

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Version 4.1 Revision Date 09.01.2012

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GENERIC EU MSDS - NO COUNTRY SPECIFIC DATA - NO OEL DATA

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING**1.1 Product identifiers**

Product name : Polypropylene

Product Number : 452149
Brand : Aldrich
CAS-No. : 9003-07-0**1.2 Relevant identified uses of the substance or mixture and uses advised against**

Identified uses : Laboratory chemicals, Manufacture of substances

1.3 Details of the supplier of the safety data sheetCompany : Sigma-Aldrich (Shanghai) Trading Co.,Ltd
41F K. Wah Centre
1010 Huai Hai Zhong Road
200031 SHANGHAI
CHINATelephone : +86 21-61415566
Fax : +86 21-61415567
E-mail address : china@sial.com**1.4 Emergency telephone number**

Emergency Phone # : +8621-61415560

2. HAZARDS IDENTIFICATION**2.1 Classification of the substance or mixture**Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.
This substance is not classified as dangerous according to Directive 67/548/EEC.**2.2 Label elements**

Caution - substance not yet tested completely.

2.3 Other hazards - none

3. COMPOSITION/INFORMATION ON INGREDIENTS**3.1 Substances**Formula : C₃H₆

4. FIRST AID MEASURES**4.1 Description of first aid measures****If inhaled**

If breathed in, move person into fresh air. If not breathing, give artificial respiration.

In case of skin contact

Wash off with soap and plenty of water.

In case of eye contact

Flush eyes with water as a precaution.

If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water.

- 4.2 **Most important symptoms and effects, both acute and delayed**
- 4.3 **Indication of any immediate medical attention and special treatment needed**
no data available

5. **FIREFIGHTING MEASURES**

- 5.1 **Extinguishing media**
Suitable extinguishing media
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
- 5.2 **Special hazards arising from the substance or mixture**
Carbon oxides, Acrolein, formaldehyde-like
Nature of decomposition products not known.
Carbon oxides
- 5.3 **Advice for firefighters**
Wear self contained breathing apparatus for fire fighting if necessary.
- 5.4 **Further information**
no data available

6. **ACCIDENTAL RELEASE MEASURES**

- 6.1 **Personal precautions, protective equipment and emergency procedures**
Avoid dust formation. Avoid breathing vapors, mist or gas.
- 6.2 **Environmental precautions**
Do not let product enter drains.
- 6.3 **Methods and materials for containment and cleaning up**
Sweep up and shovel. Keep in suitable, closed containers for disposal.
- 6.4 **Reference to other sections**
For disposal see section 13.

7. **HANDLING AND STORAGE**

- 7.1 **Precautions for safe handling**
Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection.
- 7.2 **Conditions for safe storage, including any incompatibilities**
Store in cool place. Keep container tightly closed in a dry and well-ventilated place.
- 7.3 **Specific end uses**
no data available

8. **EXPOSURE CONTROLS/PERSONAL PROTECTION**

- 8.1 **Control parameters**
Components with workplace control parameters
- 8.2 **Exposure controls**
Appropriate engineering controls
General industrial hygiene practice.
- Personal protective equipment**
- Eye/face protection**
Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).
- Skin protection**
Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of

contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Body Protection

Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

- | | |
|---|-------------------|
| a) Appearance | Form: pellets |
| b) Odour | no data available |
| c) Odour Threshold | no data available |
| d) pH | no data available |
| e) Melting point/freezing point | no data available |
| f) Initial boiling point and boiling range | no data available |
| g) Flash point | no data available |
| h) Evaporation rate | no data available |
| i) Flammability (solid, gas) | no data available |
| j) Upper/lower flammability or explosive limits | no data available |
| k) Vapour pressure | no data available |
| l) Vapour density | no data available |
| m) Relative density | 0,9 g/mL at 25 °C |
| n) Water solubility | no data available |
| o) Partition coefficient: n-octanol/water | no data available |
| p) Autoignition temperature | no data available |
| q) Decomposition temperature | no data available |
| r) Viscosity | no data available |
| s) Explosive properties | no data available |
| t) Oxidizing properties | no data available |

