

MATERIAL SAFETY DATA SHEET

According to NOHSC: 2011 (2003)

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product name: UCRETE FLOORING, PART 2 All Grades

Other name: DP BASECOAT B4; DP BASECOAT B6; DP BASECOAT B9; DP TOPCOAT; DP TOPCOAT AS; DP BASECOAT B6 AS; MF; MF AS; UD200; UD200N; UD200 SR; WR; PRIMER LC; PRIMER LC AS; PRIMER SC; PRIMER SCF; FL; HF100; HF 100 RT; MT; TZ; TZ AS; TZ COVING; TZ GROUT

Product code: Various.

Recommended use: Part 2 of a three component, water-based polyurethane flooring system.

Supplier: BASF Construction Chemicals Australia Pty Ltd. ABN 46 000 450 288
BASF New Zealand Ltd.

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2. HAZARDS IDENTIFICATION

Hazard classification: HAZARDOUS SUBSTANCE. NON DANGEROUS GOODS
Hazardous substance according to the criteria of NOHSC
Non Dangerous goods for transport according to the ADG code

Hazard Designation: Xi Irritant
Xn Harmful

Risk phrase(s): R20 Harmful by inhalation.
R42/43 May cause sensitization by inhalation and skin contact.
R36/37/38 Irritating to eyes, respiratory system and skin.

Safety phrase(s): S2 Keep out of the reach of children.
S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S35 This material and its container must be disposed of in a safe way.
S36/37 Wear suitable protective clothing and gloves.
S38 In case of insufficient ventilation, wear suitable respiratory equipment.
S45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
S46 If swallowed, seek medical advice immediately and show this container or label.
S63 In case of accident by inhalation, remove casualty to fresh air and keep at rest.
S64 If swallowed, rinse mouth with water (only if the person is conscious).
S91 Contains isocyanates. See information provided by the manufacturer.

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3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Characterisation: Mixture of diphenylmethane diisocyanates and polymer constituents

<u>Chemical Name</u>	<u>CAS Number</u>	<u>Proportion</u>
Diphenylmethane Diisocyanate: Isomers and Homologues.	9016-87-9	50 – 100%
Non hazardous ingredients		To 100%
All ingredients listed on AICS.		

4. FIRST AID MEASURES

Inhalation: Use in well ventilated areas. If inhalation does occur, remove victim from exposure. If difficulty with breathing, administer oxygen. If breathing has stopped administer artificial respiration. Seek medical attention.

Eyes: While holding eyes open, gently flood with plenty of fresh water for 15 minutes. If irritation persists or recurs seek medical attention. Skilled personnel should only undertake removal of contact lenses after an eye injury.

Skin: Remove contaminated clothing. Remove excess from skin mechanically. Wash contacted areas thoroughly with plenty of soap and water. Do NOT use solvents or thinners. If irritation persists seek medical attention. Wash contaminated clothing thoroughly before re-use.

Ingestion: Not a normal route of injury. Do not induce vomiting; get immediate medical attention. If vomiting occurs spontaneously, keep head below hips to prevent aspiration of liquids into lungs. Do NOT give anything by mouth to an unconscious person.

5. FIRE FIGHTING MEASURES

Suitable extinguishing media: Alcohol resistant foam, CO₂, dry powder or water spray. Do not use water jet.

Hazards from combustion products: Fire will produce dense black smoke. During fires, oxides of carbon and nitrogen, isocyanate vapour and traces of hydrogen cyanide may be given off. Exposure to decomposition products may cause a health hazard.

Precautions and equipment for fire fighters: Appropriate breathing apparatus may be required. Cool endangered containers with water in case of fire. Do not allow quenching water into sewers or waterways.

Hazchem code: 3[Y]E.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions: Remove ignition sources. Provide for sufficient ventilation. Do not inhale the vapour. Refer to protective measures listed in sections 7 and 8.

