



**SAFETY DATA SHEET**  
**EF KA-81 Aldehyde Resin**  
COMMISSION REGULATION (EU) 2015/830 of 28 May 2015.

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

1.1. Product identifier

Product name                      EF KA-81 Aldehyde Resin  
Chemical name                    Urea, polymer with formaldehyde and 2-methylpropanal

Synonyms; trade names        ALDEHYDE RESIN, UREA-ALDEHYDE RESIN

CAS number                        28931-47-7

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

Identified uses                    Paint. Resin.  
Uses advised against            Chemical molecules containing hydroxyl, polymerisation may occur upon contact with the active material. Users should undertake sufficient mixing and storage tests to confirm there is no risk of gel material system.

1.3. Details of the supplier of the safety data sheet

Company                            Everchem Specialty Chemicals  
    1400 N. Providence Road, Suite 302  
    Media, PA 19063  
    (ph) 484-234-5030  
    (fax) 484-234-5037

1.4. Emergency telephone number

**For Chemical Emergency - Spill, Leak, Fire, Exposure or Accident**

**Call CHEMTREC Day or Night USA + Canada = 1-800-424-9300 / 703-527-3887**

**SECTION 2: Hazards identification**

2.1. Classification of the substance or mixture

Classification (EC/1272/2008)

Physical hazards                    Not Classified  
Health hazards                      Not Classified  
Environmental hazards            Not Classified

2.2. Label elements

Hazard statements                NC Not Classified

2.3. Other hazards

None known.

## EF KA-81 Aldehyde Resin

### SECTION 3: Composition/information on ingredients

#### 3.1. Substances

Product name	EF KA- 81 Aldehyde Resin
CAS number	28931-47-7
Composition comments	Urea, polymer with formaldehyde and 2-methylpropanal CAS 28931-47-7 99.919% 2,6-Di-tert-butyl-4-methylphenol CAS 128-37-0 EC 204-881-4 0.04% Bis(2,2,6,6-tetramethyl-4-piperidyl)sebacate CAS 52829-07-9 EC 258-207-9 0.04% Formaldehyde CAS 50-00-0 EC 200-001-8 0.001%.

### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

General information	Get medical attention if any discomfort continues.
Inhalation	Move affected person to fresh air at once. When breathing is difficult, properly trained personnel may assist affected person by administering oxygen. Get medical attention if any discomfort continues.
Ingestion	Rinse mouth thoroughly with water. Get medical attention if any discomfort continues.
Skin contact	May cause burns to the skin when in contact with the molten state. Remove affected person from source of contamination. Remove contaminated clothing immediately and wash skin with soap and water. Get medical attention if irritation persists after washing.
Eye contact	If molten material contacts the eye, immediately flush with plenty of water for at least 15 minutes. Remove any contact lenses and open eyelids wide apart. 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

Inhalation	No specific symptoms known.
Ingestion	No specific symptoms known.
Skin contact	May cause burns to the skin when in contact with the molten state.
Eye contact	May cause temporary eye irritation. May cause eye burns when in contact with the molten state.

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

Notes for the doctor	No specific recommendations. If in doubt, get medical attention promptly.
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### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

Suitable extinguishing media	Use fire-extinguishing media suitable for the surrounding fire.
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#### 5.2. Special hazards arising from the substance or mixture

Specific hazards	Dust may form explosive mixture with air.
Hazardous combustion products	Carbon dioxide (CO <sub>2</sub> ). Carbon monoxide (CO). Oxides of nitrogen.

#### 5.3. Advice for firefighters

## EF KA-81 Aldehyde Resin

Protective actions during firefighting	Cool containers exposed to flames with water until well after the fire is out. Do not use water jet as an extinguisher, as this will spread the fire. Control run-off water by containing and keeping it out of sewers and watercourses.
Special protective equipment for firefighters	Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.

### SECTION 6: Accidental release measures

#### 6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions	Warn everybody of potential hazards and evacuate if necessary. Eliminate all sources of ignition. No smoking, sparks, flames or other sources of ignition near spillage. Provide adequate ventilation. Use suitable respiratory protection if ventilation is inadequate. Wear protective clothing as described in Section 8 of this safety data sheet.
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#### 6.2. Environmental precautions

Environmental precautions	Do not discharge into drains or watercourses or onto the ground. Spillages or uncontrolled discharges into watercourses must be reported immediately to the Environmental Agency or other appropriate regulatory body.
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#### 6.3. Methods and material for containment and cleaning up

Methods for cleaning up	Avoid generation and spreading of dust. Collect powder using special dust vacuum cleaner with particle filter or carefully sweep into suitable waste disposal containers and seal securely. Flush contaminated area with plenty of water. Take care as floors and other surfaces may become slippery. Collect and place in suitable waste disposal containers and seal securely. Label the containers containing waste and contaminated materials and remove from the area as soon as possible.
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#### 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.
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### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

Usage precautions	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Take precautionary measures against static discharges. Avoid contact with skin and eyes. Provide adequate general and local exhaust ventilation. If ventilation is inadequate, suitable respiratory protection must be worn. Observe any occupational exposure limits for the product or ingredients. Good personal hygiene procedures should be implemented. Wash hands and any other contaminated areas of the body with soap and water before leaving the work site. Avoid handling which leads to dust formation. Avoid generation and spreading of dust.
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#### 7.2. Conditions for safe storage, including any incompatibilities

