

ALPHA

SAFETY DATA SHEET ALPHA 5300

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product name ALPHA 5300
Product No. 5300

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

Identified uses STRUCTURAL ADHESIVE

1.3. Details of the supplier of the safety data sheet

Supplier Alpha Adhesives & Sealants Ltd
Llewellyn Close, Sandy Lane Ind. Est.
Stourport-on-Severn
Worcestershire DY13 9RH
01299 828626
01299 828666
sales@alpha-adhesives.co.uk

1.4. Emergency telephone number

44 (0) 1299 828626 (Available 08.30 to 17.00)

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Classification (1999/45/EEC) Xi;R36/37/38. R43. F;R11. R52/53.

2.2. Label elements

Contains METHYL METHACRYLATE
IMPACT MODIFIER

Labelling



Irritant



Highly flammable

Risk Phrases

| | |
|-----------|---|
| R11 | Highly flammable |
| R36/37/38 | Irritating to eyes, respiratory system and skin. |
| R43 | May cause sensitisation by skin contact. |
| R52/53 | Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment. |

Safety Phrases

| | |
|--------|---|
| S9 | Keep container in a well-ventilated place. |
| S16 | Keep away from sources of ignition - No smoking. |
| S24/25 | Avoid contact with skin and eyes. |
| S26 | In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. |
| S37 | Wear suitable gloves. |
| S51 | Use only in well-ventilated areas. |

2.3. Other hazards

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

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| | | |
|---|--|---------------------------------------|
| METHYL METHACRYLATE | | 60-100% |
| CAS-No.: 80-62-6 | EC No.: 201-297-1 | Registration Number: 01-2119452498-28 |
| Classification (EC 1272/2008) Flam. Liq. 2 - H225 Skin Irrit. 2 - H315 Skin Sens. 1 - H317 STOT SE 3 - H335 | Classification (67/548/EEC) F;R11 R43 Xi;R37/38 | |
| METHACRYLIC ACID | | 1-5% |
| CAS-No.: 79-41-4 | EC No.: 201-204-4 | |
| Classification (EC 1272/2008) Acute Tox. 4 - H302 Acute Tox. 4 - H312 Skin Corr. 1A - H314 STOT SE 3 - H335 | Classification (67/548/EEC) Xn;R21/22. C;R35. Xi;R37. | |
| PDHP ACCELERATOR | | 1-5% |
| CAS-No.: 34562-31-7 | EC No.: | |
| Classification (EC 1272/2008) Not classified. | Classification (67/548/EEC) Xn;R22. Xi;R38. | |
| IMPACT MODIFIER | | 1-5% |
| CAS-No.: | EC No.: | |
| Classification (EC 1272/2008) Skin Sens. 1 - H317 | Classification (67/548/EEC) R43. | |
| PARA TOLUENE SULFONYL CHLORIDE | | 1-5% |
| CAS-No.: 98-59-9 | EC No.: 202-684-8 | |
| Classification (EC 1272/2008) Skin Corr. 1B - H314 | Classification (67/548/EEC) C;R34. | |
| 2,6-DI-TERT-BUTYL-P-CRESOL | | <1% |
| CAS-No.: 128-37-0 | EC No.: 204-881-4 | |
| Classification (EC 1272/2008) Aquatic Acute 1 - H400 Aquatic Chronic 1 - H410 | Classification (67/548/EEC) N;R50/53. | |

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| | | |
|--|--|-----|
| CUMENE HYDROPEROXIDE | | <1% |
| CAS-No.: 80-15-9 | EC No.: 201-254-7 | |
| Classification (EC 1272/2008) Org. Perox. E - H242 Acute Tox. 4 - H302 Acute Tox. 4 - H312 Acute Tox. 3 - H331 Skin Corr. 1B - H314 STOT SE 3 - H335 STOT RE 2 - H373 Aquatic Chronic 2 - H411 | Classification (67/548/EEC) O;R7 T;R23 C;R34 Xn;R21/22,R48/20/22 N;R51/53 | |
| DEFOAMER | | <1% |
| CAS-No.: | EC No.: | |
| Classification (EC 1272/2008) Flam. Liq. 3 - H226 Skin Irrit. 2 - H315 STOT SE 3 - H336 Aquatic Chronic 2 - H411 | Classification (67/548/EEC) Xi;R38. N;R51/53. R10,R67. | |
| ETHANEDIOL | | <1% |
| CAS-No.: 107-21-1 | EC No.: 203-473-3 | |
| Classification (EC 1272/2008) Acute Tox. 4 - H302 | Classification (67/548/EEC) Xn;R22. | |