Methods and materials for containment and clean up: Spills should be collected/removed mechanically. Remainder can be contained by absorbing with a non combustible dry inert filler (vermiculite, sand or soil), which can then be shovelled into appropriately labelled drums. Do not seal the containers, CO₂ may be given off. Disposal should be effected by an approved waste disposal organisation according to local regulations.

Environmental precautions: Do not empty into drains. If the product contaminates sewers, drains or waterways, inform appropriate authorities in accordance with local regulations.

7. HANDLING AND STORAGE

Information for safe handling

Provide for fresh air ventilation. Do not inhale the vapour. Avoid contact with skin and eyes. Do not eat or drink during work – no smoking. Comply with all health and safety at work laws.

Information about protection against explosions and fires

No particular measures required.

Requirements to be met by storerooms and containers

Containers should be kept dry and sealed. Containers, which are opened, must be carefully resealed and kept upright to prevent leakage. Reaction with water (moisture) produces CO₂ gas. Exothermic reaction with materials containing active hydrogen groups. A hazardous build up of pressure can result if contaminated containers are resealed.

Information about separation of incompatible products

Keep away from oxidising agents, from strongly alkaline and strongly acid materials. Reaction with water (moisture) produces CO₂ gas. Exothermic reaction with materials containing active hydrogen groups. A hazardous build up of pressure can result if contaminated containers are resealed.

Further information about storage conditions

Always keep in containers of same material as the original one. See also instructions on the label. Containers should be kept dry and sealed. Avoid heating over 50°C and direct sunlight. Avoid cooling to under 0°C.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION**Additional information about engineering measures**

Provide adequate ventilation. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of vapours or particles below the OEL (Occupational Exposure Limit), suitable respiratory protection must be worn. Allergics and persons who have problems with the respiration tract are not recommended to work with this product.

Components with critical values that require monitoring at the workplace (exposure limits).

Diphenylmethane Diisocyanate: Isomers and Homologues; CAS No.: 9016-87-9

Specification: Threshold Limit Value (GB)

Value: 0.02 mg/m³ / 8 Hr.

Remarks: MEL / TWA

Specification: Threshold Limit Value (GB)

Value: 0.07 mg/m³ / 15 min.

Remarks: MEL / STEL

Personal Protective Equipment (PPE):

Respiratory protection: By spraying: air fed respirator.

By other operations than spraying: in well ventilated areas, airfed respirators could be replaced by a combination of charcoal filter and particulate filter mask.

Glove type (AS2161): Butyl rubber gloves >= 0.5mm >= 480 min. By using other gloves with a lower endurance, change them more often. After washing hands replace lost skin fat by fat containing skin creams

Eye protection: Chemical worker's goggles, well fitting safety glasses or full face shield.

Clothing: No special clothing required but overalls or other suitable industrial clothing which provides full skin coverage are suggested as a general precaution, especially where heavy contamination is likely.

Other: Use barrier creams to protect skin from contact with the material. Do not eat drink or smoke while working with the material. Always wash hands before smoking, eating, drinking or using the toilet and after finishing work. Observe the usual precautions when handling chemicals.

9. PHYSICAL AND CHEMICAL PROPERTIES

<u>Appearance:</u>	Dark brown liquid.
<u>Odour:</u>	Earthy, musty
<u>pH:</u>	ca 7
<u>Boiling point (1013 hPa):</u>	350 °C
<u>Vapour Pressure (50 °C):</u>	0.0001 hPa
<u>Solubility in water:</u>	Insoluble.
<u>Specific gravity:</u>	ca 1.24
<u>Flash point:</u>	> 200 °C (DIN 53213)
<u>Ignition Temperature:</u>	> 400 °C
<u>Viscosity (23 °C):</u>	90 – 300 mPa.s

10. STABILITY AND REACTIVITY

<u>Chemical stability:</u>	Stable under normal storage and handling conditions. Not sensitive to mechanical impact.
<u>Incompatible materials:</u>	Keep away from oxidizing agents, strongly alkaline and strongly acid materials in order to avoid exothermic reactions. Exothermic reactions with amines and alcohols. In contact with water (moisture) CO ₂ is formed which leads to excess pressure in closed containers.
<u>Hazardous decomposition products:</u>	When exposed to high temperatures may produce hazardous decomposition products such as carbon monoxide and dioxide, smoke, oxides of nitrogen.
<u>Hazardous reactions:</u>	Hazardous polymerisation will not occur.

