



DIVERSE URETHANES

PRODUCT DATA SHEET

DFS 300P PUR Flooring

Description:

A two component, solvent free, polyurethane flooring system designed to produce a hard-wearing smooth coating. The cured product is able to withstand exposure to various chemicals and mild acids.

Uses:

DFS 300P may be applied to concrete substrates to produce a monolithic coating at a hardness of 80 to 90 Shore A. Part A and B are mixed together till homogeneous, then poured onto the **primed** surface and spread to the desired thickness with a notched trowel. This product is designed for professional use, by workmen skilled in the mixing and application of two component flooring systems. The surface can be primed with either polyurethane or epoxy primer that seals all blow holes.

Safety:

Part A does not present any significant health hazard under normal conditions of industrial exposure.

Part B consists of methylene diphenyl diisocyanate(MDI) and therefore suitable conditions of industrial hygiene should be observed. Contact with the skin and eyes should be avoided by wearing gloves, safety goggles and protective clothing. In case of eye contact wash well with water and obtain medical advice.

Properties:

Mixing Ratio (Weight)	100 Part A : 25 Part B (MDI 10)
Colour Mixed	Grey
Theoretical coverage	1 kg/m ² @ 1mm thick
Pot Life	+ - 45 minutes.
Shelf Life	6 months in sealed containers
Application Temp.	+ - 25 C
Service Temp.	-5 C - 60 C.
Full Cure	7 Days.

Physical properties

<u>Hardness</u>	80-90 Shore A
Tensile Strength	5N/mm ²
Elongation at Break	80% (DN 53504)

This information supplied is believed to be reliable. However as we have no control over the application of the products we cannot guarantee results to be obtained.

1. **PROCESSING**

7.1 Weigh out the components in the correct ratio and mix together thoroughly without entraining air.

7.2 Trowel the mixture into the parts.

7.3 Allow the mixture to gel. The time required for this operation will vary according to mould design and size, but will be in the region of \pm 45 minutes.

2. **PACKAGING**

Standard packs consist of 5 kg kits and 25 kg kits. Larger packs are available on request.

3. **STORAGE**

3.1 **DFS 300P**

Should be stored under cover in a dry environment. Prolonged or repeated heating of the material will accelerate decomposition. Partly used containers should be resealed immediately after use.

3.2 **MDI 10**

Should be stored at 20 - 30°C, as it begins to crystallise after prolonged exposure to temperature below 0°C. If however crystallisation does occur the material should be heated to 70 - 80°C to melt it out, then be thoroughly agitated to ensure homogeneity and then cooled before use.

4. **HANDLING**

4.1 **DFS 300P**

DFS 300P does not represent a significant health hazard to users under normal conditions of industrial exposure.

4.2 **MDI 10**

MDI 10 is an isocyanate containing material and normal standards of industrial hygiene should be observed during its handling. Safety goggles, gloves and overalls should be worn, and the material should preferably be used in a well ventilated area. Inhalation of its vapours should be avoided.

5. **TOXICITY**

MDI 10 is harmful if ingested.

6. FIRST AID MEASURES

6.1 DFS 300P

In the case of skin contact with DFS 300P, the affected area must be washed with soap and water. Eye contamination should be treated by rinsing with running water for at least 10 minutes. Seek medical assistance. (See attached Safety Data Sheet).

6.2 MDI 10

MDI 10 may be dermatitic and exhibit a low order of oral toxicity, however, since it is possible that certain individuals may be unusually sensitive to this material, it is recommended that all users wash thoroughly and avoid prolonged and repeated contact. Eye contamination, will cause severe irritation and pain. Immediate rinsing with water must be initiated and continued for at least 10 minutes. (See attached Safety Data Sheet.) Seek medical assistance.

7. FIRE

Keep drums cool by spraying them with water if they are exposed to fire. Extinguish with dry chemical, foam, sand or water spray.

8. SPILLAGES AND WASTE DISPOSAL

8.1 DFS 300P

Drum as much as possible of the spill, and wash away the remains with copious amounts of water.

8.2 MDI 10

Decontamination can be affected by overnight contact with liberal amounts of a solution containing methanol (30 parts), water (70 parts), concentrated ammonia (1 part) and detergent (1 part). Drums should not be resealed until decontamination is complete. (See attached Safety Data Sheet on details for Dealing with Larger Spills.)

8.3 Waste Disposal

Customers are advised to check their local, provincial or national legislation governing the disposal of waste material.

MDI 10 is an isocyanate containing material and is considered hazardous by inhalation.

Full details on procedures for safe handling of this material are contained in the ICI information sheet reference PU 93: MDI-BASED COMPOSITIONS : HAZARDS AND SAFE HANDLING PROCEDURES.

This publication may be obtained from Diverse Urethanes.

The information provided in this data sheet and otherwise supplied to users is based on our general experience and upon tests which are believed to be reliable. However, because we

have no control over the exact manner in which the information is used, we cannot guarantee the results to be obtained. Furthermore we make no express or implied warranty of merchantability or fitness of the product for a particular purpose.

All sales of this product shall be subject to Diverse Urethanes Standard Conditions of Sale. The information contained in this data sheet is correct and accurate to the best of our knowledge but without warranty or liability.

All tests are carried out according to the standard methods used by Diverse Urethanes and details may be supplied on request.

