee using available literature references.

The SDS is a Hazard Communication tool and should be used to assist in the Risk Assessment. Many factors determine whether the reported Hazards are Risks in the workplace or other settings. Risks may be determined by reference to Exposures Scenarios. Scale of use, frequency of use and current or available engineering controls must be considered.

Definitions and abbreviations

PC-TWA: Permissible Concentration-Time Weighted Average

PC-STEL: Permissible Concentration-Short Term Exposure Limit

IARC: International Agency for Research on Cancer

ACGIH: American Conference of Governmental Industrial Hygienists

STEL: Short Term Exposure Limit

TEEL: Temporary Emergency Exposure Limit。

IDLH: Immediately Dangerous to Life or Health Concentrations

OSF: Odour Safety Factor

NOAEL :No Observed Adverse Effect Level

LOAEL: Lowest Observed Adverse Effect Level

TLV: Threshold Limit Value

LOD: Limit Of Detection

OTV: Odour Threshold Value

BCF: BioConcentration Factors

BEI: Biological Exposure Index

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TEL (+61 3) 9572 4700.