AkzoNobel Specialty Coatings AkzoNobel Aerospace Coatings



### SAFETY DATA SHEET

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

1.1 Product identifier

Product name : Aviox 37124 CF Primer

MSDS code : A45374

Product code : 37124/000000

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

Aerospace coating

Uses advised against

For professional use only.

#### 1.3 Details of the supplier of the safety data sheet

AkzoNobel Aerospace Coatings

Rijksstraatweg 31 2171 AJ Sassenheim

P.O. Box 3

2170 BA Sassenheim The Netherlands

e-mail address of person responsible for this SDS

: PSRA SSH@akzonobel.com

#### 1.4 Emergency telephone number

National advisory body/Poison Center

Telephone number : Not available.

**Supplier** 

**Telephone number** : + 31 (0)71 308 6944

Hours of operation : 24 hours

#### **SECTION 2: Hazards identification**

#### 2.1 Classification of the substance or mixture

Product definition : Mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Flam. Liq. 3, H226 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317

Repr. 2, H361d (Unborn child) Aquatic Chronic 3, H412

The product is classified as hazardous according to Regulation (EC) 1272/2008 as amended.

ingredients of unknown : 2.5 percent of the mixture consists of component(s) of unknown toxicity

toxicity

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#### **SECTION 2: Hazards identification**

Ingredients of unknown

: Contains 2.5 % of components with unknown hazards to the aquatic environment

ecotoxicity

Classification according to Directive 1999/45/EC [DPD]

The product is classified as dangerous according to Directive 1999/45/EC and its amendments.

Classification : R10

Xi; R36/38 R43 R52/53

Physical/chemical

hazards

: Flammable.

**Human health hazards**: Irritating to eyes and skin. May cause sensitization by skin contact.

**Environmental hazards**: Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic

environment.

See Section 16 for the full text of the R phrases or H statements declared above. See Section 11 for more detailed information on health effects and symptoms.

#### 2.2 Label elements

Hazard pictograms :







Signal word : Warning

**Hazard statements** : Flammable liquid and vapor.

Causes serious eye irritation.

Causes skin irritation.

May cause an allergic skin reaction.

Suspected of damaging the unborn child.

Harmful to aquatic life with long lasting effects.

**Precautionary statements** 

**Prevention**: Obtain special instructions before use. Wear protective gloves. Keep away from

heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

**Response** : IF exposed or concerned: Get medical attention.

Storage : Not applicable.

Disposal : Not applicable.

**Hazardous ingredients**: reaction product: bisphenol-A-(epichlorhydrin); epoxy resin

2,2-bis(acryloyloxymethyl)butyl acrylate

toluene

Phenol, polymer with formaldehyde, glycidyl ether

: Contains epoxy constituents. May produce an allergic reaction.

Supplemental label

elements

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles : Not applicable.

#### Special packaging requirements

Containers to be fitted

with child-resistant

fastenings

: Not applicable.

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## **SECTION 2: Hazards identification**

Tactile warning of danger : Not applicable.

#### 2.3 Other hazards

Other hazards which do : None known.

not result in classification

The mixture may be a skin sensitizer. It may also be a skin irritant and repeated contact may increase this effect.