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

Composition Comments

Any substances listed showing% have less than 0.09%

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

General information

Move the exposed person to fresh air at once. Get medical attention if any discomfort continues.

Inhalation

Move the exposed person to fresh air at once. Provide rest, warmth and fresh air. Get medical attention if any discomfort continues.

Ingestion

DO NOT INDUCE VOMITING! Rinse mouth thoroughly. Provide rest, warmth and fresh air. Get medical attention immediately!

Skin contact

Remove affected person from source of contamination. Remove contaminated clothing. Wash the skin immediately with soap and water. Get medical attention if irritation persists after washing.

Eye contact

Remove victim immediately from source of exposure. Make sure to remove any contact lenses from the eyes before rinsing. Immediately flush with plenty of water for up to 15 minutes. Remove any contact lenses and open eyes wide apart. Get medical attention if any discomfort continues.

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

Inhalation.

Vapours may cause drowsiness and dizziness.

Ingestion

May cause discomfort if swallowed.

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Skin contact
 Skin irritation.
 Eye contact
 May cause temporary eye irritation.

4.3. Indication of any immediate medical attention and special treatment needed**SECTION 5: FIREFIGHTING MEASURES****5.1. Extinguishing media**

Extinguishing media
 Extinguish with alcohol-resistant foam, carbon dioxide or dry powder.

5.2. Special hazards arising from the substance or mixture

Hazardous combustion products
 In case of fire, toxic gases (CO, CO₂, NO_x) may be formed.
 Unusual Fire & Explosion Hazards
 HIGHLY FLAMMABLE!
 Specific hazards
 The product is flammable, and heating may generate vapours which may form explosive vapour/air mixtures.

5.3. Advice for firefighters

Special Fire Fighting Procedures
 Avoid breathing fire vapours. Cool containers exposed to flames with water until well after the fire is out. Keep run-off water out of sewers and water sources. Dike for water control.
 Protective equipment for fire-fighters
 Use air-supplied respirator during fire fighting.

SECTION 6: ACCIDENTAL RELEASE MEASURES**6.1. Personal precautions, protective equipment and emergency procedures**

For personal protection, see section 8.

6.2. Environmental precautions

Do not discharge into drains, water courses or onto the ground.

6.3. Methods and material for containment and cleaning up

Clean-up personnel should use respiratory and/or liquid contact protection. Absorb in vermiculite, dry sand or earth and place into containers.

6.4. Reference to other sections

See section 11 for additional information on health hazards.

SECTION 7: HANDLING AND STORAGE**7.1. Precautions for safe handling**

Avoid spilling, skin and eye contact. Keep away from heat, sparks and open flame. Ventilate well, avoid breathing vapours. Use approved respirator if air contamination is above accepted level.

7.2. Conditions for safe storage, including any incompatibilities

Flammable/combustible - Keep away from oxidisers, heat and flames. Store in tightly closed original container in a dry, cool and well-ventilated place. Keep in original container.

7.3. Specific end use(s)

The identified uses for this product are detailed in Section 1.2.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**8.1. Control parameters**

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| Name | STD | TWA - 8 Hrs | | STEL - 15 Min | | Notes |
|--------------------------------|-----|-------------|-----------|---------------|-----------|-------|
| | | | | | | |
| 2,6-DI-TERT-BUTYL-P-CRESOL | WEL | | 10 mg/m3 | | | |
| DEFOAMER | WEL | 20 ppm | | 50 ppm | | |
| ETHANEDIOL | | | | 40 | 104 | |
| METHACRYLIC ACID | WEL | 20 ppm | 72 mg/m3 | 40 ppm | 143 mg/m3 | |
| METHYL METHACRYLATE | WEL | 50 ppm | 208 mg/m3 | 100 ppm | 416 mg/m3 | |
| PARA TOLUENE SULFONYL CHLORIDE | | | | | 5 mg/m3 | |

WEL = Workplace Exposure Limit.

