



1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product information

Trade name : DESMOPAN DP 1080AU
Use : Production of moulded plastic articles

Company

Bayer MaterialScience AG
HSEQ-PRC (Product Safety)
51368 Leverkusen, Deutschland

Tel.: +49 214 30 25026
Fax: +49 214 30 50035
Email: productsafety@bayerbms.com
Im Notfall: +49 214 30 99300 (Sicherheitszentrale Bayer)

2. COMPOSITION/INFORMATION ON INGREDIENTS

Thermoplastic polyurethane

3. HAZARDS IDENTIFICATION

Not a product dangerous for health or the environment according to the definition of EC Directives 67/548/EEC or 1999/45/EC and their valid adaptations and derived national regulations.

4. FIRST AID MEASURES

In case of skin contact: CONTACT WITH THE HOT MELT: Cool immediately with plenty of water. Do not remove product crusts which may have formed neither forcibly nor by applying any solvents to the skin involved. To obtain treatment for possible burns, and appropriate skin care, seek medical advice immediately.

The following information refers to the handling of the product at room temperature. In case of skin contact wash affected areas thoroughly with soap and plenty of water.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media: Water, Foam, Dry chemical

Burning releases carbon monoxide, carbon dioxide, oxides of nitrogen and traces of hydrogen cyanide. In the event of fire and/or explosion do not breathe fumes.



SAFETY DATA SHEET according to EC directive 2001/58/EC

112000020022

DESMOPAN DP 1080AU

Version 1.1

Revision Date 17.04.2007

Print Date 18.04.2007

Firemen must wear self-contained breathing apparatus.

Do not allow contaminated extinguishing water to enter the soil, ground-water or surface waters.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions: Put on protective equipment (see chapter 8). Granules - slip hazard! Ensure adequate ventilation/exhaust ventilation. Keep unauthorized persons away.

Environmental precautions: Do not flush into surface water or sanitary sewer system.

Methods for cleaning up: Use mechanical handling equipment. Avoid dust formation. Sweep up and shovel into suitable containers for disposal.

Additional advice: For further disposal measures see chapter 13.

7. HANDLING AND STORAGE

Handling

Adequate ventilation and if necessary, effective exhaust must be provided at the workplace when opening fresh drums, drying granules and processing the material. Under recommended processing conditions small amounts of emissions may occur.

Provided good ventilation and/or local exhaust systems are used, the Workplace Exposure Limit(s) stated in Chapter 8 should not be exceeded. Dust must be removed by effective exhaust ventilation.

Storage

Keep container tightly closed and dry.

VCI storage class (VCI = German Association of the Chemical Industry): 11

Storage temperature: < 40 °C

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

The regulations for the substances listed below must be observed when processing this product, particularly if processing takes place at elevated temperatures. In our experience the provision of effective fresh-air and exhaust ventilation equipment at the points where vapors may be generated will ensure compliance with the tolerance limits quoted below.

Substance	CAS-No.	Basis	Type	Value	Ceiling Limit Value	Remarks
tetrahydrofuran	109-99-9	TRGS 900		50 ppm 150 mg/m ³	2	If in compliance with the OEL and BEL values, then there should be no risk of reproductive damage.
tetrahydrofuran	109-99-9	TRGS 900				Dermal absorption possible
tetrahydrofuran	109-99-9	TRGS 900	STEL CL			Category I: substances for which the localized effect has an assigned OEL respiratory passages.
tetrahydrofuran	109-99-9	EU ELV	TWA	50 ppm 150 mg/m ³		
tetrahydrofuran	109-99-9	EU ELV	STEL	100 ppm 300 mg/m ³		
tetrahydrofuran	109-99-9	EU ELV				Dermal absorption possible
General limiting value of dust		TRGS 900		10 mg/m ³	2	inhalable fraction
General limiting value of dust		TRGS 900		3 mg/m ³	2	measured as the alveolar aerosol content
General limiting value of dust		TRGS 900	STEL CL			Category II: substances with a resorptive effect.

Respiratory protection:

In case of dust formation use respiratory equipment with filter type particle filter P1 according to EN 143.

Hand protection:

Suitable materials for safety gloves; DIN EN 374-3:
polyvinyl chloride - PVC (≥ 0.5 mm)
Contaminated and/or damaged gloves must be changed.

