Safety data sheet: AD8 and AD9 Aliphatic Resin

according to regulation (EC) Nr. 1907/2006 Revision date: 10/6/2015 Page 1 of 7

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

1.1. Product identifier

Product name Aliphatic Resin

REACH Registration Number

This product is a mixture and therefore not directly subject of the registration requirements under REACH.

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

1.3. Details of the supplier of the safety data sheet

Deluxe Materials Ltd Unit 13, Cufaude Business Park, Cufaude Lane, Bramley Hants RG26 5DL, United Kingdom

SDS Contact (email of responsible person)

info@deluxematerials.com

1.4. Emergency telephone number +44 (0)1256 883944

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation 1272/2008/EC (CLP) Not a hazardous substance or preparation according to Regulation 1272/2008 (CLP)

2.2. Label elements Not required

2.3 Other Hazards The mixture does not meet the criteria for PBT / vPvB according to REACH, Annex XIII

Statements of hazard Frequent contact can lead to skin and eye irritation, especially if product is allowed to dry out. Observe the usual precautions when handling chemicals.

SECTION 3: Composition/information on ingredients

Chemical characterization Water-borne polymer emulsion. Basis: Vinyl acetate Contains film- forming helping agents.

3.1. Substances not applicable

3.2. Mixtures see Chemical characterization

Components	CAS-No	EC-No.	Identification Number	Percent %
2-(2-Butoxyethoxy)ethyl acetate	124-17-4	204-685-9		204-685-9

Components	1272/2008/EC (CLP)	Hazard Statements
2-(2-Butoxyethoxy)ethyl acetate	Not a dangerous substance according to GHS	

SECTION 4: First aid measures

4.1. Description of first aid measures

General Information Remove contaminated, soaked clothing immediately and dispose of safely.

Inhalation Move to fresh air. If symptoms persist, call a physician.

Skin Wash off with soap and water. If symptoms persist, call a physician.

Eyes Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Call a physician immediately.

Ingestion If swallowed, seek medical advice immediately and show this container or label. If conscious, drink plenty of water. Do not induce vomiting without medical advice.

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

Main symptoms None known.

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

SECTION 5: Fire fighting measures

5.1. Extinguishing media

Suitable extinguishing media Foam, Dry powder, Carbon dioxide (CO2), Water spray

Extinguishing media which must not be used for safety reasons Do not use a solid water stream as it may scatter and spread fire.

5.2. Special hazards arising from the substance or mixture

Under conditions giving incomplete combustion, hazardous gases produced may consist of Carbon monoxide Carbon dioxide (CO2) Combustion gases of organic materials must in principle be graded as inhalation poisons

5.3. Advice for fire fighters

Special protective equipment for fire-fighters

Wear self contained breathing apparatus for fire fighting if necessary.

Environmental precautions

Dike and collect water used to fight fire..

Other Information

This is a water-based product and presents no particular fire or explosion hazard.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Contaminated surfaces will be extremely slippery. Avoid contact with the skin and the eyes.

6.2. Environmental precautions

Do not allow material to contaminate ground water system. Do not flush into surface water or sanitary sewer system.

6.3. Methods and material for containment and cleaning up

Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Keep in suitable, closed containers for disposal. Contaminated equipment (brushes, rags) must be cleaned immediately with water. Dispose of in accordance with local regulations.

6.4. Reference to other sections

Consider the information for "Personal Protection" in chapter 8 of this Safety Data Sheet

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Hygiene measures

Wash hands before breaks and at the end of workday When using, do not eat, drink or smoke Take off all contaminated clothing immediately Wash contaminated clothing before re-use.

Advice on safe handling

Product may contain hazardous volatile ingredients which could accumulate in the unvented headspace of drums or containers. Open containers in ventilated area. Do not breathe vapor. During longer storage small amounts of carbon monoxide may form. To the best of our knowledge, no OEL (occupational exposure limit) is exceeded during the intended use. Containers/tanks may only be entered after thoroughly executed ventilation while considering national regulations and international standards for inspection of containers/tanks. In any caseof doubt a measurement of the CO concentration is necessary.

Incompatible products

Materials that react with water

Protection - fire and explosion:

No special protective measures against fire required.

Reduce the release of the substance or mixture to the environment See Section 8: Environmental exposure controls

7.2. Conditions for safe storage, including any incompatibilities

Material storage

Protect from frost. To maintain product quality, do not store in heat or direct sunlight. Keep at temperatures between 5°C and 35°C (40°F and 95°F). Agitate before use. Keep tightly closed in a dry and cool place.

Incompatible products

Materials that react with water

Technical measures/Storage conditions

Keep tightly closed in a dry and cool place. No special technical protective measures required.

7.3. Specific end use(s)

None known

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

EC Exposure Limit Values

No exposure limits established.