Ingredient Comments

No exposure limits noted for ingredient(s).

METHYL METHACRYLATE (CAS: 80-62-6)

| | | | | | |
|-----------------------|-------------|------------|------------------|-----------------|--|
| DNEL | | | | | |
| Industry | Inhalation. | Long Term | Systemic Effects | 210 mg/m3 | |
| Consumer | Inhalation. | Long Term | Systemic Effects | 74.3 mg/m3 | |
| Industry | Dermal | Long Term | Systemic Effects | 13.67 mg/kg/day | |
| Industry | Dermal | Short Term | Systemic Effects | 1, 500 mg/m3 | |
| Consumer | Dermal | Long Term | Systemic Effects | 8.2 mg/kg/day | |
| Consumer | Dermal | Short Term | Systemic Effects | 1, 500 mg/m3 | |
| PNEC | | | | | |
| Freshwater | 0.94 | mg/l | | | |
| Marinewater | 0.094 | mg/l | | | |
| Soil | 1.47 | mg/kg | | | |
| Sediment (Freshwater) | 5.74 | mg/kg | | | |

METHACRYLIC ACID (CAS: 79-41-4)

| | | | | | |
|----------|-------------|-----------|------------------|----------------|--|
| DNEL | | | | | |
| Industry | Inhalation. | Long Term | Systemic Effects | 89.5 mg/m3 | |
| Industry | Dermal | Long Term | Systemic Effects | 11.4 mg/kg/day | |
| PNEC | | | | | |
| Industry | Freshwater | Long Term | 0.82 mg/l | | |

8.2. Exposure controls

Protective equipment



Process conditions

Use engineering controls to reduce air contamination to permissible exposure level.

Engineering measures

Provide adequate ventilation. Observe Occupational Exposure Limits and minimise the risk of inhalation of vapours.

Respiratory equipment

If ventilation is insufficient, suitable respiratory protection must be provided.

Hand protection

Use protective gloves.

Eye protection

Wear approved safety goggles.

Other Protection

Wear appropriate clothing to prevent any possibility of liquid contact and repeated or prolonged vapour contact.

Hygiene measures

Wash hands at the end of each work shift and before eating, smoking and using the toilet. Wash promptly if skin becomes contaminated.

Promptly remove any clothing that becomes contaminated. Use appropriate skin cream to prevent drying of skin. When using do not eat, drink or smoke.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

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9.1. Information on basic physical and chemical properties

| | |
|------------------|--------------------------|
| Appearance | Viscous Paste |
| Colour | White / off-white. |
| Odour | Characteristic. |
| Relative density | 0.9-1.0 20 |
| Viscosity | 500, 000-650, 000 cps 20 |
| Flash point | 11.5 CC (Closed cup). |

9.2. Other information**SECTION 10: STABILITY AND REACTIVITY****10.1. Reactivity**

Reaction with: Acids. Strong oxidising agents.

10.2. Chemical stability

Stable under normal temperature conditions.

10.3. Possibility of hazardous reactions

Not applicable.

10.4. Conditions to avoid

Avoid heat. Avoid contact with acids and oxidising substances.

10.5. Incompatible materials

Materials To Avoid

Strong acids. Strong oxidising substances.

10.6. Hazardous decomposition products

Fire creates: Toxic gases/vapours/fumes of: Carbon dioxide (CO₂). Carbon monoxide (CO). Nitrous gases (NO_x).

SECTION 11: TOXICOLOGICAL INFORMATION**11.1. Information on toxicological effects**

General information

Contains small amounts of organic solvents. Extensive use of the product in areas with inadequate ventilation may result in hazardous vapour concentrations.