9.2 Other safety information

no data available

10. STABILITY AND REACTIVITY

10.1 Reactivity

no data available

- 10.2 Chemical stability**
no data available
- 10.3 Possibility of hazardous reactions**
no data available
- 10.4 Conditions to avoid**
no data available
- 10.5 Incompatible materials**
Strong oxidizing agents, Chlorine, permanganates, e.g. potassium permanganate
- 10.6 Hazardous decomposition products**
Other decomposition products - no data available

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity

LD50 Intraperitoneal - rat - > 110.000 mg/kg

Remarks: Sense Organs and Special Senses (Nose, Eye, Ear, and Taste):Eye:Lacrimation. Sense Organs and Special Senses (Nose, Eye, Ear, and Taste):Eye:Ptosis. Behavioral:Convulsions or effect on seizure threshold.

LD50 Intravenous - rat - > 99.000 mg/kg

Remarks: Behavioral:Tremor. Cyanosis Nutritional and Gross Metabolic:Changes in:Body temperature decrease.

Skin corrosion/irritation

no data available

Serious eye damage/eye irritation

no data available

Respiratory or skin sensitization

no data available

Germ cell mutagenicity

no data available

Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

Reproductive toxicity

no data available

Specific target organ toxicity - single exposure

no data available

Specific target organ toxicity - repeated exposure

no data available

Aspiration hazard

no data available

Potential health effects

Inhalation

May be harmful if inhaled. May cause respiratory tract irritation.

Ingestion

May be harmful if swallowed.

Skin

May be harmful if absorbed through skin. May cause skin irritation.

Eyes

May cause eye irritation.

Additional Information

RTECS: Not available

12. ECOLOGICAL INFORMATION**12.1 Toxicity**

no data available

12.2 Persistence and degradability

no data available

12.3 Bioaccumulative potential

no data available

12.4 Mobility in soil

no data available

12.5 Results of PBT and vPvB assessment

no data available

12.6 Other adverse effects

no data available

13. DISPOSAL CONSIDERATIONS**13.1 Waste treatment methods****Product**

Offer surplus and non-recyclable solutions to a licensed disposal company.

Contaminated packaging

Dispose of as unused product.

14. TRANSPORT INFORMATION**14.1 UN number**

ADR/RID: -

IMDG: -

IATA: -

14.2 UN proper shipping name

ADR/RID: Not dangerous goods

IMDG: Not dangerous goods

IATA: Not dangerous goods

14.3 Transport hazard class(es)

ADR/RID: -

IMDG: -

IATA: -

14.4 Packaging group

ADR/RID: -

IMDG: -

IATA: -

14.5 Environmental hazards

ADR/RID: no

IMDG Marine pollutant: no

IATA: no

14.6 Special precautions for user

no data available

15. REGULATORY INFORMATION

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

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

no data available

15.2 Chemical Safety Assessment

no data available

16. OTHER INFORMATION**Further information**

Copyright 2012 Sigma-Aldrich Co. License granted to make unlimited paper copies for internal use only. The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any

guarantee of the properties of the product. Sigma-Aldrich Co., shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale.



01 July 2009

HKR102

Statement on the regulatory status of Sasol Polymers Polypropylene intended for use in food contact applications

Europe

The grade of polypropylene listed above complies with the regulations of the Commission of the European Communities relating to plastic materials and articles intended to come into contact with food as published in *Commission Directive 2002/72/EC* and amended by *Commission Directive 2004/19/EC*, *Commission Directive 2007/19/EC* and *Commission Directive 2008/39/EC*. Compliance is claimed on the basis of the following:

- Only monomers listed in Annex II (Sections A and B) to *Directive 2002/72/EC* are used in the production of this grade.
- Only additives listed in Annex III (Sections A and B) to *Directive 2002/72/EC* (as amended by Annex II to *Directive 2004/19/EC*, Annex II to *Directive 2007/19/EC* & Annex I to V of *Directive 2008/39/EC*) are used in the production of this grade. Where applicable additives are used in concentrations below the maximum permitted concentration ("QM") specified in the directives listed above.

