# Material Safety Data Sheet



Agilent Technologies Australia Pty Ltd 679 Springvale Road Mulgrave Victoria 3170, Australia 1800 802 402

#### Compensated Epon - No hardener, Part Number G7426-85001

1. Identification of the material and supplier			
Names			
Product name	: Compensated Epon - No ha	ardener, Part Number G7426-85001	
Part No. (Chemical Kit)	: G7426-85001		
Part No.	: EPON resin 828 Resolve- AL HO	8829971600 8830150900	
ADG	: Not regulated as Dangerous	ulated as Dangerous Goods according to the ADG Code	
<u>Supplier</u>			
Supplier/Manufacturer	: Agilent Technologies Austra 679 Springvale Road Mulgrave Victoria 3170, Australia 1800 802 402	alia Pty Ltd	
Emergency telephone number	: CHEMTREC®: +(61)-2903	72994	
<u>Uses</u>			
Area of application	: EPON resin 828	Industrial applications, Professional applications.	
	Resolve- AL HO	Industrial applications, Professional applications.	
Material uses	: Analytical chemistry. 1 Container EPON resin 828 Resolve- AL HO	1 a x Tubo	
	Resolve- AL HU	1 g x Tube	

2. Hazards identification		
Classification	: EPON resin 828	Xi; R36/38 R43 N; R51/53
	Resolve- AL HO	Not regulated.
Risk phrases	: EPON resin 828 Resolve- AL HO	R36/38- Irritating to eyes and skin. R43- May cause sensitisation by skin contact. R51/53- Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. Not classified.
Safaty phrases	: EPON resin 828	
Safety phrases		S28- After contact with skin, wash immediately with plenty of [***]. S37/39- Wear suitable gloves and eye/face protection. S61- Avoid release to the environment. Refer to special instructions/safety data sheet.
	Resolve- AL HO	Not applicable.
Statement of hazardous/ dangerous nature	: EPON resin 828	HAZARDOUS SUBSTANCE. DANGEROUS GOODS.
	Resolve- AL HO	NON-HAZARDOUS SUBSTANCE. NON- DANGEROUS GOODS.

## 3. Composition/information on ingredients

Mixture	: EPON resin 828 Resolve- AL HO	No. No.	
Ingredient name		CAS number	%
EPON resin 828 Reaction product: Bisp	henol-A-(Epichlorhydrin); epoxy resin	25068-38-6	>60

Other ingredients, determined not to be hazardous according to Safe Work Australia criteria, and not dangerous according to the ADG Code, make up the product concentration to 100%.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

### 4. First-aid measures

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Inhalation	: EPON resin 828	Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
	Resolve- AL HO	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
Ingestion	: EPON resin 828	Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
	Resolve- AL HO	Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.
Skin contact	: EPON resin 828	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. In the event of any complaints or symptoms, avoid further

## 4. First-aid measures

	Resolve- AL HO	exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse. Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
Eye contact	: EPON resin 828	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.
	Resolve- AL HO	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
Protection of first-aiders	: EPON resin 828	No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.
	Resolve- AL HO	No action shall be taken involving any personal risk or without suitable training.
Advice to doctor	: EPON resin 828	No specific treatment. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
	Resolve- AL HO	No specific treatment. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

## 5. Fire-fighting measures

Extinguishing media		
Suitable	: EPON resin 828	Use an extinguishing agent suitable for the surrounding fire.
	Resolve- AL HO	Use an extinguishing agent suitable for the surrounding fire.
Not suitable	: EPON resin 828 Resolve- AL HO	None known. None known.
Special exposure hazards	: EPON resin 828	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. This material is toxic to aquatic organisms. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.
	Resolve- AL HO	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
	EPON resin 828	In a fire or if heated, a pressure increase will occur and the container may burst.
	Resolve- AL HO	No specific fire or explosion hazard.
Hazardous thermal decomposition products	: EPON resin 828	Decomposition products may include the following materials: carbon dioxide carbon monoxide halogenated compounds
	Resolve- AL HO	Decomposition products may include the following materials: carbon dioxide

