



SAFETY DATA SHEET: AD83 Plastic Magic 10 sec

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

1.1. Product identifier

Product name	Plastic Magic 10 sec
Product number	AD83
Synonyms; trade names	DIETHYLENE GLYCOL DIETHYL ETHER, bis (2-ETHOXY-ETHYL) ETHER, DIETHYL CARBITOL UFI: 2110-9009-600E-EUSU
REACH registration number	01-2119969946-13-XXXX
CAS number	112-36-7
EC number	203-963-7

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

Identified uses	Solvent for model hobby building
Uses advised against	This product is not recommended for any industrial, professional or consumer uses other than those identified above.

1.3. Details of the supplier of the safety data sheet

Supplier	Deluxe Materials Ltd., Unit 12 & 13, Cufau de Business Park, Cufau de Lane, Bramley, Hampshire, RG26 5DL, United Kingdom Tel. + 44 (0) 1256 883944
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Contact person	john@deluxematerials.com
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1.4. Emergency telephone number

Emergency telephone	+ 44 (0) 1256 883944 (Mon-Friday office hours only)
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SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical hazards	Not Classified
Health hazards	Skin Irrit. 2 - H315
Environmental hazards	Not Classified

Classification (67/548/EEC or 1999/45/EC) Xi;R36.

Human health	Prolonged skin contact may cause redness and irritation.
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Environmental Not considered as an environmental hazard according to CLP criteria

Physicochemical Not considered as a physical hazard under CLP criteria

2.2. Label elements

EC number 203-963-7

Hazard pictograms



Signal word Warning

Hazard statements H315 Causes skin irritation.

Precautionary statements P264 Wash contaminated skin thoroughly after handling.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
P302+P352 IF ON SKIN: Wash with plenty of water.
P321 Specific treatment (see medical advice on this label).
P332+P313 If skin irritation occurs: Get medical advice/ attention.
P362+P364 Take off contaminated clothing and wash it before reuse.

2.3. Other hazards

This substance is not classified as PBT or vPvB according to current EU criteria.

SECTION 3: Composition/information on ingredients

3.1. Substances

Product name Plastic Magic 10 sec
REACH registration number 01-2119969946-13-XXXX
CAS number 112-36-7
EC number 203-963-7
Chemical formula C8H18O3

SECTION 4: First aid measures

4.1. Description of first aid measures

General information Keep affected person under observation. Effects may be delayed. If in doubt, get medical attention promptly. Show this Safety Data Sheet to the medical personnel.

Inhalation Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. If breathing stops, provide artificial respiration. When breathing is difficult, properly trained personnel may assist affected person by administering oxygen. Keep affected person under observation. Get medical attention if symptoms are severe or persist. Show this Safety Data Sheet to the medical personnel.

Ingestion Get medical attention immediately. Rinse mouth thoroughly with water. Do not induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Keep affected person under observation. Show this Safety Data Sheet to the medical personnel.

Skin contact Remove affected person from source of contamination. Remove contaminated clothing immediately and wash skin with soap and water. Get medical attention promptly if symptoms occur after washing.

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Eye contact Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes. Get medical attention immediately.

Protection of first aiders First aid personnel should wear appropriate protective equipment during any rescue.

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

General information Get medical attention immediately. The casualty should be transferred to hospital as soon as possible.

Inhalation Vapours/aerosol spray may irritate the respiratory system. In high concentrations, vapours are anaesthetic and may cause headache, fatigue, dizziness and central nervous system effects. Overexposure to organic solvents may depress the central nervous system, causing dizziness and intoxication and, at very high concentrations, unconsciousness and death.

Ingestion Gastrointestinal symptoms, including upset stomach. Diarrhoea. Nausea, vomiting.

Skin contact Prolonged contact may cause redness, irritation and dry skin. Product has a defatting effect on skin.

Eye contact Causes serious eye irritation. Immediate first aid is imperative. Vapour or spray in the eyes may cause irritation and smarting.

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

Notes for the doctor No specific recommendations.

Specific treatments No specific chemical antidote is known to be required after exposure to this product.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog.

Unsuitable extinguishing media Do not use water jet as an extinguisher, as this will spread the fire. Non-alcohol resistant foam

5.2. Special hazards arising from the substance or mixture

Specific hazards Although not classed as flammable this product is combustible. May ignite at high temperature. Closed containers can burst violently when heated, due to excess pressure build-up. When sprayed on a naked flame or any incandescent material the aerosol vapours can be ignited. Solvent vapours may form explosive mixtures with air.

Hazardous combustion products Oxides of carbon. Acid smoke or fumes.