Users of this grade are informed that:

- A Specific Migration Limit ("SML") or concentration limit ("QM") is imposed on certain additives by the directives listed above. To enable polymer converters to fulfil their obligations in term of the regulations, polymer producers are obliged to disclose information pertaining to additives on which limits are imposed. Polymer converters are therefore informed that the grade of polypropylene listed above contains the following additive(s) which are subject to a SML and/or a QM:
 - None
- The directives listed above require that plastic materials and articles in contact with foodstuffs shall have an overall migration limit ("OML") not exceeding 10 mg/dm² of the area in contact with the foodstuffs (in some instances an alternative OML of 60 mg/kg of foodstuffs packaged in the article is specified). The OML applies to all additives and adjuvant substances present in the final article, including those added during conversion.

Sasol Polymers a division of Sasol Chemical Industries Limited (Registration number 1968/013914/06) (SCI)
2 Pressburg Road Modderfontein Founders View PO Box 72 Modderfontein 1645 South Africa
Telephone +27 (0)11 458 0700 Facsimile +27 (0)11 458 0744 www.sasol.com

Directors: RK Groh (Chairman) (German) M du Toit C van den Berg
Company Secretary: Sasol Group Services (Pty) Limited (Registration Number: 2006/011591/07)

Divisional Directors: RK Groh (Chairman) (German) M Sieberhagen (Managing Director) T Bates N Behrens LPA Davies
AM De Ruyter BE Klingenberg TJ Makhoere TS Munday KC Ramon JF van Buren-Schele

- Migration behaviour of additives from polymers into packaged foodstuff is dependant on polymer material composition, packaging article geometry, nature of foodstuff and conditions under which the foodstuff is packed, stored and used. Verification of compliance to SML's and OML's must therefore be done by polymer converters or foodstuff packagers based on the specific design and specific use of the final article in accordance with *Article 8 of Directive 2002/72/EC*, i.e. either by calculation, migration modelling or migration testing in accordance with *Directive 82/711/EEC* (as amended with *Directive 93/8/EEC* and *97/48/EEC*) and *Directive 85/572/EEC* (as emended by *Directive 2007/19/EC*).

United States of America

The grade of polypropylene listed above complies with the regulations of the US Food and Drug Administration (FDA) governing the use of plastic materials in contact with food as published in the *Code of Federal Regulations 21 CFR*. Compliance is claimed on the basis of the following:

- The basic polymer used in this grade meets the requirements of paragraph (a) (1) (i) or paragraph (a) (3) (i) of *21 CFR 177.1520*.
- The additives used in this grade meet the requirements of paragraph (b) of *21 CFR 177.1520* in that they are permitted for use by the applicable regulations in *21 CFR 170* through *189*. The additives in this grade are permitted in articles intended for use with:
 - Foods of types I to IX as listed in Table 1 of *21 CFR 176.170*.
 - Conditions A to H as listed in Table 2 of *21 CFR 176.170*.

For further information or clarification of any part of this statement please do not hesitate to contact us.



A.J. Krüger

Sasol Polymers
arrie.kruger@sasol.com
+27 11 458 0713

Disclaimer:

- This statement replaces all earlier statements from Sasol Polymers on the above mentioned topic(s). Please contact Sasol Polymers regularly for up-to-date regulatory information.*
- This statement will remain valid until replaced by a newer version from Sasol Polymers on the above mentioned topic.*
- Sasol Polymers provides this information in good faith, but makes no representation as to its comprehensiveness or accuracy. Individuals receiving this information must exercise their independent judgement in determining its appropriateness for a particular purpose. Accordingly, Sasol Polymers will not be responsible for damages resulting from use of or reliance upon this information.*

- d. *This statement only applies to virgin polypropylene granules as supplied by Sasol Polymers and does not include:*
- *Modification of the polymer by the addition of any other product to it.*
 - *Modification of the polymer resulting from processing.*
 - *Modification of the polymer resulting from storage.*
- e. *This statement does not claim or guarantee that Sasol Polymers polypropylene is suitable for any specific food contact application. No blanket “food contact approval” of polymer materials and/or articles made from polymer materials is possible under the applicable regulations. Migration of substances from polymers depends to a large extent on the geometry of the article made from the polymer, the foodstuff packed in the articles and the conditions under which the foodstuff is packaged, stored and used. Sasol Polymers cannot predict or guarantee the migratory behaviour of it its polypropylene after it has been converted into articles (mouldings, film, etc). Users are advised to subject articles made from Sasol Polymers polypropylene to relevant calculations and/or migration modelling and/or migration testing before suitability for food contact applications is claimed.*