11. TOXICOLOGICAL INFORMATION

<u>LD50 / LC50 values that are relevant for classification</u>	Specification:	LC-50 Inhalation
	Test species:	Rat
	Value/dosage:	ca 490 mg/m ³
	Test period:	41 hr
	Specification:	LD-50 Oral
	Test species:	Rat
<u>Experience on practice</u>	Value/dosage:	> 15 g/kg
	Based on the properties of the isocyanate components and considering toxicological data on similar preparations, this preparation may cause acute irritation and/or sensitization of the respiratory system leading to an asthmatic condition, wheeziness and a tightness of the chest. Sensitized persons may subsequently show asthmatic symptoms when exposed to atmospheric concentrations well below the OEL (=Occupational Exposure Limit). Repeated exposure may lead to permanent respiratory disability. Delayed reactions possible (breathing problems, coughs, asthma).	
<u>Additional toxicological information</u>	The product was classified in toxicological terms on the basis of the results of the calculation procedure outlined within General Directive on Preparations (1999/45/EC).	

12. ECOLOGICAL INFORMATIONEcotoxicological effects:Aquatic toxicity:

Specification: Toxicity to fish

Parameters: LC50 Danio Rerio

Value / dosage: > = 1000 mg/L

Test period: 96 hours

Specification: Toxicity to daphnia

Parameters: EC50 Species: Daphnia magna Straus 1820

Value / dosage: > = 1000 mg/L

Test period: 24 hours

Specification: Toxicity to Bacteria

Parameters: EC50 Species: Bacteria

Value / dosage: > = 100 mg/L

Test period: 31 hours

General Information: Do not discharge into sewers or waterways.**13. DISPOSAL CONSIDERATIONS**Disposal method and containers:

Contaminated packaging must be emptied of all residues and, following appropriate cleaning, may be sent to a recycling plant. Uncleaned packaging must be disposed of in the same manner as the medium.

Special precautions for landfill or incineration:

None known

14. TRANSPORT INFORMATIONUN number: None allocatedUN proper shipping name: None allocated.Dangerous goods class: None allocatedSubsidiary risk: None allocatedEPG card: None allocatedPacking group: None allocatedHazchem code: 3[Y]E**15. REGULATORY INFORMATION**

Standard for the Uniform Scheduling of Drugs and Poisons (SUSDP): None allocated

All ingredients listed on the Australian Inventory of Chemical Substances (AICS).

This information relates to New Zealand only. Not applicable in Australia.

ERMA NZ Registration: HSR 002670

ERMA Group Standard: Surface Coatings and Colourants (subsidiary risk) group standard 2006

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HSNO Classifications:

- 6.1C Harmful by inhalation
- 6.1D Harmful in contact with the skin
- 6.1E Irritating to respiratory system
- 6.4A Irritating to eyes
- 6.5A Sensitisation by inhalation
- 6.5B Sensitisation by skin contact
- 6.9A Irritating to skin

16. OTHER INFORMATION

Reason for issue: Addition of ERMA HSNO/HSR data for New Zealand. Rearrangement of hazard data.

The data herein is based on the BASF Construction Chemicals (UK) Ltd MSDS Revision: 11.07.2006, Version: 2.0.0

This MSDS summarises our best knowledge of the health and safety hazard information of the product and how to safely handle and use the product in the workplace. Each user should read this MSDS and consider the information in the context of how the product will be handled and used in the workplace including in conjunction with other products. If clarification or further information is needed to ensure that an appropriate risk assessment can be made, the user should contact this company. Our responsibility for products sold is subject to our standard terms and conditions, a copy of which is sent to our customers and is also available on request. All information contained in this MSDS is as accurate and up-to-date as possible. No warranty expressed or implied is made as to its accuracy, reliability or completeness.