DNELs The product is exempt from REACH registration

PNECs The product is exempt from REACH registration

8.2. Exposure controls

Engineering measures Provide adequate ventilation. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction.

Personal protective equipment

General advice Avoid contact with skin and eyes.

Hygiene measures Wash hands before breaks and at the end of workday When using, do not eat, drink or smoke. Take off all contaminated clothing immediately. Wash contaminated clothing before re-use.

Eye protection safety glasses

Hand protection Chemicals resistant gloves

Suitable material rubber gloves Type Nitril (Company KCL) or comparable article; or refer to glove manufacturer's recommendation Evaluation according to EN 374: level 6 Material thickness approx. 0.1 / 0.4 mm Break through time > 480 min

Environmental exposure controls

Do not discharge into the drains/surface waters/groundwater

Environmental Precautions

Should not be released into the environment

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties Appearance

Form liquid

Colour yellow

Odour sweet

SECTION 9: Physical and chemical properties

Melting point/range ~ 0°C

Boiling point/range ~ 100°C

Density 1.03 - 1.13 g/ml @ 25°C Method ISO 2811-3

pH 2.8 - 3.6 Method ISO 976

Viscosity 6000 - 9000 mPa*s @ 20°C Method Brookfield DV-1 Visc. Sp. 7 / 20 r.p.m.

Vapor pressure 24 hPa @ 20°C

Water solubility miscible

9.2. Other information The product was not tested for properties not listed on the MSDS.

SECTION 10: Stability and reactivity

10.1. Reactivity

Stable under recommended storage conditions.

10.2. Chemical Stability

No decomposition if stored and applied as directed. This cross-linked polymer will release formaldehyde in application processes involving the use of greater than 100 $^{\circ}$ C (212 F).

10.3. Possibility of hazardous reactions

No hazards to be especially mentioned.

10.4. Conditions to avoid Do not freeze.

10.5. Incompatible Materials

Materials that react with water

10.6. Hazardous decomposition products

No decomposition if stored and applied as directed

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicological data are not available. Observe the usual hygienic measures for handling chemicals.

SECTION 12: Ecological information

Ecotoxicological data are not available. According to experience, the material has no harmful effect on the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product information Disposal required in compliance with all waste management related state and local regulations. The choice of the appropriate method of disposal depends on the product composition by the time of disposal as well as the local statutes and possibilities for disposal. Diluted solution may be introduced into a biological purification plant, with permission of the responsible authorities.

Uncleaned empty packaging

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Contaminated packaging should be emptied as far as possible and after appropriate cleansing may be taken for reuse. Regulations concerning reuse or disposal of used packaging materials must be observed.

European Waste Catalogue Allocation of a waste code number, according to the European Waste Catalogue (EWC), should be carried out in agreement with the regional waste disposal company.

SECTION 14: Transport information

ADR/RID Not regulated

ADN Not regulated ICAO/IATA Not restricted

IMDG Not regulated

SECTION 15: Regulatory information

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

Water Hazard Class (WGK): WGK Class 1 WGK Source Classification based on addendum 4 (VwVwS)

15.2 Chemical Safety Assessment

Chemical Safety Assessment (CSA) is not required

SECTION 16: Other information

For further information, see:

For more information, consult the Technical Data Sheet

Other Information:

• Traces of residual monomers can be found in the product:

Vinyl acetate

Training advice

Make sure that employees are aware of the hazards / risks as detailed on this Safety Data Sheet.

Sources of key data used to compile the datasheet

Information contained in this safety data sheet is based on Deluxe Materials Ltd owned data and public sources deemed valid or acceptable. The absence of data elements required by ANSI or 1907/2006/EC indicates that no data meeting these requirements is available.

Further information

This information is based on our present state of knowledge. It shall describe our products regarding safety requirements and shall not be construed as a guarantee or statement of condition and/or quality.

Abbreviation and Acronym:

ADR = Accord européen sur le transport des marchandises dangereuses par Route (European Agreement

concerning the International Carriage of Dangerous Goods by Road)

CAS = Chemical Abstracts Service (division of the American Chemical Society)

CLP = Classification, Labelling and Packaging

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DNEL = Derived No Effect Level EINECS = European Inventory of Existing Commercial Chemical Substances GHS = Globally Harmonized System of Classification and Labelling of Chemicals IATA = International Air Transport Association IBC Code = International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk (IMO) ICAO = International Civil Aviation Organization IMDG = International Maritime Code for Dangerous Goods LC50 = Lethal Concentration LD50 = Lethal Dose PBT = Persistent, Bioaccumulative and Toxic PNEC = Predicted No Effect Concentration RCR = Risk Characterization Ratio RID = Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail) R-Phrases = Risk Phrases

S-Phrases = Safety Phrases

Annex: Exposure Scenario(s)

Development of Exposure Scenario is not required

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