

MATERIAL SAFETY DATA SHEET according to Regulation (EU) 453/2010
DEUREX[®] EO 45

1. IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND OF THE COMPANY

1.1. Product identifier

Trade name: DEUREX[®] EO 45 K
DEUREX[®] EO 45 A
DEUREX[®] EO 4545 M
DEUREX[®] EO 4520 M
DEUREX[®] EO 4515 M

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

Industrial use (Use category SU 3):

1.3. Details of the supplier of the safety data sheet

DEUREX AG
Dr.-Bergius-Str. 8 – 12
D - 06729 Elsteraue
Tel.: +49(0)3441 / 8 29 29 29, Fax: +49(0)3441 / 8 29 29 28
Material-Safety@Deurex.com
www.Deurex.com

1.4. Emergency telephone number

Common poisons information centre of the Federal States
Mecklenburg-Western Pomerania, Saxony, Saxony-Anhalt and Thuringia.
D-99089 Erfurt
Tel.: +49(0)361-730730

2. HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) 1272/2008 [HCS]:

H phrases: None.
P phrases: None.

2.2. Label elements

Labelling according to Regulation (EC) 1272/2008 [HCS]:
None.

2.3. Other hazards

Based on the available evidence and when handled correctly, the product poses no danger for humans and the environment. The usual minimum standards for protective measures in the chemical industry must be observed. The substances do not meet the criteria for classification as PBT or vPvB → Chapter 12.

3. COMPOSITION / INFORMATION ON INGREDIENTS

3.1. Substances

Chemical identity and characterisation:

Chemical identity:	Polar, oxidized HDPE
CAS No:	68441-17-8
EINECS No:	Polymer
REACH:	Polymer [Regulation (EC) 1907/2006, chapter 1, article 2, paragraph 9]

4. FIRST AID MEASURES

4.1. Description of first aid measures

General: A hazard originated from the substance can occur during processing in hot state (risk of burning)!

Inhalation: Dust can irritate the respiratory tract. If breathing fumes, smoke and gases produced at higher temperatures, irritations of the respiratory system are possible. Remove the person to fresh air.

Skin: Rinse contaminated skin with plenty of water. Remove contaminated clothing and shoes. If symptoms persist, seek medical attention. Wash clothing before reuse. Thoroughly clean shoes before reuse. In case of contact with hot product apply first aid according to the degree of burn. Cool affected area with cool water. Do not remove solidified product from the skin. Remove clothing only if it does not stick to the skin. Cover affected areas with sterile Metalline fire cloth and provide medical treatment.

Eye: Foreign bodies cause mechanical irritation. Remove foreign bodies. in Rinse eye, holding the eye lids apart, thoroughly under running water. In case of complaints seek medical advice.



Swallowing: Rinse the mouth with water. Remove affected person to fresh air. Keep person warm and calm. If material has been swallowed and the affected person is conscious, give small amounts of water to drink. If you experience nausea do not let the person drink more since vomiting can be dangerous. Do not induce vomiting unless directed by medical personnel. If symptoms persist, seek medical attention. Never infuse an unconscious person anything through the mouth. In case of unconsciousness, place in recovery position and seek immediate medical attention.

4.2. Most important symptoms and effects, both acute and delayed

No typical symptoms and effects known. If symptoms persist, seek medical advice.

4.3. Indication of any immediate medical attention and special treatment needed

No additional information available.

5. FIREFIGHTING MEASURES

5.1. Extinguishing media

Suitable extinguishing media:

Foam, dry chemical, carbon dioxide, water spray. Extinguishing media that suit the surrounding fire.

Unsuitable extinguishing media:

Water jet.

5.2. Special hazards arising from the substance or mixture

Take precautionary measures against electrostatic charges.

Do not breath fumes of fire → Chapter 10.

5.3. Advice for firefighters

Use approved compressed air breathing apparatus and wear firefighters protective clothing.



Do not empty fire water into drains. Fire residues and contaminated fire water must be disposed according to local regulations.

6. ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Personal protection measures / protective equipment → Chapter 8.

6.2. Environmental precautions

Contain product mechanically for recovery or disposal. Solidify hot liquid product and collect it in clean containers for recycling or disposal. Do not empty into drains or surface water.