### 5. Fire-fighting measures

6. Accidental release measures		
Special protective equipment for fire-fighters	: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.	
	carbon monoxide	

Personal precautions	: EPON resin 828	risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Avoid breathing vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see Section 8).
	Resolve- AL HO	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Put on appropriate personal protective equipment (see Section 8).
Environmental precautions	: EPON resin 828	Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities.
	Resolve- AL HO	Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
Methods for cleaning up	: EPON resin 828	Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water- insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
	Resolve- AL HO	Move containers from spill area. Vacuum or sweep up material and place in a designated, labelled waste container. Dispose of via a licensed waste disposal contractor.

#### 7. Handling and storage : EPON resin 828 Handling Put on appropriate personal protective equipment (see Section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapour or mist. Avoid release to the environment. Refer to special instructions/safety data sheet. Keep in the original container or an approved alternative

## 7. Handling and storage

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	Resolve- AL HO	made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container. Put on appropriate personal protective equipment (see Section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas.
Storage	: EPON resin 828	Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination.
	Resolve- AL HO	Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination.

## 8. Exposure controls/personal protection

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Occupational exposure limits	: No exposure standard allocated.
Recommended monitoring procedures	: If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectivenes of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to appropriate monitoring standards. Reference to national guidance documents for methods for the determination of hazardous substances will also be required.
Exposure controls	
Engineering measures	: Good general ventilation should be sufficient to control worker exposure to airborn contaminants.
Hygiene measures	: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothin Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
Eyes	: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.

## 8. Exposure controls/personal protection

Hands	:	Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
Respiratory	:	Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.
Skin	:	Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Environmental exposure controls	:	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

## 9. Physical and chemical properties

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Physical state	: EPON resin 828 Resolve- AL HO	Liquid. [Viscous liquid.] Solid.
Colour	EPON resin 828 Resolve- AL HO	Clear. [Light] White.
Odour	: EPON resin 828 Resolve- AL HO	Not available. Not available.
Odour threshold	: EPON resin 828 Resolve- AL HO	Not available. Not available.
Boiling point	: EPON resin 828 Resolve- AL HO	>260°C (>500°F) Not available.
Melting point	: EPON resin 828 Resolve- AL HO	Not available. 175 to 180°C (347 to 356°F)
Vapour pressure	: EPON resin 828 Resolve- AL HO	<0.013 kPa (<0.1 mm Hg) [room temperature] <0.004 kPa (<0.03 mm Hg) [50°C] Not available.
Relative density	: EPON resin 828 Resolve- AL HO	1.17 Not available.
Flash point	: EPON resin 828 Resolve- AL HO	Closed cup: 248.89°C (480°F) [Pensky- Martens.] Open cup: 249°C (480.2°F) Not available.
Flammable limits	: EPON resin 828 Resolve- AL HO	Not available. Not available. Not available.
Vapour density	: EPON resin 828 Resolve- AL HO	Not available. Not available.
рН	: EPON resin 828 Resolve- AL HO	Not available. Not available.
Viscosity	: EPON resin 828 Resolve- AL HO	Not available. Not available.
Auto-ignition temperature	: EPON resin 828 Resolve- AL HO	Not available. Not available.
Evaporation rate	: EPON resin 828 Resolve- AL HO	Not available. Not available.
Solubility	: EPON resin 828	Insoluble in the following materials: cold water and hot water.
	Resolve- AL HO	Insoluble in the following materials: cold water and hot water.