5.3. Advice for firefighters

Protective actions during firefighting Move containers from fire area if it can be done without risk. Cool containers exposed to heat with water spray and remove them from the fire area if it can be done without risk. Withdraw immediately in case of rising sound from venting safety device or any discoloration of tanks due to fire. For massive fire in cargo area, use unmanned hose holder or monitor nozzles, if possible. If not, withdraw and let fire burn out. Control run-off water by containing and keeping it out of sewers and watercourses. If risk of water pollution occurs, notify appropriate authorities.

Special protective equipment for firefighters Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing. Use protective equipment appropriate for surrounding materials.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

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Personal precautions Avoid inhalation of vapours and contact with skin and eyes. Provide adequate ventilation. If ventilation is inadequate, suitable respiratory protection must be worn. Take precautionary measures against static discharges. Take care as floors and other surfaces may become slippery. Follow precautions for safe handling described in this safety data sheet. For personal protection, see Section 8.

6.2. Environmental precautions

Environmental precautions Environmental Manager must be informed of all major spillages. Do not discharge into drains or watercourses or onto the ground. Avoid discharge to the aquatic environment. Spillages or uncontrolled discharges into watercourses must be reported immediately to the Environmental Agency or other appropriate regulatory body.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up Stop leak if possible without risk. Extinguish all ignition sources. Avoid sparks, flames, heat and smoking. Ventilate. Avoid the spillage or runoff entering drains, sewers or watercourses. Take care as floors and other surfaces may become slippery. Contain spillage with sand, earth or other suitable non-combustible material. Collect spillage for reclamation or disposal in sealed containers via a licensed waste contractor. Containers with collected spillage must be properly labelled with correct contents and hazard symbol. Dispose of contents/container in accordance with international regulations. Waste, residues, empty containers, discarded work clothes and contaminated cleaning materials should be collected in designated containers, labelled with their contents.

6.4. Reference to other sections

Reference to other sections Wear protective clothing as described in Section 8 of this safety data sheet. See Section 11 for additional information on health hazards. Collect and dispose of spillage as indicated in Section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions Keep away from heat, sparks and open flame. Avoid contact with skin, eyes and clothing. Avoid inhalation of vapours and spray/mists. Avoid spilling. Avoid release to the environment. Use explosion-proof electrical, ventilating and lighting equipment. Use only in well-ventilated areas. Use suitable respiratory protection if ventilation is inadequate. Take precautionary measures against static discharge. Earth container and transfer equipment to eliminate sparks from static electricity. Restrict line velocity during pumping in order to avoid generation of electrostatic discharge. AVOID splash filling DO NOT use compressed air for filling, discharging or handling operations

Advice on general occupational hygiene Eye wash facilities and emergency shower must be available when handling this product. Good personal hygiene procedures should be implemented. Wash at the end of each work shift and before eating, smoking and using the toilet. When using do not eat, drink or smoke. Clean equipment and the work area every day. Contaminated clothing should be placed in a closed container for disposal or decontamination.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions Keep away from oxidising materials, heat and flames. Store in tightly-closed, original container in a well-ventilated place. Bund storage facilities to prevent soil and water pollution in the event of spillage. Earth container and transfer equipment to eliminate sparks from static electricity. Storage tanks and other containers must be earthed. Prolonged contact with air may cause formation of explosive peroxides. Keep away from food, drink and animal feeding stuffs. Only store in correctly labelled containers. Suitable container materials: Carbon steel. Mild steel. Stainless steel. Unsuitable containers: aluminium. May attack some plastics, rubber and coatings.

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Storage class Chemical storage.

7.3. Specific end use(s)

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

Ingredient comments No exposure limits known for ingredient(s).

DNEL

Workers - Inhalation; Long term systemic effects: 50.05 mg/m³
 Workers - Dermal; Long term systemic effects: 3.43 mg/kg/day
 General population - Inhalation; Long term systemic effects: 5.96 mg/m³
 General population - Dermal; Long term systemic effects: 1.71 mg/kg/day
 General population - Oral; Long term systemic effects: 1.71 mg/kg/day

PNEC No PNEC values have been established

8.2. Exposure controls

Protective equipment



Appropriate engineering controls

As this product contains ingredients with exposure limits, process enclosures, local exhaust ventilation or other engineering controls should be used to keep worker exposure below any statutory or recommended limits, if use generates dust, fumes, gas, vapour or mist. Ensure the ventilation system is regularly maintained and tested. Use explosion-proof electrical, ventilating and lighting equipment. This product must not be handled in a confined space without adequate ventilation. In case of insufficient ventilation, wear suitable respiratory equipment.

Eye/face protection

Wear eye protection. If risk of splashing, wear safety goggles or face shield. Personal protective equipment for eye and face protection should comply with European Standard EN166.

