DESMOPAN 9380A 000000

Version 1.11 Revision Date 09.12.2020 Print Date 10.12.2020

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

1.1 Product identifier

DESMOPAN 9380A 000000

Material number: 00882515

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

Use:
Production of moulded plastic articles

1.3 Details of the supplier of the safety data sheet

Covestro Deutschland AG
COV-CTO-HSEQ-PSRA-PSI
D-51365 LEVERKUSEN

Tel.: +49 214 6009 4068
e-mail: ProductSafetyEMLA@covestro.com

1.4 Emergency telephone number

+1-703-527-3887 (Chemtrec)
National Chemical Emergency Centre - UK
Tel: +44 1865 407 333

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

No classification in accordance with the Regulation (EC) No. 1272/2008.

2.2 Label elements

No labeling necessary according to the Regulation (EC) No. 1272/2008.

2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

SECTION 3: Composition/information on ingredients

Type of product: Mixture

3.2 Mixtures

Thermoplastic polyurethane

No dangerous ingredients according to REACH-Regulation (EC) No. 1907/2006.

Candidate List of Substances of Very High Concern for Authorisation

This product contains no substances of very high concern in concentrations where an information obligation applies (REACH Regulation (EC) No. 1907/2006, Article 59).

SECTION 4: First aid measures

4.1 Description of 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.

4.2 Most important symptoms and effects, both acute and delayed

Notes to physician: No information available.

4.3 Indication of any immediate medical attention and special treatment needed

Therapeutic measures: No information available.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media: Water, Foam, Dry chemical

5.2 Special hazards arising from the substance or mixture

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.

5.3 Advice for fire-fighters

Firemen must wear self-contained breathing apparatus.

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

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Put on protective equipment (see section 8). Granules - slip hazard! Ensure adequate ventilation/exhaust extraction. Keep unauthorized persons away.

6.2 Environment related measures

Do not flush into surface water or sanitary sewer system.

6.3 Methods and material for containment and cleaning up

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

6.4 Reference to other sections

For further disposal measures see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe 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 section 8 should not be exceeded. In case of mechanical processing, dust must be removed by effective exhaust ventilation.

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.

7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed and dry.

Storage class (TRGS 510) : 11: Combustible Solids
Recommended storage temperature: < 40 °C

7.3 Specific end use(s)

No information available.

SECTION 8: Exposure controls/personal protection

UK Workplace Exposure Limits (WEL), per EH40 document (Health & Safety Executive). If no UK value exists, EU exposure limits given where available.

8.1 Control parameters

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
Isocyanates (all, as -NCO)		EH40 WEL	STEL	0.07 mg/m3		, measured as NCO
Isocyanates (all, as -NCO)		EH40 WEL	TWA	0.02 mg/m3		, measured as NCO
Isocyanates (all, as -NCO)		EH40 WEL				Listed., measured as NCO
General limiting value of dust		EH40 WEL	TWA	10 mg/m3		inhalable fraction
General limiting value of dust		EH40 WEL	TWA	4 mg/m3		alveolar fraction

8.2 Exposure controls

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; EN 374:
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.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance:	granular
Colour:	different according to colouration
Odour:	almost odourless
Odour Threshold:	not established
pH:	not applicable
Softening point:	> 120 °C
Flash point:	not established
Evaporation rate:	not established
Flammability:	not established
Burning number:	not established
Upper/lower flammability or explosive limits:	not applicable
Vapour pressure:	not applicable
Vapour density:	not established
Density:	ca. 1.2 g/cm³
Bulk density:	500 - 700 kg/m3
Water solubility:	practically insoluble
Surface tension:	not established
Partition coefficient (n−octanol/water):	not established
Auto-ignition temperature:	not applicable
Ignition temperature:	> 210 °C
Decomposition temperature:	not established
Heat of combustion:	not established
Viscosity, dynamic:	not applicable

9.2 Other information

The indicated values do not necessarily correspond to the product specification. Please refer to the product information sheet or the technical information sheet for specification data.

Explosive properties:	not established
Dust explosion class:	not established
Oxidising properties:	not established

SECTION 10: Stability and reactivity

10.1 Reactivity

This information is not available.