Inhalation

Irritating to respiratory system.

Ingestion

May cause stomach pain or vomiting.

Skin contact

Irritating to skin. May cause sensitisation by skin contact.

Eye contact

Irritating to eyes.

Toxicological information on ingredients.

ALPHA 5300
METHACRYLIC ACID (CAS: 79-41-4)

Acute toxicity:

Acute Toxicity (Oral LD50)

1320 mg/kg Rat

Acute Toxicity (Dermal LD50)

> 50 mg/kg Rabbit

Acute Toxicity (Inhalation LC50)

7.1 mg/l (vapours) Rat 4 hours

Specific target organ toxicity - repeated exposure:

STOT - Repeated exposure

NOAEL 100 ppmV/6hr/day Inhalation. Rat

2,6-DI-TERT-BUTYL-P-CRESOL (CAS: 128-37-0)

Toxic Dose 1 - LD 50

>2, 930 mg/kg (oral rat)

Toxic Dose 2 - LD 50

>2000 mg/kg (oral-rbt)

PARA TOLUENE SULFONYL CHLORIDE (CAS: 98-59-9)

Toxic Dose 1 - LD 50

4680 mg/kg (oral rat)

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity

The product contains a substance which is harmful to aquatic organisms and which may cause long term adverse effects in the aquatic environment.

12.1. Toxicity**Ecological information on ingredients.**

METHACRYLIC ACID (CAS: 79-41-4)

Acute Toxicity - Fish

LC50 96 hours 85 mg/l Onchorhynchus mykiss (Rainbow trout)

Acute Toxicity - Aquatic Invertebrates

EC50 48 hours > 130 mg/l Daphnia magna

NOEC 192 hours 53 mg/l Daphnia magna

Acute Toxicity - Aquatic Plants

EC50 72 hours 45 mg/l Selenastrum capricornutum

PARA TOLUENE SULFONYL CHLORIDE (CAS: 98-59-9)

LC 50, 96 Hrs, Fish mg/l

100

12.2. Persistence and degradability**Degradability**

The product is expected to be slowly biodegradable.

Ecological information on ingredients.

METHACRYLIC ACID (CAS: 79-41-4)

Degradability

The product is easily biodegradable.

Biodegradation

Air. Degradation (86%) 28 days

readily biodegradable

12.3. Bioaccumulative potential

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Bioaccumulative potential

The product does not contain any substances expected to be bioaccumulating.

Ecological information on ingredients.

METHACRYLIC ACID (CAS: 79-41-4)

Bioaccumulative potential

The product is not bioaccumulating.

12.4. Mobility in soil

Mobility:

The product contains volatile organic compounds (VOC) which will evaporate easily from all surfaces.

Ecological information on ingredients.

METHACRYLIC ACID (CAS: 79-41-4)

Mobility:

The product contains volatile organic compounds (VOC) which will evaporate easily from all surfaces.

12.5. Results of PBT and vPvB assessment

Ecological information on ingredients.

2,6-DI-TERT-BUTYL-P-CRESOL (CAS: 128-37-0)

This product does not contain any PBT or vPvB substances.

12.6. Other adverse effects**SECTION 13: DISPOSAL CONSIDERATIONS****13.1. Waste treatment methods**

Dispose of waste and residues in accordance with local authority requirements.

SECTION 14: TRANSPORT INFORMATION**14.1. UN number**

| | |
|----------------------|------|
| UN No. (ADR/RID/ADN) | 1133 |
| UN No. (IMDG) | 1133 |
| UN No. (ICAO) | 1133 |

14.2. UN proper shipping name

Proper Shipping Name ADHESIVES

14.3. Transport hazard class(es)

| | |
|---------------------|-----------------------------|
| ADR/RID/ADN Class | 3 |
| ADR/RID/ADN Class | Class 3: Flammable liquids. |
| ADR Label No. | 3 |
| IMDG Class | 3 |
| ICAO Class/Division | 3 |
| Transport Labels | |

**14.4. Packing group**

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| | |
|---------------------------|----|
| ADR/RID/ADN Packing group | II |
| IMDG Packing group | II |
| ICAO Packing group | II |

14.5. Environmental hazards

Environmentally Hazardous Substance/Marine Pollutant
No.