Hand protection

Wear protective gloves. To protect hands from chemicals, gloves should comply with European Standard EN374. The most suitable glove should be chosen in consultation with the glove supplier/manufacture, who can provide information about the breakthrough time of the glove material. For exposure up to 8 hours, wear gloves made of the following material: Butyl rubber. Polyethylene. Nitrile rubber. Polytetrafluoroethylene (PTFE, Teflon). Viton rubber (fluoro rubber). Neoprene rubber For short-term / splash protection the following are recommended Polyvinyl alcohol (PVA). The most suitable glove should be chosen in consultation with the glove supplier/manufacture, who can provide information about the breakthrough time of the glove material.

Other skin and body protection

Wear appropriate clothing to prevent any possibility of liquid contact and repeated or prolonged vapour contact. Provide eyewash station and safety shower.

Hygiene measures

Do not eat, drink or smoke when using this product. Wash at the end of each work shift and before eating, smoking and using the toilet. Remove contaminated clothing and protective equipment before entering eating areas. Contaminated clothing should be placed in a closed container for disposal or decontamination.

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Respiratory protection	If ventilation is inadequate, suitable respiratory protection must be worn. Wear a respirator fitted with the following cartridge: Organic vapour filter. Ensure all respiratory protective equipment is suitable for its intended use and is 'CE'-marked. Gas and combination filter cartridges should comply with European Standard EN14387. Change filter cartridge on respirator daily. Check that the respirator fits tightly and the filter is changed regularly. Respirator selection must be based on exposure levels, the hazards of the product and the safe working limits of the selected respirator. When spraying, wear a suitable supplied-air respirator.
Environmental exposure controls	Keep container tightly sealed when not in use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	Liquid.
Colour	Colourless.
Odour	Ether.
Melting point	- 44°C
Initial boiling point and range	189°C @ 1013 hPa
Flash point	90°C Closed cup.
Evaporation rate	No information available.
Upper/lower flammability or explosive limits	No information available.
Vapour pressure	0.5 hPa @ 20°C
Vapour density	No information available.
Bulk density	0.908 kg/l @ 20°C
Solubility(ies)	Soluble in water. Soluble in the following materials: Organic solvents.
Partition coefficient	log Kow: 0.39
Auto-ignition temperature	213°C
Viscosity	1.4 mPa s @ 20°C

9.2. Other information

Refractive index	1.412
Molecular weight	162.22

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity	The following materials may react with the product: Strong oxidising agents.
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10.2. Chemical stability

Stability	Stable at normal ambient temperatures and when used as recommended. Contact with air and light may form explosive peroxides.
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10.3. Possibility of hazardous reactions

Possibility of hazardous reactions	Reacts with strong oxidising agents
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10.4. Conditions to avoid

Conditions to avoid Avoid heat, flames and other sources of ignition. Avoid contact with the following materials:
Strong oxidising agents.

10.5. Incompatible materials

Materials to avoid Strong oxidising agents.

10.6. Hazardous decomposition products

Hazardous decomposition products Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours. Acrid smoke or fumes.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity - oral

Notes (oral LD₅₀) LD₅₀ 4,970 mg/kg, Oral, Rat

Acute toxicity - dermal

Notes (dermal LD₅₀) LD₅₀ 6,030 mg/kg, Dermal, Rabbit

Skin corrosion/irritation

Animal data Not classified as irritating to skin

Serious eye damage/irritation

Serious eye damage/irritation Classified as irritating to eyes

Respiratory sensitisation

Respiratory sensitisation Not classified as a respiratory sensitiser

Skin sensitisation

Skin sensitisation Not classified as a skin sensitiser

Germ cell mutagenicity

Genotoxicity - in vitro Does not contain any substances known to be mutagenic.

Carcinogenicity

Carcinogenicity Does not contain any substances known to be carcinogenic.

Reproductive toxicity

Reproductive toxicity - fertility Based on available data the classification criteria are not met.

Reproductive toxicity - development This substance has no evidence of toxicity to reproduction.

Specific target organ toxicity - single exposure

STOT - single exposure Not classified as a specific target organ toxicant after a single exposure.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure Not classified as a specific target organ toxicant after repeated exposure.

Aspiration hazard

Aspiration hazard Entry into the lungs following ingestion or vomiting may cause chemical pneumonitis.

General information

Prolonged and repeated contact with solvents over a long period may lead to permanent health problems.