## **SECTION 3: Composition/information on ingredients**

3.2 Mixtures : Mixture

			Classi		
Product/ingredient name	Identifiers	%	67/548/EEC	Regulation (EC) No. 1272/2008 [CLP]	Type
reaction product: bisphenol-A- (epichlorhydrin); epoxy resin	EC: 500-033-5 CAS: 25068-38-6 Index: 603-074-00-8	≥10 - ≤20	Xi; R36/38 R43 N; R51/53	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317 Aquatic Chronic 2, H411	[1]
4-methylpentan-2-one	REACH #: 01-2119473980-30 EC: 203-550-1 CAS: 108-10-1 Index: 606-004-00-4	≤10	F; R11 Xn; R20 Xi; R36/37 R66	Flam. Liq. 2, H225 Acute Tox. 4, H332 Eye Irrit. 2, H319 STOT SE 3, H335 EUH066	[1] [2]
heptan-2-one	REACH #: 01-2119902391-49 EC: 203-767-1 CAS: 110-43-0	≤10	R10 Xn; R20/22	Flam. Liq. 3, H226 Acute Tox. 4, H302 Acute Tox. 4, H332	[1] [2]
2,2-bis (acryloyloxymethyl) butyl acrylate	EC: 239-701-3 CAS: 15625-89-5 Index: 607-111-00-9	≤5	Xi; R36/38 R43	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317	[1]
toluene	EC: 203-625-9 CAS: 108-88-3 Index: 601-021-00-3	≤5	F; R11 Repr. Cat. 3; R63 Xn; R48/20, R65 Xi; R38 R67	Flam. Liq. 2, H225 Skin Irrit. 2, H315 Repr. 2, H361d (Unborn child) STOT SE 3, H336 STOT RE 2, H373 Asp. Tox. 1, H304	[1] [2]
Acetoacetate resin	-	≤3	R52/53	Aquatic Chronic 3, H412	[1]
Phenol, polymer with formaldehyde, glycidyl ether	CAS: 28064-14-4	≤2	Xi; R36/38 R43 N; R51/53	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317 Aquatic Chronic 2, H411	[1]
xylene	EC: 215-535-7 CAS: 1330-20-7 Index: 601-022-00-9	≤2	R10 Xn; R20/21 Xi; R38	Flam. Liq. 3, H226 Acute Tox. 4, H312 Acute Tox. 4, H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335 Asp. Tox. 1, H304	[1] [2]
1,4-dihydroxybenzene	REACH #: 01-2119524016-51 EC: 204-617-8 CAS: 123-31-9 Index: 604-005-00-4	≤0.1	Carc. Cat. 3; R40 Muta. Cat. 3; R68 Xn; R22 Xi; R41 R43	Acute Tox. 4, H302 Eye Dam. 1, H318 Skin Sens. 1, H317 Muta. 2, H341 Carc. 2, H351	[1] [2]

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SECTION 3: Composition/information on ingredients				
	N; R50	Aquatic Acute 1, H400 (M=10)		
	See Section 16 for the full text of the R-phrases declared above.	See Section 16 for the full text of the H statements declared above.		

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, are PBTs, vPvBs or Substances of equivalent concern, or have been assigned a workplace exposure limit and hence require reporting in this section.

#### Type

Inhalation

- [1] Substance classified with a health or environmental hazard
- [2] Substance with a workplace exposure limit
- [3] Substance meets the criteria for PBT according to Regulation (EC) No. 1907/2006, Annex XIII
- [4] Substance meets the criteria for vPvB according to Regulation (EC) No. 1907/2006, Annex XIII
- [5] Substance of equivalent concern

Occupational exposure limits, if available, are listed in Section 8.

#### **SECTION 4: First aid measures**

#### 4.1 Description of first aid measures

General	: In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and seek medical advice.
Eye contact	<ul> <li>Remove contact lenses, irrigate copiously with clean, fresh water, holding the eyelids apart for at least 10 minutes and seek immediate medical advice.</li> </ul>

: Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel.

**Skin contact** : Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognized skin cleanser. Do NOT use solvents or thinners.

Ingestion : If swallowed, seek medical advice immediately and show this container or label.

Keep person warm and at rest. Do NOT induce vomiting.

Protection of first-aiders: 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.

4.2 Most important symptoms and effects, both acute and delayed

There are no data available on the mixture itself. The mixture has been assessed following the conventional method of the CLP Regulation (EC) No 1272/2008 and is classified for toxicological properties accordingly. See Sections 2 and 3 for details.

Exposure to component solvent vapor concentrations in excess of the stated occupational exposure limit may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and, in extreme cases, loss of consciousness.

Solvents may cause some of the above effects by absorption through the skin. Repeated or prolonged contact with the mixture may cause removal of natural fat from the skin, resulting in non-allergic contact dermatitis and absorption through the skin.

If splashed in the eyes, the liquid may cause irritation and reversible damage.

Ingestion may cause nausea, diarrhea and vomiting.

This takes into account, where known, delayed and immediate effects and also chronic effects of components from short-term and long-term exposure by oral, inhalation and dermal routes of exposure and eye contact.

Based on the properties of the epoxy constituent(s) and considering toxicological data on similar mixtures, this

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#### **SECTION 4: First aid measures**

mixture may be a skin sensitizer and an irritant. It contains low-molecular weight epoxy constituents which are irritating to eyes, mucous membranes and skin. Repeated skin contact may lead to irritation and to sensitization, possibly with cross-sensitization to other epoxies. Skin contact with the mixture and exposure to spray, mist and vapors should be avoided.

Contains reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight ≤ 700), 2, 2-bis(acryloyloxymethyl)butyl acrylate, Phenol, polymer with formaldehyde, glycidyl ether. May produce an allergic reaction.

