

Safety data sheet:

Planolen HD 0511 E

**According to EC directive no. 1907/2006 (REACH)
(amended by EU directive no. 453/2010)**

Created on: 22/10/2014
Revised on: 25/06/2018
Effective from: 01/10/2014
Version: issue 001
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1. Description of the substance or mixture and company name

1.1. Product identifier

Type of chemical product: Substance
Trade name: Planolen HD 0511 E
Index no.: not available
EC no.: not available
CAS no.: 9002-88-4
REACH registration no.: not available

Further names: none

1.2. Relevant identified applications of the substance or mixture, and applications which are not recommended

Identified applications of the substance:

- Production of plastic products including compounds and conversions
- Application in open, semi-open or closed processes

Applications which are not recommended:

Applications beyond the intended purpose are not recommended.

1.3. Details on the supplier providing the safety data sheet

Manufacturer / supplier / contact for technical information:
RE Plano GmbH
Brunnenstraße 138 // D-44536 Lünen
Tel.: +49 2306 106-414
Fax: +49 2306 106-405
E-mail: uwe.schwerin@replano.com

1.4. Emergency numbers

European emergency number: 112
Emergency number of the manufacturer: +49 2306 106-414 (Monday to Friday: 8.00 am to 4 pm)

2. Potential hazards

2.1. Classification of the substance or mixture

Classification according to EC directive no. 1272/2008, appendix VII (substances):

- Not classified.

Classification according to directive 67/548/EEC or directive 1999/45/EC (substances or mixtures):

- Not classified.

2.2. Classification elements

Classification elements according to EC directive no. 1272/2008 (substances) / directive 1999/45/EC (mixtures)

Classified products are exempted from the regulations for labelling according to appendix 1, chapter 1.3.4 of the CLP directive 1272/2008. According to this exemption, the product in its marketed form is neither dangerous for human health after inhaling, swallowing or skin contact, nor for the aquatic environment. Under normal conditions, dangerous or classified substances such as additives are encapsulated and not released. If the product is ground, shredded or heated, users must obtain information about the existing exposition limits and consider potential risks when inhaling the product.

2.3. Further hazards

No further information available.

3. Composition / details on the constituents of the substance

3.1. Substances

Main constituent of the substance:

Substance name: HDPE

Classification according to directive 67/548EEC: not classified.

Classification according to EC directive no. 1272/2008 (CLP): not classified.

Index no.: not available.

EC no.: not available.

CAS no.: 9002-88-4

Hazard statements (H phrases)

Not required.

Precautionary statements (P phrases)

Not required.

4. First-aid measures

4.1. Description of first-aid measures

First-aid measures in general: Immediately cool with cold water after getting in contact with the hot product.

After inhaling

Not applicable.

After contact with the skin

Immediately cool with cold water after getting in contact with the hot product.

After contact with the eyes

Immediately rinse with much water, also beneath the eyelids.

After swallowing

Not applicable.

4.2. Major acute and delayed symptoms and impacts

- Symptoms after inhaling: Material dust may cause irritations of the respiratory tract.
- Symptoms after contact with the skin: Contact with molten product may cause burns.
- Symptoms after contact with the eyes: Irritation of the eyes.
- Symptoms after swallowing: Not applicable.

4.3. Notes with regard to immediate medical attention or special treatment

Specific first-aid measures are not required.



5. Fire fighting measures

5.1. Extinguishing agents

Suited: Carbon dioxide (CO₂), powder, (spray) water, alcohol-resistant foam extinguishing agents in case of fire.

Unsuited: Water jet.

5.2. Special hazards of the substance or mixture

Fire hazard: According to the EC classification criteria, the product is not classified as inflammable.

Explosion hazard: Dust forms an explosive mixture with air.

Reactivity: Not applicable.

Measures to be taken in general: Avoid the generation of dust.

5.3. Fire fighting notes

Cool product with spray water. Collect extinguishing water in a separate vessel. Do not allow extinguishing water to enter the sewage system. Do not allow extinguishing water to enter the ground/soil.

Remove persons from the area of smoke generation.

Protective equipment for fire fighting: Autonomous breathing apparatus.



6. Measures in case of unintended release

6.1. Personal precautions, protective equipment and procedures to be applied in case of emergency

Wear personal protective equipment. Keep unprotected persons away from the danger zone. Warn persons who are within the danger zone. Provide adequate ventilation. Wear appropriate breathing protection if steam, dust and aerosol is emitted. Attention! Slip hazard! Observe protective measures according to chapter 7 and 8.

6.2. Environmental protection measures

Do not allow the substance to enter the sewage system or waters. Avoid the generation of dust.

6.3. Methods and materials for retention and cleaning

Sweep or shovel the substance into a container provided for disposal.

Remove spilled polymers – danger of falling (slip hazard).

6.4. Reference to other chapters

No further information available.