Storage precautions	Store in tightly-closed, original container in a dry, cool and well-ventilated place. Do not store near heat sources or expose to high temperatures. Avoid contact with oxidising agents. Protect from freezing and direct sunlight.
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#### 7.3. Specific end use(s)

Specific end use(s)	The identified uses for this product are detailed in Section 1.2.
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### SECTION 8: Exposure Controls/personal protection

#### 8.1. Control parameters

## EF KA-81 Aldehyde Resin

### Occupational exposure limits

2,6 Ditertiary-butyl-para-cresol

Long-term exposure limit (8-hour TWA): WEL 10 mg/m<sup>3</sup>

Formaldehyde

Long-term exposure limit (8-hour TWA): WEL 2 ppm 2.5 mg/m<sup>3</sup>

Short-term exposure limit (15-minute): WEL 2 ppm 2.5 mg/m<sup>3</sup>

WEL = Workplace Exposure Limit

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

### 8.2. Exposure controls

#### Protective equipment



Appropriate engineering controls

This product must not be handled in a confined space without adequate ventilation.

Eye/face protection

Wear tight-fitting, chemical splash goggles or face shield.

Hand protection

Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible.

Other skin and body protection

Provide eyewash station. Wear apron or protective clothing in case of contact.

Hygiene measures

When using do not eat, drink or smoke. Wash promptly if skin becomes contaminated. Wash hands at the end of each work shift and before eating, smoking and using the toilet.

Respiratory protection

If ventilation is inadequate, suitable respiratory protection must be worn.

## SECTION 9: Physical and Chemical Properties

### 9.1. Information on basic physical and chemical properties

Appearance	Dusty powder.
Colour	Light (or pale). Yellow.
Odour	Slight.
Melting point	100°C
Initial boiling point and range	>250°C @
Flash point	>200°C
Relative density	1.1 g/cm <sup>3</sup> @ 20°C
Bulk density	600-700 kg/m <sup>3</sup>
Solubility(ies)	Insoluble in water.
Auto-ignition temperature	>450°C

### 9.2. Other information

Other information	Not available.
Molecular weight	1500-2500

## SECTION 10: Stability and reactivity

## EF KA-81 Aldehyde Resin

### 10.1. Reactivity

Reactivity There are no known reactivity hazards associated with this product.

### 10.2. Chemical stability

Stability Stable at normal ambient temperatures and when used as recommended.

### 10.3. Possibility of hazardous reactions

Possibility of hazardous reactions May polymerise, as the product contains a hydroxyl group. Risk of gel polymerisation.

### 10.4. Conditions to avoid

Conditions to avoid Avoid exposure to high temperatures or direct sunlight.

### 10.5. Incompatible materials

Materials to avoid Strong alkalis. Strong acids. Strong oxidising agents.

### 10.6. Hazardous decomposition products

Hazardous decomposition products Fire or high temperatures create: Vapours/gases/fumes of: Carbon monoxide (CO). Carbon dioxide (CO<sub>2</sub>). Sulphurous gases (SO<sub>x</sub>).

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Toxicological effects Not regarded as a health hazard under current legislation.

Inhalation No specific health hazards known.

Ingestion No harmful effects expected from quantities likely to be ingested by accident.

Skin contact No specific health hazards known. May cause burns to the skin when in contact with the molten state.

Eye contact May cause temporary eye irritation. May cause eye burns when in contact with the molten state.

## SECTION 12: Ecological Information

Ecotoxicity No data on possible environmental effects have been found. The product is not expected to be hazardous to the environment.

### 12.1. Toxicity

Acute toxicity - fish Not available.

Acute toxicity - aquatic invertebrates EC<sub>50</sub>, 48 hours: >100 mg/l, Daphnia magna

Acute toxicity - aquatic plants Not available.

Acute toxicity - microorganisms Not available.

### 12.2. Persistence and degradability

Persistence and degradability The product is readily biodegradable.

### 12.3. Bioaccumulative potential

Bioaccumulative potential No data available on bioaccumulation.

## EF KA-81 Aldehyde Resin

### 12.4. Mobility in soil

Mobility The product is insoluble in water.

### 12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment No information available.

### 12.6. Other adverse effects

Other adverse effects None known.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

General information Waste should be treated as controlled waste. Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority. When handling waste, the safety precautions applying to handling of the product should be considered.

Disposal methods Recover or recycle, if possible. Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

## 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)

Not applicable.

### 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 Annex II of MARPOL 73/78 and the IBC Code Not applicable.

## SECTION 15: Regulatory information

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

## EF KA-81 Aldehyde Resin

National regulations	Health and Safety at Work etc. Act 1974 (as amended). The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (SI 2009 No. 716). Control of Substances Hazardous to Health Regulations 2002 (as amended). EH40/2005 Workplace exposure limits.
EU legislation	COMMISSION REGULATION (EU) 2015/830 of 28 May 2015. 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). 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).
Guidance	Introduction to Local Exhaust Ventilation HS(G)37. Workplace Exposure Limits EH40. Approved Classification and Labelling Guide (Sixth edition) L131. 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).

### 15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

### SECTION 16: Other information

Revision comments	NOTE: Lines within the margin indicate significant changes from the previous revision.
Issued by	HS&E Manager.
Revision date	29/03/2016
Revision	13
Supersedes date	23/10/2015

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