



# DIVERSE URETHANES

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## PRODUCT DATA SHEET

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### PS HDF 435

#### 1. INTRODUCTION

PS HDF 435 is a polyether based polyol, designed for use with the polymeric isocyanate, MR 200, for the production of high density rigid polyurethane foam mouldings and encapsulation.

#### 2. TYPICAL PHYSICAL PROPERTIES

Appearance	:	Pale, straw coloured liquid
Specific gravity	:	1,02 - 1,12 (20°C)
Viscosity	:	1425 - 1575 cps (20°C) ASTM D1638
Water Content	:	0,2 - 0.23 ASTM D2849

#### 3. PROCESSING DETAILS

Mixing Ratio	:	100 : 100 - PS HDF 435 :	MR 200
Reaction Rate	:	(20°C, hand mix)	
Cream Time	:	40 - 52 seconds	
End of Rise Time	:	120 - 135 seconds	
Free Rise Density	:	230 - 245kg/m <sup>3</sup>	DIN 53479

Processing: The chemicals should be processed at approximately 20°C. It is necessary to mix the PS HDF 435 and isocyanate vigorously and intimately in order to obtain a satisfactory foam. Preheating of moulds will give enhanced surface finish and assist demoulding.

#### 4. STORAGE RECOMMENDATIONS

This blend is hygroscopic and should therefore be protected from contamination by moisture by keeping containers properly sealed when not in use. Under temperate conditions the storage life of this polyol blend is six months.

**5. FIRE AND EXPLOSION HAZARDS**

This material is not readily ignited and is unlikely to sustain a fire once started. However, if it were involved in a fire, some of the decomposition products could be harmful if inhaled.

**6. HEALTH CONSIDERATIONS**

Consideration of the composition of this product coupled with several years experience in the manufacture and use of similar products, indicates that it does not present a significant health hazard to users.

Normal standards of industrial hygiene should however, be observed when handling this material and suitable clothing and eye protection must be worn. Should the material be splashed on the skin or in the eyes, it should be removed promptly by copious irrigation with clean water. Following eye contamination it is a suitable precaution to have the person affected medically examined.

**7. WASTE DISPOSAL**

The recommended procedure for disposing of waste polyol blend is either burying on an approved tip or burning under carefully controlled conditions. However, customers are advised to check their local, provincial or national legislation governing the disposal of waste materials.

**8. SPILLAGES**

Excessive spillages should be contained by, and covered with, large quantities of sand, earth or similar absorbent material which is then brushed in vigorously to assist absorption. The mixture can then be shovelled up into drums or plastic bags, and disposed of as described in the previous section.

- 9.** 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.

## SAFETY DATA SHEET

### PS HDF 435

#### IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY/UNDERTAKING

Product Name : PS HDF 435  
Address/Tel.No. : DIVERSE URETHANES  
No 2A High Street  
Modderfontein  
011 606 2413

#### COMPOSITION/INFORMATION ON INGREDIENTS

PRODUCT DESCRIPTION	POLYOL BLEND			
HAZARDOUS INGREDIENTS	CAS NO.	% (W/W)	SYMBOL	R PHRASES
POLYISOCYANATE POLYADDITION 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

	LTEL 8 hr TWA		STEL	Time
Hazardous ingredients	ppm	mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup> mins.

No Occupational Exposure Limit Assigned.

### **PHYSICAL AND CHEMICAL PROPERTIES:**

Form : Liquid

Flash Point : > 100  
(Deg C)

### **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.