6.3. Methods and material for containment and cleaning up

Mechanical containment.

Observe Waste Act when disposing the waste and the contaminated material
→ Chapter 13.

7. HANDLING AND STORAGE

7.1. Precautions for safe handling

Usual precautions when handling chemicals → Chapter 8.

Keep away from ignition sources and take precautionary measures against electrostatic charges. The product is **not** dust explosive in the condition as received, however, prevent dust formation and raise of dust. In the presence of deposited combustible dust, risk of explosion is expected. When processing explosive dust may be accumulated, which can result in an explosive atmosphere. Good ventilation of the workplace, appropriate extraction and ventilation is required at the processing machines. polymers are lubricants, danger of slipping!



7.2. Conditions for safe storage, including any incompatibilities

Storage conditions: Dry and at room temperature (10 – 25 °C).
Relative humidity < 80%.

Avoid direct sunlight and heat, moisture, water and other harmful influences → Chapter 10.
Do not store together with food and feeding stuff.

Storage class: 11 – Flammable solids.

Fire class: B – Fires involving liquids or liquefiable substances.



7.3. Specific end use(s)

Risk of burn when handling with liquid (hot) product.



According to the formulation, the products do not contain:

- Heavy metals
- VOC
- Compounds listed in the Chemicals Prohibition Ordinance
- Substances according to Directive 2002/95/EC – Appendix II
- Substances according to Regulation (EC) 1907/2006 – Appendix XIV (SVHC listing)

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1. Control parameters

Components with critical values that require monitoring at the workplace:

EINECS No	Chemical name	Description	Value	Unit
---	---	- no information -		

8.2. Exposure controls

Exposure limitation and controlling are workplace related and must be regulated by the user.

8.2.1. Appropriate technical safety devices

Ensure good ventilation - local exhaust. If this is not sufficient, wear respiratory protection.

8.2.2. Personal protective equipment

General protective and hygiene measures:

Usual precautions for handling chemicals. Do not eat, drink or smoke during work, and wear suitable protective clothing. Do not breathe dust. Wash hands before breaks. Remove contaminated clothing. After contact, clean skin with water and soap or use suitable cleanser. Do not use organic solvents.

Eye / Face protection:

Wear protective shield when handling hot material.



Skin / Body protection:

Wear protective gloves made of nitrile rubber. Wear heat-resistant gloves when handling hot material.



Wear protective clothing when handling hot material.
Polymers are lubricants, danger of slipping! Wear suitable footwear (antistatic work shoes).



Breathing protection:
If required, wear dust mask for fine particles when processing the product.



Wear respirator filter or breathing apparatus against vapours during thermal processing.

8.2.3. Limitation and controlling of environmental exposure

Information on environmental exposure → Chapters 6, 7 and 12.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Color:	White to off-white
Aggregate state:	Solid
Quality:	Fine granules – micronized powder
Odour:	typically for product

9.2. Other information

Dropping point:	125 – 135 °C
Flash point:	> 180 °C
Spontaneous ignitability:	No
Oxidizing properties:	None
Viscosity [160 °C]:	< 4,000 mPas
Specific gravity:	0.97 – 0.99 g/cm ³
Solubility in water and fat:	Insoluble
DEUREX EO 4545 M	
DEUREX EO 45 A:	ST 1 – Possibility of dust explosion

10. STABILITY AND REACTIVITY

10.1. Reactivity

Unknown.

10.2. Chemical stability

The product is stable under normal conditions and the set handling and storage conditions described in Chapter 7.

10.3. Possibility of hazardous reactions

The product is not dust explosive in the condition as received. However, fine dust enrichment can cause a dust explosion.

10.4. Conditions to avoid

Keep away from ignition sources and take precautionary measures against electrostatic charges. Avoid dust formation and the raise of dust. Keep away from open fire and flames.

10.5. Incompatible materials

Strong oxidants.

10.6. Hazardous decomposition products

In case of combustion, CO, CO₂, flammable hydrocarbons, ammonia and smoke, as well as traces of nitrous gases and nitrogen oxides can be produced.

11. TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Acute toxicity: LD₅₀ Oral rat >5000 mg/kg.

Irritating effects: No significant effects or critical hazards known.