10.2 Chemical stability

Decomposition begins at 230 °C.

10.3 Possibility of hazardous reactions

No hazardous reactions observed.

10.4 Conditions to avoid

This information is not available.

10.5 Incompatible materials

This information is not available.

10.6 Hazardous decomposition products

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

Under recommended processing conditions small amounts of isocyanates may be emitted.
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).

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

Isocyanates (all, as -NCO)

SECTION 11: Toxicological information

Toxicological studies on the product are not yet available.

Please find below the data available to us:

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity, oral
Thermoplastic polyurethane
LD50 rat: > 5,000 mg/kg
Method: OECD Test Guideline 423
Studies of a comparable product.

Acute toxicity, dermal
Thermoplastic polyurethane
LD50 rat: > 2,000 mg/kg
Studies of a comparable product.

Acute toxicity, inhalation
Thermoplastic polyurethane
Assessment: The substance or mixture has no acute inhalation toxicity
Studies of a comparable product.

Primary skin irritation
Thermoplastic polyurethane
Species: rabbit
Result: non-irritant
Classification: No skin irritation
Method: OECD Test Guideline 404
Studies of a comparable product.

Primary mucosae irritation
Thermoplastic polyurethane
Species: rabbit
Result: non-irritant
Classification: No eye irritation
Studies of a comparable product.

Sensitisation
Thermoplastic polyurethane
Skin sensitisation according to Magnusson/Kligmann (maximizing test):
Species: Guinea pig
Result: negative
Classification: Does not cause skin sensitization.
Method: OECD Test Guideline 406
Studies of a comparable product.

Subacute, subchronic and prolonged toxicity
Thermoplastic polyurethane
No data available.

Carcinogenicity
Thermoplastic polyurethane
No data available.

Reproductive toxicity/Fertility
Thermoplastic polyurethane
No data available.

Reproductive toxicity/Developmental Toxicity/Teratogenicity
Thermoplastic polyurethane
No data available.

Genotoxicity in vitro
Thermoplastic polyurethane
Test type: Salmonella/microsome test (Ames test)
Result: No indication of mutagenic effects.
Method: OECD Test Guideline 471
Studies of a comparable product.

Genotoxicity in vivo
Thermoplastic polyurethane
No data available.

STOT evaluation – one-time exposure
Thermoplastic polyurethane
Based on available data, the classification criteria are not met.

STOT evaluation – repeated exposure
Thermoplastic polyurethane
no data available

Aspiration toxicity

Thermoplastic polyurethane
No data available.

CMR Assessment
Thermoplastic polyurethane
Carcinogenicity: No data available.
Mutagenicity: Based on available data, the classification criteria are not met.
Teratogenicity: No data available.
Reproductive toxicity/Fertility: No data available.

11.2 Information on other hazards

No data available.

SECTION 12: Ecological information

Ecotoxicological studies of the product are not available.

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

Please find below the data available to us:

12.1 Toxicity

Acute Fish toxicity
Thermoplastic polyurethane
EC50 > 100 mg/l
Species: Danio rerio (zebra fish)
Exposure duration: 96 h
Method: Tested according to Directive 92/69/EEC.
Studies of a comparable product.

Chronic Fish toxicity
Thermoplastic polyurethane
No data available.

Acute toxicity for daphnia
Thermoplastic polyurethane
EC50 > 100 mg/l
Species: Daphnia magna (Water flea)
Exposure duration: 48 h
Method: Tested according to Directive 92/69/EEC.
Studies of a comparable product.

Chronic toxicity to daphnia
Thermoplastic polyurethane
No data available.

Acute toxicity for algae
Thermoplastic polyurethane
endpoint: Growth inhibition
Species: scenedesmus subspicatus
Exposure duration: 72 h
Method: OECD Test Guideline 201
No toxic effects with saturated solution.
Studies of a comparable product.

Acute bacterial toxicity
Thermoplastic polyurethane
EC50 > 10,000 mg/l
Test type: Respiration inhibition
Species: activated sludge
Exposure duration: 3 h
Method: OECD Test Guideline 209
Studies of a comparable product.