Eye protection:

Wear eye/face protection.

Skin and body protection:

Wear suitable protective clothing.

Further protective measures:

Do not breathe dust/vapor. Grease skin.

Hygiene measures:

Keep away from foodstuffs, drinks and tobacco. Wash hands and face before breaks and at the end of work. Keep working clothes separately. Change contaminated clothing.



9. PHYSICAL AND CHEMICAL PROPERTIES

Colour:	different according to colouration
Form:	granular
Odour:	almost odourless
Density:	ca. 1,2 g/cm ³
Bulk density:	500 - 700 kg/m ³
Vapour pressure:	not applicable
Viscosity, dynamic:	not applicable
Water solubility:	practically insoluble
pH:	not applicable
Ignition temperature:	> 210 °C
Autoignition temperature:	not applicable
Explosion limits:	not applicable

10. STABILITY AND REACTIVITY

Hazardous reactions: No hazardous reactions observed.

Hazardous decomposition products: Smouldering or incomplete combustion leads to the formation of toxic gas mixtures consisting mainly of CO, CO₂ and nitrogen oxides.

Thermal decomposition: Decomposition begins at 230 °C.

11. TOXICOLOGICAL INFORMATION

Small quantities of isocyanates may be released when drums are opened for the first time and when the product is exposed to elevated temperatures (e.g. during drying or processing). It is primarily a matter of diisopropylphenyl isocyanate.

Exceeding the recommended processing temperatures leads to a significant increase in the amount of isocyanate vapor generated.

Over-exposure entails a risk of concentration-dependent inhalatory irritation and/or sensitization by isocyanates (delayed appearance of difficult breathing, coughing, asthma is possible). Hypersensitive persons may suffer from these effects even at low isocyanate concentrations.

The regulations for the substances listed below must be observed when processing this product, particularly if processing takes place at elevated temperatures.

Substance	CAS-No.	R-phrase(s)
Isocyanates (all, as - NCO)		R42 May cause sensitisation by inhalation.



SAFETY DATA SHEET according to EC directive 2001/58/EC

112000020022

DESMOPAN DP 1080AU

Version 1.1

Revision Date 17.04.2007

Print Date 18.04.2007

diisopropyl-phenylisocyanate	28178-42-9	R26 Very toxic by inhalation. R34 Causes burns. R22 Harmful if swallowed. R42 May cause sensitisation by inhalation.
tetrahydrofuran	109-99-9	R36/37 Irritating to eyes and respiratory system.

Additional information:

According to our experience and information the product has no harmful effects on health if properly handled.

12. ECOLOGICAL INFORMATION

Do not allow to escape into waterways, wastewater or soil.

Further information on ecology:

The product is practically insoluble in water. In view of its consistency and insolubility in water, no ecological problems are to be expected if the product is properly handled. The product is not readily biodegradable.

13. DISPOSAL CONSIDERATIONS

Dispose in accordance with applicable international, national and local laws, ordinances and statutes. For disposal within the EC, the appropriate code according to the European Waste Catalogue (EWC) should be used.

After containers have been emptied as thoroughly as possible (e.g. by pouring, scraping or draining until "drip-dry"), they can be sent to an appropriate collection point set up within the framework of the existing take-back scheme of the chemical industry. Containers must be recycled in compliance with national legislation and environmental regulations.

The product is suitable for mechanical recycling. After appropriate treatment it can be remelted and reprocessed into new moulded articles. Mechanical recycling is only possible if the material has been selectively retrieved and carefully segregated according to type.

14. TRANSPORT INFORMATION

ADR/RID	--
ADNR	--
IATA	--
IMDG	--

Other information : Not dangerous cargo.
Slight smell. Keep dry.
Keep separated from foodstuffs.



SAFETY DATA SHEET according to EC directive 2001/58/EC

112000020022

DESMOPAN DP 1080AU

Version 1.1

Revision Date 17.04.2007

Print Date 18.04.2007

15. REGULATORY INFORMATION

No labeling necessary according to EC Directives 67/548/EEC or 1999/45/EC and their valid adaptations and derived national regulations.

National legislation

Water contaminating class (Germany): nw not water endangering
(in accordance with Annex 1 to the Directive on Water-Hazardous Substances)

16. OTHER INFORMATION

Further information

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.