## 10. Stability and reactivity

Chemical stability	: EPON resin 828 Resolve- AL HO	The product is stable. The product is stable.
Possibility of hazardous reactions	: EPON resin 828 Resolve- AL HO	Under normal conditions of storage and use, hazardous reactions will not occur. Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	: EPON resin 828 Resolve- AL HO	No specific data. No specific data.
Materials to avoid	: EPON resin 828 Resolve- AL HO	No specific data. No specific data.
Hazardous decomposition products	: EPON resin 828	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
	Resolve- AL HO	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## 11. Toxicological information

Potential acute health	<u>effects</u>	
Inhalation	: EPON resin 828 Resolve- AL HO	No known significant effects or critical hazards. No known significant effects or critical hazards.
Ingestion	: EPON resin 828 Resolve- AL HO	Irritating to mouth, throat and stomach. No known significant effects or critical hazards.
Skin contact	: EPON resin 828	Irritating to skin. May cause sensitisation by skin contact.
	Resolve- AL HO	No known significant effects or critical hazards.
Eye contact	: EPON resin 828 Resolve- AL HO	Irritating to eyes. No known significant effects or critical hazards.

#### Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
<b>EPON resin 828</b> Reaction product: Bisphenol- A-(Epichlorhydrin); epoxy resin	LD50 Oral	Rat	11.4 g/kg	-

**Conclusion/Summary** : Not available.

#### Potential chronic health effects

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
<b>EPON resin 828</b> Reaction product: Bisphenol- A-(Epichlorhydrin); epoxy resin	Eyes - Mild irritant	Rabbit	-	100 milligrams	-
	Eyes - Moderate irritant	Rabbit	-	24 hours 20 milligrams	-
	Skin - Moderate irritant	Rabbit	-	24 hours 500 microliters	-
	Skin - Severe irritant	Rabbit	-	24 hours 2 milligrams	-

#### **Conclusion/Summary**

<u>Sensitiser</u>

**Conclusion/Summary** : Not available.

Chronic toxicity / Carcinogenicity / Mutagenicity / Teratogenicity / Reproductive toxicity Not available.

: Not available.

## 11. Toxicological information

Chronic effects	: EPON resin 828	Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.
	Resolve- AL HO	No known significant effects or critical hazards.
Carcinogenicity	: EPON resin 828 Resolve- AL HO	No known significant effects or critical hazards. No known significant effects or critical hazards.
Mutagenicity	: EPON resin 828 Resolve- AL HO	No known significant effects or critical hazards. No known significant effects or critical hazards.
Teratogenicity	: EPON resin 828 Resolve- AL HO	No known significant effects or critical hazards. No known significant effects or critical hazards.
Developmental effects	: EPON resin 828 Resolve- AL HO	No known significant effects or critical hazards. No known significant effects or critical hazards.
Fertility effects	: EPON resin 828 Resolve- AL HO	No known significant effects or critical hazards. No known significant effects or critical hazards.
Over-exposure signs/sympt	<u>oms</u>	
Inhalation	: EPON resin 828 Resolve- AL HO	No specific data. No specific data.
Ingestion	: EPON resin 828 Resolve- AL HO	No specific data. No specific data.
Skin	: EPON resin 828	Adverse symptoms may include the following: irritation redness
	Resolve- AL HO	No specific data.
Eyes	: EPON resin 828	Adverse symptoms may include the following: irritation watering redness
	Resolve- AL HO	No specific data.
Other adverse symptoms	: EPON resin 828 Resolve- AL HO	Not available. Not available.
Target organs	: EPON resin 828 Resolve- AL HO	Not available. Not available.

### 12. Ecological information

Ecotoxicity

: This material is toxic to aquatic life with long lasting effects.

**Other ecological information** 

Other adverse effects

: No known significant effects or critical hazards.

## 13. Disposal considerations

 Methods of disposal
The generation of waste should be avoided or minimised wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

## 14. Transport information

### **Regulatory information**

ADG / IMDG / IATA

: Not regulated as Dangerous Goods according to the ADG Code .

**Schedule** 

## 15. Regulatory information

Standard Uniform Schedule of Medicine and Poisons

Not regulated.

Control of Scheduled Carcinogenic Substances

Ingredient name

No listed substance

Australia inventory (AICS) : Not determined.

### 16. Other information

Remarks	:
Date of issue	: 29/08/2014
Date of previous issue	: 21/06/2012.

✓ Indicates information that has changed from previously issued version.

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