14.6. Special precautions for user

| | |
|-------------------------|----------|
| EMS | F-E, S-D |
| Emergency Action Code | •3YE |
| Hazard No. (ADR) | 33 |
| Tunnel Restriction Code | (D/E) |

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**SECTION 15: REGULATORY INFORMATION****15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**

Uk Regulatory References

The Control of Substances Hazardous to Health Regulations 2002 (S.I 2002 No. 2677) with amendments.

Statutory Instruments

The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (S.I 2009 No. 716). Control of Substances Hazardous to Health.

Approved Code Of Practice

Classification and Labelling of Substances and Preparations Dangerous for Supply.

Guidance Notes

Workplace Exposure Limits EH40. Introduction to Local Exhaust Ventilation HS(G)37. CHIP for everyone HSG(108).

EU Legislation

Dangerous Substance Directive 67/548/EEC.

National Regulations

Workplace Exposure Limits 2005 (EH40)

15.2. Chemical Safety Assessment**SECTION 16: OTHER INFORMATION**

Abbreviations and acronyms used in the safety data sheet

ADR : European Agreement concerning the International Transport of Dangerous Goods by Road RID : Regulations Concerning the International Transport of Dangerous Goods by Rail IMDG : International Maritime Code for Dangerous Goods IATA : International Air Transport Association ICAO : International Civil Aviation Organization GHS : Globally Harmonized System of Classification and Labelling of Chemicals EINECS : European Inventory of Existing Commercial Chemical Substances CAS : Chemical Abstracts Service DNEL ; Derived No Effect Level (REACH) PNEC : Predicted No Effect Concentration (REACH) LC50 : Lethal Concentration 50 percent LD50 : Lethal Dose 50 percent

Information Sources

Dangerous Properties of Industrial Materials Report, N.Sax et.al.

Revision Comments

NOTE: Lines within the margin indicate significant changes from the previous revision.

Revision Date NOVEMBER 2012

Revision 6

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Risk Phrases In Full

| | |
|-----------|--|
| R34 | Causes burns. |
| R35 | Causes severe burns. |
| R10 | Flammable. |
| R22 | Harmful if swallowed. |
| R21/22 | Harmful in contact with skin and if swallowed. |
| R52/53 | Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment. |
| R48/20/22 | Harmful: danger of serious damage to health by prolonged exposure through inhalation and if swallowed. |
| R11 | Highly flammable |
| R36/37/38 | Irritating to eyes, respiratory system and skin. |
| R37/38 | Irritating to respiratory system and skin. |
| R37 | Irritating to respiratory system. |
| R38 | Irritating to skin. |
| R7 | May cause fire. |
| R43 | May cause sensitisation by skin contact. |
| R23 | Toxic by inhalation. |
| R51/53 | Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. |
| R67 | Vapours may cause drowsiness and dizziness. |
| R50/53 | Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. |

Hazard Statements In Full

| | |
|------|---|
| H319 | Causes serious eye irritation. |
| H314 | Causes severe skin burns and eye damage. |
| H315 | Causes skin irritation. |
| H226 | Flammable liquid and vapour. |
| H302 | Harmful if swallowed. |
| H312 | Harmful in contact with skin. |
| H412 | Harmful to aquatic life with long lasting effects. |
| H242 | Heating may cause a fire. |
| H225 | Highly flammable liquid and vapour. |
| H317 | May cause an allergic skin reaction. |
| H373 | May cause damage to organs <<Organs>> through prolonged or repeated exposure. |
| H336 | May cause drowsiness or dizziness. |
| H335 | May cause respiratory irritation. |
| H331 | Toxic if inhaled. |
| H411 | Toxic to aquatic life with long lasting effects. |
| H410 | Very toxic to aquatic life with long lasting effects. |
| H400 | Very toxic to aquatic life. |

Disclaimer

This 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. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.