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

Notes to physician : Treat symptomatically. Contact poison treatment specialist immediately if large

quantities have been ingested or inhaled.

**Specific treatments** : No specific treatment.

See toxicological information (Section 11)

## SECTION 5: Firefighting measures

#### 5.1 Extinguishing media

Suitable extinguishing media

: Recommended: alcohol-resistant foam, CO<sub>2</sub>, powders, water spray.

Unsuitable extinguishing

media

: Do not use water jet.

#### 5.2 Special hazards arising from the substance or mixture

Hazards from the substance or mixture : Fire will produce dense black smoke. Exposure to decomposition products may cause a health hazard.

**Hazardous thermal** decomposition products : Decomposition products may include the following materials: carbon monoxide, carbon dioxide, smoke, oxides of nitrogen.

#### 5.3 Advice for firefighters

Special protective actions for fire-fighters

: Cool closed containers exposed to fire with water. Do not release runoff from fire to drains or watercourses.

**Special protective** equipment for fire-fighters : Appropriate breathing apparatus may be required.

#### SECTION 6: Accidental release measures

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

For non-emergency personnel

: Exclude sources of ignition and ventilate the area. Avoid breathing vapor or mist. Refer to protective measures listed in sections 7 and 8.

For emergency responders: If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

6.2 Environmental precautions

: Do not allow to enter drains or watercourses. If the product contaminates lakes, rivers, or sewers, inform the appropriate authorities in accordance with local regulations.

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#### **SECTION 6: Accidental release measures**

6.3 Methods and materials for containment and cleaning up

: Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Preferably clean with a detergent. Avoid using solvents.

6.4 Reference to other sections

: See Section 1 for emergency contact information.

See Section 8 for information on appropriate personal protective equipment.

See Section 13 for additional waste treatment information.

## **SECTION 7: Handling and storage**

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

## 7.1 Precautions for safe handling

: Prevent the creation of flammable or explosive concentrations of vapors in air and avoid vapor concentrations higher than the occupational exposure limits. In addition, the product should only be used in areas from which all naked lights and other sources of ignition have been excluded. Electrical equipment should be protected to the appropriate standard.

Mixture may charge electrostatically: always use earthing leads when transferring from one container to another.

Operators should wear antistatic footwear and clothing and floors should be of the conducting type.

Keep away from heat, sparks and flame. No sparking tools should be used.

Avoid contact with skin and eyes. Avoid the inhalation of dust, particulates, spray or mist arising from the application of this mixture. Avoid inhalation of dust from sanding

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed.

Put on appropriate personal protective equipment (see Section 8).

Never use pressure to empty. Container is not a pressure vessel.

Always keep in containers made from the same material as the original one.

Comply with the health and safety at work laws. Do not allow to enter drains or watercourses.

#### Information on fire and explosion protection

Vapors are heavier than air and may spread along floors. Vapors may form explosive mixtures with air.

When operators, whether spraying or not, have to work inside the spray booth, ventilation is unlikely to be sufficient to control particulates and solvent vapors in all cases. In such circumstances, they should wear a compressed-air-fed respirator during the spraying process and until the particulate and solvent vapor concentrations have fallen below the exposure limits.

#### 7.2 Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations.

#### Notes on joint storage

Keep away from: oxidizing agents, strong alkalis, strong acids.

#### Additional information on storage conditions

Observe label precautions. Store in a dry, cool and well-ventilated area. Keep away from heat and direct sunlight. Keep away from sources of ignition. No smoking. Prevent unauthorized access. Containers that have been opened must be carefully resealed and kept upright to prevent leakage.

#### 7.3 Specific end use(s)

Recommendations : Not available.

Industrial sector specific : Not available.

solutions

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## **SECTION 8: Exposure controls/personal protection**

The information in this section contains generic advice and guidance. Information is provided based on typical anticipated uses of the product. Additional measures might be required for bulk handling or other uses that could significantly increase worker exposure or environmental releases.