Eye irritation: No significant effects or critical hazards known.

Sensitisation: No significant effects or critical hazards known.

Germ cell mutagenicity: No significant effects or critical hazards known.

Carcinogenicity: No significant effects or critical hazards known.

Reproductive toxicity: No significant effects or critical hazards known.

Results of CMR assessment: The substances do not meet the criteria for CMR category 1 or 2.

Further information: When the products are handled correctly, in compliance with the industrial hygiene and the inhalation of dusts and fumes is avoided, there is no health risk.

12. ECOLOGICAL INFORMATION

12.1. Toxicity

No significant effects or critical hazards known.

12.2. Persistence and degradability

Not easily biodegradable.

12.3. Bio-accumulative potential

No significant effects or critical hazards known.

12.4. Mobility in soil

No significant effects or critical hazards known.

12.5. Results of PBT and vPvB assessment

The substances do not meet the criteria for a classification as PBT or vPvB.

12.6. Other adverse effects

Water hazard class: Not hazardous to water.

13. DISPOSAL CONSIDERATION

13.1. Waste treatment methods

The producer of the waste must dispose the product according to its use, specific to the industry and the process, in cooperation with the local waste management company based on local waste disposal regulations and national regulations and laws. Contaminated packaging should be disposed according to local and national regulations and in consultation with the local waste management companies. For Europe, the waste producer sets the waste code in accordance with the European Waste List (Decision 2000/532/EC). According to the present knowledge, the products are not regarded as hazardous waste as defined by EU Directive 91/689/EEC

14. TRANSPORT INFORMATION

Transport only in accordance with ADR for road haulage, RID for rail transportation, ADNR/IMDG for carriage by vessel/sea and IATA for carriage by air.

	Road traffic - ADR - Rail traffic - RID -	Barge traffic - ADNR - Maritime traffic - IMDG -	Air traffic - IATA -
14.1. UN number	No hazardous materials	No hazardous materials	No hazardous materials
14.2. UN proper shipping name	No hazardous materials	No hazardous materials	No hazardous materials
14.3. Transport hazard class(es)	No hazardous materials	No hazardous materials	No hazardous materials
14.4. Packing group	No hazardous materials	No hazardous materials	No hazardous materials
14.5. Environmental hazards	No hazardous materials	No hazardous materials	No hazardous materials
14.6. Special precautions for user → Chapters 6 to 8.			
14.7. Transport in bulk according to Annex II of MARPOL73/8 and the IBC Code Not applicable.			

15. REGULATORY INFORMATION

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

Labelling:

According to EC Directives 67/548/EEC and 1999/45/EC:

None.

According to Regulation EC/1272/2008:

None.

International regulations:

Regulation (EC) 1907/2006

Regulation (EC) 1272/2008

Regulation (EU) 453/2010

Directive 67/548/EEC

Directive 91/689/EEC

Directive 94/62/EC

Directive 1999/45/EC

Directive 2002/95/EC

Directive 2002/96/EC

- respectively in the latest version incl. all amendment and corrections.

National regulations:

Compliance with applicable agreements, regulations and laws of the respective country.

Classification according to GefStoffV. (BRD): No.

Technical Instruction Air (TA_{Luft}): Not classified.

Information on employment restrictions: None.

International listing:

The contained substances are listed in the following inventory sheets:

EINECS (Europe) **TSCA** (USA) **DSL** (Canada) **AICS** (Australia)
METI (Japan) **NZIoC** (New-Zealand)

15.2. Chemical safety assessment

Not applicable according to Regulation (EC) 1907/2006 [REACH] Article 37 (4).

16. OTHER INFORMATION

List of all R and S phrases according to Directive 2001/59/EC dt. 06.08.2001:

R phrases: ---

S phrases: ---

List of all H and P phrases according to Regulation EC/1272/2008 dt. 16.12.2008:

H phrases: ---

P phrases: ---

Restrictions:

This information relates only to the above class of products and need not be valid if used with another product or in any special process.

Further information:

The information is based on our present knowledge, it is correct and complete. However, this information is given without a guarantee. It remains the responsibility of the user to satisfy itself whether the information is appropriate and complete for his special use of the product.

Sources: Internal information
 → Chapter 15