7. Handling and storage

7.1. Protective measures for safe handling

Avoid the generation of dust.

Application temperature = room temperature.

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Measures against fire and explosions

No further measures are required in addition to the general preventive fire protection measures.

Measures to prevent the generation of dust

Avoid the generation of inflammable dust.

Measures for environmental protection

Do not allow product to enter the sewage system.

General hygienic measures

- Do not smoke, eat and drink in the zone of application.
- Wash your hands during breaks and after work.
- Take off personal protective equipment when entering social amenities rooms.

7.2. Conditions for safe storage in consideration of incompatibilities

Technical measures:	Minimise the generation of inflammable dust.
Storage conditions:	Store in dry, cool and well ventilated rooms.
Prohibition of storing the substance with other materials:	Not applicable.
Storage:	Special storage not required.
Packaging requirements:	Keep packaging closed as long as the product is not needed.
Packaging material (options):	Not applicable.

7.3. Specific final applications

No further information available.

8. Restriction and control of exposition / personal protective equipment

8.1. Parameters to be controlled

Substance:	HDPE (9002-88-4)	
Germany	TRGS 900 Limit values at the workplace (mg/m ³)	Limit value for pore-shaped dust: 10 mg/m ³ (3 mg/m ³ respirable)
Italy/Portugal/USA (ACGIH)	ACGIH TWA (mg/m ³)	Limit value for pore-shaped dust: 10 mg/m ³ (4 mg/m ³ respirable)
Spain	VLA – ED (mg/ m ³)	Limit value for dust: 10 mg/m ³
Switzerland	VME (mg/ m ³)	Limit value for dust: 5 mg/m ³
Great Britain	WEL TWA (mg/ m ³)	Limit value for pore-shaped dust: 10 mg/m ³

8.2. Restriction and control of the exposition

Suitable technical control device:	Normal room ventilation is sufficient.
Suitable material for protective clothing:	Not applicable.
Hand protection:	Protective gloves.
Eye protection:	Safety goggles.
Skin and body protection:	Not applicable.
Breathing protection:	Use breathing protection whenever dust is generated. Filter type P2.
Restriction and control of environmental exposition:	Do not allow product to enter the sewage system.

9. Physical and chemical properties

9.1. Details on the basic physical and chemical properties

Appearance:	Ball-shaped/cylinder-shaped/lens-shaped granules
State of aggregation:	Solid
Colour:	Depending on pigments
Odour:	Odourless
Melting point:	105 – 130 °C
Flashing point	> 350°C
Absolute density:	< 1 g/cm ³
Solubility in water:	Insoluble
Self-ignition temperature:	> 380°C
Decomposition temperature:	The product is stable under normal conditions.

9.2. Further details

None

10. Stability and reactivity

10.1. Reactivity

Not applicable.

10.2. Chemical stability

The product is stable.

10.3. Potential dangerous reactions

No further information available.

10.4. Conditions to avoid

Overheating.

10.5. Incompatible materials

Not applicable.

10.6. Dangerous decomposition products

In case of fire: Generation of carbon monoxide and carbon dioxide.

11. Toxicological details

11.1. Details on toxicological effects

For substances of the following hazard classes

Hazard class	Concentration	Species	Remark
Acute oral toxicity	LD50	Rat	Not known. mg/kg
Acute dermal toxicity	LD50	Rat	Not known. mg/kg
Acute dermal toxicity	LD50	Rabbit	Not known. mg/kg
Acute inhaled toxicity	LC50 (mg/l/4hrs)	Rat	Not known. mg/l/4hrs
Acute inhaled toxicity	LC50 (ppm/4hrs)	Rat	Not known. ppm/4hrs

12. Environmental details

12.1. Toxicity

Ecology – general details:	Not dangerous.
Ecology – air:	Not dangerous.
Ecology – water:	Not dangerous, product is insoluble in water.

12.2. Persistence and decomposability

Persistence and decomposability:	The product is not toxic and biologically not decomposable.
BOD:	Not applicable. g O ₂ /g substance
COD:	Not applicable. g O ₂ /g substance
ThOD:	Not applicable. g O ₂ /g substance
BOD (% ThOD):	Not applicable. % ThOD

12.3. Bioaccumulation potential

Log Kow:	Not applicable.
Bioaccumulation potential:	Not bioaccumulating.

12.4. Mobility in the soil

Mobility in the soil:	None.
Surface tension:	Not applicable.
Ecology – soil:	Not bioaccumulating.

12.5. Result of PBT and vPvB assessment

The product is an inorganic substance and therefore no substance for PBT and vPvB assessment.

12.6. Further harmful effects

No direct details. From this, the product does not put a special risk for the underwater world.
No disadvantageous impacts on health have been observed.

13. Notes with regard to disposal

13.1. Waste management methods

Processing of contaminated packaging

Dispose of contaminated packaging/containers after use.