#### 8.1 Control parameters

#### Occupational exposure limits

Product/ingredient name	Exposure limit values
4-methylpentan-2-one	EH40/2005 WELs (United Kingdom (UK), 12/2011). Absorbed through skin.  STEL: 416 mg/m³ 15 minutes.  STEL: 100 ppm 15 minutes.  TWA: 208 mg/m³ 8 hours.  TWA: 50 ppm 8 hours.
heptan-2-one	EH40/2005 WELs (United Kingdom (UK), 12/2011). Absorbed through skin.  STEL: 475 mg/m³ 15 minutes. STEL: 100 ppm 15 minutes. TWA: 237 mg/m³ 8 hours. TWA: 50 ppm 8 hours.
toluene	EH40/2005 WELs (United Kingdom (UK), 12/2011). Absorbed through skin.  STEL: 384 mg/m³ 15 minutes.  STEL: 100 ppm 15 minutes.  TWA: 191 mg/m³ 8 hours.  TWA: 50 ppm 8 hours.
xylene	EH40/2005 WELs (United Kingdom (UK), 12/2011). Absorbed through skin.  STEL: 441 mg/m³ 15 minutes. STEL: 100 ppm 15 minutes. TWA: 220 mg/m³ 8 hours. TWA: 50 ppm 8 hours.
1,4-dihydroxybenzene	EH40/2005 WELs (United Kingdom (UK), 12/2011). TWA: 0.5 mg/m³ 8 hours.

## Recommended monitoring procedures

If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

#### **DNELs/DMELs**

No DNELs/DMELs available.

#### **PNECs**

No PNECs available.

#### 8.2 Exposure controls

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## **SECTION 8: Exposure controls/personal protection**

## Appropriate engineering controls

: Provide adequate ventilation. Where reasonably practicable, this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and solvent vapors below the OEL, suitable respiratory protection must be worn.

#### Individual protection measures

#### 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 clothing. 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.

## **Eye/face protection**

#### **Skin protection**

#### **Hand protection**

: Use safety eyewear designed to protect against splash of liquids.

There is no one glove material or combination of materials that will give unlimited resistance to any individual or combination of chemicals.

The breakthrough time must be greater than the end use time of the product.

The instructions and information provided by the glove manufacturer on use, storage, maintenance and replacement must be followed.

Gloves should be replaced regularly and if there is any sign of damage to the glove material. Always ensure that gloves are free from defects and that they are stored and used correctly.

The performance or effectiveness of the glove may be reduced by physical/chemical damage and poor maintenance.

Barrier creams may help to protect the exposed areas of the skin but should not be applied once exposure has occurred.

#### **Gloves**

: For prolonged or repeated handling, use the following type of gloves:

Not recommended: nitrile rubber May be used: butyl rubber

The recommendation for the type or types of glove to use when handling this product is based on information from the following source:

The user must check that the final choice of type of glove selected for handling this product is the most appropriate and takes into account the particular conditions of use, as included in the user's risk assessment.

## **Body protection**

: Personnel should wear antistatic clothing made of natural fibers or of high-temperature-resistant synthetic fibers.

### Other skin protection

: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

#### **Respiratory protection**

: If workers are exposed to concentrations above the exposure limit, they must use appropriate, certified respirators.

Dry sanding, flame cutting and/or welding of the dry paint film will give rise to dust and/or hazardous fumes. Wet sanding/flatting should be used wherever possible. If exposure cannot be avoided by the provision of local exhaust ventilation, suitable respiratory protective equipment should be used.

## **Environmental exposure** controls

: Do not allow to enter drains or watercourses.

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## **SECTION 9: Physical and chemical properties**

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

**Appearance** 

Physical state : Liquid.
Color : Yellow.
Odor : TYPICAL.
Odor threshold : Not available.
pH : Neutral.

Melting point/freezing point Initial boiling point and

boiling range

: 110°C

: Not available.

Flash point : Closed cup: 25°C
Evaporation rate : Not available.
Flammability (solid, gas) : Not available.

Upper/lower flammability or

explosive limits

: Greatest known range: Lower: 1.4% Upper: 7.5% (4-methylpentan-2-one)

Vapor pressure : Not available.

**Vapor density** : Highest known value: 3.7 (Air = 1) (xylene). Weighted average: 3.27 (Air = 1)

Relative density : 1.348

Solubility(ies) : Not available.

Partition coefficient: n-octanol/ : Not available.

water

Auto-ignition temperature : Not available.

Decomposition temperature : Not available.

Viscosity : Kinematic (room temperature): 2.15 cm<sup>2</sup>/s

Explosive properties : Not available.

Oxidizing properties : Not available.

**VOC content** : 245 g/l [ISO 11890-2]

#### 9.2 Other information

No additional information.

## SECTION 10: Stability and reactivity

**10.1 Reactivity** : No specific test data related to reactivity available for this product or its ingredients.

**10.2 Chemical stability** : Stable under recommended storage and handling conditions (see Section 7).

10.3 Possibility of hazardous reactions

: Under normal conditions of storage and use, hazardous reactions will not occur.