MDI 10 - SAFETY DATA SHEET

Chemical Family	:	Isocyanate
Product Type	:	Modified Polymeric MDI
Major Components	:	4,4 Diisocyanate diphenyl methane
Appearance	:	Milky to clear liquid
Boiling Point	:	>200°C
Vapour Pressure	:	2.5×10^{-5} mm Hg at 25°C
Specific Gravity	:	1,24
Flash Point	:	>205°C
Flammability Limits	:	-
Auto-ignition	:	>200°C

HEALTH HAZARD INFORMATION

<u>Eyes</u>	:	Irritation, causes watering and discomfort
<u>Skin</u>	:	Slight to mild irritation of the skin and in rare cases dermatitis. Temporary brown skin discolouration may also occur. It may cause sensitisation.
<u>Ingestion</u>	:	Irritation and pain.

FIRST AID

<u>Eyes</u>	:	Flush immediately with flowing water for at least 15 minutes and consult a physician.
<u>Skin</u>	:	Wash with flowing water.
<u>Ingestion</u>	:	Give large amounts of water and consult a physician. If vomiting occurs, follow with more water.

REACTIVITY DATA

Stability	:	Stable
Conditions to avoid	:	Water ingress
Hazardous Decomposition Products	:	Carbon Dioxide

SPILLAGES

Treat spillage with wet earth or sand. Leave material to react for 15 minutes. Shovel into bags.

WASTE DISPOSAL

Land tipping after consultation with local authority

PROTECTIVE EQUIPMENT

Eyes : Goggles
Gloves : PVC / Rubber
Overalls : Cotton.

SAFETY DATA SHEET

DFS 300P

IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY/UNDERTAKING:

Product Name : DFS 300P
Address/Tel.No. : DIVERSE URETHANES
No: 2A High Street
Modderfontein
(011) 608-2584

COMPOSITION/INFORMATION ON INGREDIENTS:

PRODUCT DESCRIPTION		POLYOL BLEND		
HAZARDOUS INGREDIENT(S)	CAS NO.	%(w/w)	SYMBOL	R PHRASES
POLYOL	-	>50	Xi	R43

HAZARDS IDENTIFICATION:

May cause sensitisation by skin contact.

FIRST AID MEASURES:

Inhalation : Remove patient from exposure

Skin contact : Wash immediately with water followed by soap and water. If symptoms (irritation or blistering) persist, obtain medical attention. Contaminated clothing should be laundered before re-issue.

Eye Contact : Irrigate with eyewash solution or clean water, holding the eyelids apart, for at least 10 minutes. Obtain medical attention.

Ingestion : Provided the patient is conscious, wash out mouth with water and give 200-300 ml (half a pint) of water to drink. Do not induce vomiting.

Further Medical Treatment : Symptomatic treatment and supportive therapy as indicated.

FIRE-FIGHTING MEASURES:

Not classed as flammable.
If involved in a fire, it may emit noxious and toxic fumes.

Extinguishing Media : Normal

Fire Fighting Protective Equipment : Full protective equipment including suitable respiratory protection.

ACCIDENTAL RELEASE MEASURES:

Ensure full personal protection during removal of spillages.
Absorb spillages onto sand, earth or any suitable absorbent material.
Transfer to a container for disposal.
Wash the spillage area clean with water and detergent.

HANDLING AND STORAGE:

Handling : Avoid contact with skin.

Storage : This material is hygroscopic. Avoid ingress of moisture by keeping containers properly sealed when not in use.

EXPOSURE CONTROLS/PERSONAL PROTECTION:

Wear suitable gloves and eye/face protection

Occupational Exposure Limits

HAZARDOUS INGREDIENT(S)	LTEL ppm	8hr TWA mg/m ³	STEL ppm mg/m ³	Time mins
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No Occupational Exposure Limit Assigned.

PHYSICAL AND CHEMICAL PROPERTIES

Form : Liquid
Flash Point : >100

STABILITY AND REACTIVITY

Hazardous Reactions : None

Hazardous Decomposition Products : None at ambient temperature

TOXICOLOGICAL INFORMATION:

This health hazard assessment is based on a consideration of the composition of this product.

Inhalation : Unlikely to be hazardous by inhalation because of the low vapour pressure of the material at ambient temperature.

Skin Contact : Slight/mild irritant.
May cause sensitisation by skin contact.

Eye Contact : Slight/mild irritant.

Ingestion : Low oral toxicity.

ECOLOGICAL INFORMATION:

No information available.

DISPOSAL CONSIDERATIONS:

The generation of waste should be avoided or minimised wherever possible. Disposal should be in accordance with local, state or national legislation. Bury on an authorised landfill site or incinerate under approved controlled conditions, using incinerators suitable for the disposal of noxious chemical waste.

TRANSPORT INFORMATION:

UN no. : -
UN Pack Group : -

AIR

ICAO/IATA Class
Primary : -

SEA

IMDG Class
Primary : -

ROAD/RAIL

ADR/RID Class : -
ADR/RID Item No. : -
ADR SIN : -

REGULATORY INFORMATION:

EEC Classification : Irritant
Hazard Symbol : Xi
Risk Phrases : R43 : May cause sensitisation by skin contact.
Safety Phrases : S24 : Avoid contact with skin.

OTHER INFORMATION:

This data sheet was prepared in accordance with Directive 91/155/EEC.