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Inhalation	Harmful if inhaled. Vapours/aerosol spray may irritate the respiratory system. In high concentrations, vapours are narcotic and may cause headache, fatigue, dizziness and nausea. Prolonged inhalation of high concentrations may damage respiratory system. Overexposure to organic solvents may depress the central nervous system, causing dizziness and intoxication and, at very high concentrations, unconsciousness and death. Extensive use of the product in areas with inadequate ventilation may result in the accumulation of hazardous vapour concentrations.
Ingestion	Gastrointestinal symptoms, including upset stomach. Diarrhoea. Aspiration into the lungs when swallowed or vomited may cause chemical pneumonitis which can be fatal
Skin contact	Prolonged or repeated contact with skin may cause irritation, redness and dermatitis. Product has a defatting effect on skin. May cause skin sensitisation or allergic reactions in sensitive individuals.
Eye contact	Causes serious eye irritation. Repeated exposure may cause chronic eye irritation. Risk of serious damage to eyes.
Acute and chronic health hazards	Irritating to eyes.
Route of exposure	Inhalation Ingestion Skin and/or eye contact
Target organs	Central nervous system Eyes Gastro-intestinal tract Skin
Medical symptoms	Central nervous system depression. Confusion, agitation and/or excitation. Gastrointestinal symptoms, including upset stomach. Diarrhoea. Dizziness. Nausea, vomiting. Irritation of eyes and mucous membranes.
Medical considerations	Central nervous system depression. Splash in eye requires examination by eye specialist. Persons with rash are directed to skin expert for examination of allergic eczema.

SECTION 12: Ecological information

Ecotoxicity	The product components are not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.
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12.1. Toxicity

Acute aquatic toxicity

Acute toxicity - fish LC₅₀, 96 hours: > 10,000 mg/l, Alburnus alburnus

Acute toxicity - aquatic invertebrates LC₅₀, 96 hours: 6,600 mg/l, Nitocra spinipes

Acute toxicity - aquatic plants EC₅₀, 96 hours: > 100 mg/l, Scenedesmus subspicatus

12.2. Persistence and degradability

Persistence and degradability Readily biodegradable Oxidises rapidly by photochemical reactions in air.

12.3. Bioaccumulative potential

Bioaccumulative potential Does not bioaccumulate significantly

Partition coefficient log Kow: 0.39

12.4. Mobility in soil

Mobility The product is water-soluble and may spread in water systems. If product enters soil it will be mobile and may contaminate groundwater.

Surface tension 27.2 mN/m @ 20°C

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12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment This product does not contain any substances classified as PBT or vPvB.

12.6. Other adverse effects

Other adverse effects The product contains volatile organic compounds (VOCs) which have a photochemical ozone creation potential.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

General information Waste is classified as hazardous waste. Disposal to licensed waste disposal site in accordance with the local Waste Disposal Authority. Contaminated packages must be completely emptied before sending away for laundering and re-use. When handling waste, the safety precautions applying to handling of the product should be considered.

Disposal methods Collect and place in suitable waste disposal containers and seal securely. Empty containers or liners may retain some product residues and hence be potentially hazardous. Label the containers containing waste and contaminated materials and remove from the area as soon as possible. Waste, residues, empty containers, discarded work clothes and contaminated cleaning materials should be collected in designated containers, labelled with their contents. Disposal of this product, process solutions, residues and by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any local authority requirements. Confirm disposal procedures with environmental engineer and local regulations. Avoid the spillage or runoff entering drains, sewers or watercourses.

SECTION 14: Transport information

General The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, ADR/RID).

14.1. UN number

Not applicable.

14.2. UN proper shipping name

Not applicable.

14.3. Transport hazard class(es)

No transport warning sign required.

14.4. Packing group

Not applicable.

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant

No.

14.6. Special precautions for user

Not applicable.

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

Transport in bulk according to Not applicable.

**Annex II of MARPOL 73/78
and the IBC Code**

SECTION 15: Regulatory information

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

National regulations	Health and Safety at Work etc. Act 1974 (as amended). Control of Substances Hazardous to Health Regulations 2002 (as amended). Dangerous Substances and Explosive Atmospheres Regulations 2002. The Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2009 (SI 2009 No. 1348) (as amended) ["CDG 2009"].
EU legislation	Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (as amended). Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (as amended). Commission Decision 2000/532/EC as amended by Decision 2001/118/EC establishing a list of wastes and hazardous waste pursuant to Council Directive 75/442/EEC on waste and Directive 91/689/EEC on hazardous waste with amendments.
Guidance	Workplace Exposure Limits EH40. Introduction to Local Exhaust Ventilation HS(G)37. Safety Data Sheets for Substances and Preparations.
Authorisations (Annex XIV Regulation 1907/2006)	No specific authorisations are known for this product.
Restrictions (Annex XVII Regulation 1907/2006)	No specific restrictions on use are known for this product.

15.2. Chemical safety assessment

SECTION 16: Other information

Key literature references and sources for data	Dangerous Properties of Industrial Materials Report, N.Sax et.al. Registry of Toxic Effects of Chemical Substances (RTECS). ECHA
Issued by	Regulatory Affairs Manager
Revision date	26/08/2021
Revision	4
Supersedes date	17/12/2018
SDS number	7061
SDS status	Approved.
Risk phrases in full	R36 Irritating to eyes.
Hazard statements in full	H315 Causes skin irritation.

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.