Waste code according to the List of Wastes Ordinance

The waste code to be used depends on the origin and field of application of waste and must be determined on the basis of the provisions given in the national and international regulations and laws.

Specific precautions

None.

Relevant EC directives or other regulations

75/442/EEC (waste)

14. Details on transportation

No hazardous material as defined in the transportation directive.

15. Statutory provisions

15.1. Provisions with regard to safety, health and environmental protection / specific statutory provisions for the substance or mixture

National and international provisions

"Dangerous substances directive" 67/548/EEC

Council Directive 67/548/EEC of 27 June 1967 on the approximation of laws, regulations and administrative provisions relating to the classification, packaging and labelling of dangerous substances.

"Dangerous substance directive" with amendments (regulation has been repealed!)

"Dangerous preparations directive" 1999/45/EC

European Parliament and Council Directive 1999/45/EC of 31 May 1999 on the approximation of laws, regulations and administrative provisions relating to the classification, packaging and labelling of dangerous preparations.

"Dangerous preparations directive" with amendments (regulation has been repealed!)

EC regulation no. 1907/2006 (REACH)

EC regulation no. 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the registration, evaluation, authorisation and restriction of chemical substances (REACH), with amendments

EC regulation no. 1272/2008 (CLP)

EC regulation no. 1272/2008 of the European Parliament and of the Council of 16 December 2008 concerning the classification, labelling and packaging of substances and mixtures (CLP), with amendments

Directive 98/24/EC

Council Directive 98/24/EC of 7 April 1998 on the protection of the health and safety of workers from the risks related to chemical agents at work, with amendments.

Directive 2000/39/EC

Commission Directive 2000/39/EC of 8 June 2000 establishing a first list of indicative occupational exposure limit values in implementation of Council Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work, with amendments.

Directive 2008/98/EC

Directive 2000/39/EC of the European Parliament and the Council of 19 November 2008 on waste.

Ordinance on the implementation of the European List of Wastes

List of Wastes Ordinance, 2001, BGBl. I, N. 65, 12.12.2001, with amendments.

Water hazard class

Not applicable.

Storage class VCI

Not applicable.

15.2. Chemical safety assessment of substances

Not applicable, as not required.

16. Further details

Amendments to the last version

This safety data sheet was created according to the provisions as specified in directive no. 453/2010. This safety data sheet was created for the re-issue to customers.

References and data sources:

Directives:

Substance directive (67/548/EEC), as last amended by directive 2009/2/EC.

Preparations directive (1999/45/EC), as last amended by EC directive no. 1907/2006.

REACH directive (EC) no. 1907/2006, as last amended by EC directive no. 453/2010.

CLP directive (EC) no. 1272/2008, as last amended by EC directive no. 790/2009.

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Internet:

<http://www.baua.de>
<http://www.arbeitssicherheit.de>
<http://www.gischem.de>
<http://www.dguv.de/ifa/de/gestis/stoffdb>

Methods according to article 9 of the EC directive no. 1272/2008 for the assessment of information for classification purposes

Wording of R phrases, hazard warnings, safety advice and/or safety notes referred to in chapter 2 to 15

According to directive 67/548/EEC:

Risk phrases:

Not required.

Safety advice:

Not required.

Abbreviations

Abbreviation	Meaning
TRGS	: Technische Regeln Gefahrstoffe (technical rules for hazardous substances)
DNEL	: Derived No-Effect Level
PNEC	: Predicted No-Effect Concentration
AGW	: Arbeitsplatzgrenzwert (limit value for workplaces)
BGW	: Biologischer Grenzwert (biological limit value)
AVV	: Verordnung über das Europäische Abfallverzeichnis (Ordinance on the European Wastes List)
LD 50	: Lethal dosis
LC 50	: Lethal concentration
EC 50	: Effective concentration
ED 50	: Effective dosis
CAS	: Chemical Abstracts Service
REACH	: Registration, Evaluation, Authorisation and Restriction of Chemicals
GHS	: Global Harmonisation Standard
CLP	: Communication Labelling and Packaging
AGS	: Ausschuss Gefahrstoffe (committee for hazardous substances)
NOEC	: No Observed Effect Concentration
NOEL	: No Observed Effect Level
NOAEL	: No Observed Adverse Effect Level
OECD	: Organisation for Economic Co-operation and Development
ADR	: Accord européen relatif au transport international des marchandises Dangereuses par Route
EMKG	: Einfaches Maßnahmen-Konzept Gefahrstoffe (simple concept of measures for hazardous goods)

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Further information

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This information is based on our current knowledge and experience with the product. No claim is made that it is complete. Unless otherwise indicated, it refers to the specific product. If the substance is in contact or mixed with other products, it is necessary to check whether further hazards might be caused. This information does in no way exempt the product user from observing any applied provisions with regard to safety, hygiene, health, work and environmental protection.

Lünen, 25/06/2018