**10.4 Conditions to avoid** : When exposed to high temperatures may produce hazardous decomposition

products.

**10.5 Incompatible materials** : Keep away from the following materials to prevent strong exothermic reactions:

oxidizing agents, strong alkalis, strong acids.

**10.6 Hazardous** : Under normal conditions of storage and use, hazardous decomposition products

**decomposition products** should not be produced.

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## SECTION 11: Toxicological information

#### 11.1 Information on toxicological effects

There are no data available on the mixture itself. The mixture has been assessed following the conventional method of the CLP Regulation (EC) No 1272/2008 and is classified for toxicological properties accordingly. See Sections 2 and 3 for details.

Exposure to component solvent vapor concentrations in excess of the stated occupational exposure limit may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and, in extreme cases, loss of consciousness.

Solvents may cause some of the above effects by absorption through the skin. Repeated or prolonged contact with the mixture may cause removal of natural fat from the skin, resulting in non-allergic contact dermatitis and absorption through the skin.

If splashed in the eyes, the liquid may cause irritation and reversible damage.

Ingestion may cause nausea, diarrhea and vomiting.

This takes into account, where known, delayed and immediate effects and also chronic effects of components from short-term and long-term exposure by oral, inhalation and dermal routes of exposure and eye contact.

Based on the properties of the epoxy constituent(s) and considering toxicological data on similar mixtures, this mixture may be a skin sensitizer and an irritant. It contains low-molecular weight epoxy constituents which are irritating to eyes, mucous membranes and skin. Repeated skin contact may lead to irritation and to sensitization, possibly with cross-sensitization to other epoxies. Skin contact with the mixture and exposure to spray, mist and vapors should be avoided.

Contains reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight ≤ 700), 2, 2-bis(acryloyloxymethyl)butyl acrylate, Phenol, polymer with formaldehyde, glycidyl ether. May produce an allergic reaction.

#### **Acute toxicity**

Product/ingredient name	Result	Species	Dose	Exposure
4-methylpentan-2-one heptan-2-one 2,2-bis(acryloyloxymethyl) butyl acrylate	LD50 Oral LD50 Oral LD50 Dermal	Rat Rat Rabbit	2080 mg/kg 1600 mg/kg 5170 mg/kg	-
toluene xylene 1,4-dihydroxybenzene	LD50 Oral LD50 Oral LD50 Oral	Rat Rat Rat	636 mg/kg 4300 mg/kg 302 mg/kg	-

#### **Conclusion/Summary**

: Not available.

#### **Acute toxicity estimates**

Route	ATE value	
Dermal	30240.7 mg/kg 107555.4 mg/kg 79.69 mg/l	

#### **Irritation/Corrosion**

Product/ingredient name	Result	Species	Score	Exposure	Observation
reaction product: bisphenol- A-(epichlorhydrin); epoxy resin	Eyes - Mild irritant	Rabbit	-	100 milligrams	-
	Skin - Moderate irritant	Rabbit	-	24 hours 500 microliters	-
	Skin - Severe irritant	Rabbit	-	24 hours 2 milligrams	-
4-methylpentan-2-one	Eyes - Moderate irritant	Rabbit	-	24 hours 100 microliters	-
	Eyes - Severe irritant	Rabbit	-	40 milligrams	-
	Skin - Mild irritant	Rabbit	-	24 hours 500	-

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## **SECTION 11: Toxicological information**

				milligrams	
heptan-2-one	Skin - Mild irritant	Rabbit	-	24 hours 14	-
				milligrams	
2,2-bis(acryloyloxymethyl)	Eyes - Moderate irritant	Rabbit	-	100	-
butyl acrylate				milligrams	
	Skin - Moderate irritant	Rabbit	-	24 hours 500	-
				milligrams	
toluene	Eyes - Mild irritant	Rabbit	-	0.5 minutes	-
				100	
	- A40 1 2 4	D 11.7		milligrams	
	Eyes - Mild irritant	Rabbit	-	870	-
		5		Micrograms	
	Eyes - Severe irritant	Rabbit	-	24 hours 2	-
	OL: MILL: II	D:		milligrams	
	Skin - Mild irritant	Pig	-	24 hours 250	-
	Older Mild books of	D - 1-1-11		microliters	
	Skin - Mild irritant	Rabbit	-	435	-
	Chin Madanata innitant	Dabbit		milligrams	
	Skin - Moderate irritant	Rabbit	-	24 hours 20	-
	Skin - Moderate irritant	Rabbit		milligrams 500	_
	Skiii - Moderale ii ilaiil	Rabbit	-		-
xylene	Eyes - Mild irritant	Rabbit		milligrams 87 milligrams	
Xylerie	Eyes - Severe irritant	Rabbit	_	24 hours 5	- -
	Lyes - Severe irritant	ιχαυσιί	_	milligrams	-
	Skin - Mild irritant	Rat	_	8 hours 60	_
	Skiii - Willa II Italit	ixat	_	microliters	
	Skin - Moderate irritant	Rabbit	_	24 hours 500	-
	Call Moderate Intant	I GOOK		milligrams	
	Skin - Moderate irritant	Rabbit	_	100 Percent	_
1,4-dihydroxybenzene	Skin - Mild irritant	Human	_	2 Percent	_
.,,,	Skin - Severe irritant	Human	_	5 Percent	-
Conclusion/Summary	• Not available	-			