12.2 Persistence and degradability

Biodegradability
Thermoplastic polyurethane
Biodegradation: 1 %, 28 d, i.e. not readily degradable
Method: Tested according to Directive 92/69/EEC.
Studies of a comparable product.

12.3 Bioaccumulative potential

No data available.

12.4 Mobility in soil

No data available.

12.5 Results of PBT and vPvB assessment

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6 Endocrine disrupting properties

No data available.

12.7 Other adverse effects

The product does not add to the AOX-value of effluent water (EN 1485).

SECTION 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.

13.1 Waste treatment methods

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.

SECTION 14: Transport information

ADR/RID

14.1 UN number	:	Not dangerous goods
14.2 UN proper shipping name	:	Not dangerous goods
14.3 Transport hazard class(es)	:	Not dangerous goods
14.4 Packing group	:	Not dangerous goods
14.5 Environmental hazards	:	Not dangerous goods

ADN

14.1 UN number	:	Not dangerous goods
14.2 UN proper shipping name	:	Not dangerous goods
14.3 Transport hazard class(es)	:	Not dangerous goods
14.4 Packing group	:	Not dangerous goods
14.5 Environmental hazards	:	Not dangerous goods

Dangerous goods classification for inland waterways tanker by request only.

IATA

14.1 UN number	:	Not dangerous goods
14.2 UN proper shipping name	:	Not dangerous goods
14.3 Transport hazard class(es)	:	Not dangerous goods
14.4 Packing group	:	Not dangerous goods
14.5 Environmental hazards	:	Not dangerous goods

IMDG

14.1 UN number	:	Not dangerous goods
14.2 UN proper shipping name	:	Not dangerous goods
14.3 Transport hazard class(es)	:	Not dangerous goods
14.4 Packing group	:	Not dangerous goods
14.5 Marine pollutant	:	Not dangerous goods

14.6 Special precautions for user

See section 6 - 8.

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

14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not applicable.

SECTION 15: Regulatory information

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

Water contaminating class (Germany)
nw not water endangering
Identification number according to AwSV: 766

15.2 Chemical Safety Assessment

A Chemical Safety Assessment has not been conducted for this substance / mixture resp. its components.

SECTION 16: Other information

Abbreviations and acronyms

ADN	Accord européen relatif au transport international des marchandises Dangereuses par voie de Navigation intérieure
ADR	Accord européen relatif au transport international des marchandises Dangereuses par Route
ANSI	American National Standards Institute
ASTM	American Society of Testing and Materials (US)
ATE	Acute Toxic Estimate
AwSv	Verordnung über Anlagen zum Umgang mit wassergefährdenden Stoffen
BCF	Bioconcentration Factor
CAS	Chemical Abstract Service
CLP	Regulation on Classification, Labelling and Packaging of Substances and Mixtures
CMR	Cancerogenic Mutagenic Reprotoxic
DIN	Deutsches Institut für Normung
DNEL	Derived No-Effect Level
EC…	Effect Concentration ... %
EWC	European Waste Catalogue
IATA	International Air Transport Association
IBC	Intermediate Bulk Container
ICAO	International Civil Aviation Organization
IMDG	International Maritime Dangerous Goods
IMO	International Maritime Organization
ISO	International Organization for Standardization
IUPAC	International Union of Pure and Applied Chemistry
LOAEL	Lowest Observable Adverse Effect Level
LC…	Lethal Concentration, ...%
LD…	Lethal Dose, ...%
MARPOL	International Convention for the Prevention of Pollution From Ships
NOAEL	No Observed Adverse Effect Level
NOEL/NOEC	No Observed Effect Level/Concentration
OECD	Organisation for Economic Co-operation and Development
PBT	persistent, bioaccumulative, toxic
PNEC	Predicted No-Effect Concentration
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	Règlement concernant le transport International ferroviaire de marchandises Dangereuses
STOT	Specific Target Organ Toxicity
TRGS	Technische Regeln für Gefahrstoffe
vPvB	very Persistent, very Bioaccumulative
WGK	Wassergefährdungsklasse

Relevant changes since the last version are highlighted in the margin. This version replaces all previous versions.

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.