**Conclusion/Summary** 

**Sensitization** 

Conclusion/Summary

**Mutagenicity** 

**Conclusion/Summary** : Not available.

**Carcinogenicity** 

Conclusion/Summary

**Reproductive toxicity** 

**Conclusion/Summary** 

**Teratogenicity** 

**Conclusion/Summary** 

: Not available.

: Not available.

: Not available.

: Not available.

: Not available. Specific target organ toxicity (single exposure)

Product/ingredient name	Category	Route of exposure	Target organs
4-methylpentan-2-one	Category 3	Not applicable.	Respiratory tract irritation
toluene xylene	0 3	Not applicable. Not applicable.	Narcotic effects Respiratory tract irritation

Specific target organ toxicity (repeated exposure)

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## **SECTION 11: Toxicological information**

Product/ingredient name	Category	Route of exposure	Target organs
toluene	Category 2	Not determined	Not determined

#### **Aspiration hazard**

Product/ingredient name	Result
toluene	ASPIRATION HAZARD - Category 1
xylene	ASPIRATION HAZARD - Category 1

Other information : Not available.

## **SECTION 12: Ecological information**

#### 12.1 Toxicity

There are no data available on the mixture itself.

Do not allow to enter drains or watercourses.

The mixture has been assessed following the summation method of the CLP Regulation (EC) No 1272/2008 and is classified for eco-toxicological properties accordingly. See Sections 2 and 3 for details.

Product/ingredient name	Result	Species	Exposure
4-methylpentan-2-one	Acute LC50 505000 to 514000 μg/l Fresh water	Fish - Pimephales promelas	96 hours
	Chronic NOEC 78 mg/l Fresh water	Daphnia - Daphnia magna	21 days
	Chronic NOEC 168 mg/l Fresh water	Fish - Pimephales promelas - Embryo	33 days
heptan-2-one	Acute LC50 131000 to 137000 μg/l Fresh water	Fish - Pimephales promelas	96 hours
xylene	Acute LC50 8500 μg/l Marine water	Crustaceans - Palaemonetes pugio	48 hours
1,4-dihydroxybenzene	Acute LC50 13400 μg/l Fresh water Acute LC50 162 μg/l Fresh water Acute LC50 44 μg/l Fresh water	Fish - Pimephales promelas Daphnia - Daphnia pulicaria Fish - Oncorhynchus mykiss	96 hours 48 hours 96 hours

Conclusion/Summary : Not available.

#### 12.2 Persistence and degradability

Conclusion/Summary : Not available.

#### 12.3 Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
reaction product: bisphenol- A-(epichlorhydrin); epoxy resin	2.64 to 3.78	31	low
4-methylpentan-2-one	1.9	-	low
heptan-2-one	2.26	-	low
2,2-bis(acryloyloxymethyl) butyl acrylate	0.67	-	low
toluene	2.73	90	low
xylene	3.12	8.1 to 25.9	low
1,4-dihydroxybenzene	0.59	3.162	low

#### 12.4 Mobility in soil

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## **SECTION 12: Ecological information**

Soil/water partition coefficient (Koc)

: Not available.

Mobility : Not available.

#### 12.5 Results of PBT and vPvB assessment

PBT : Not applicable.

vPvB : Not applicable.

**12.6 Other adverse effects** : No known significant effects or critical hazards.

## **SECTION 13: Disposal considerations**

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

#### 13.1 Waste treatment methods

#### **Product**

**Methods of disposal** : The generation of waste should be avoided or minimized 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.

**Hazardous waste**: Within the present knowledge of the supplier, this product is not regarded as

hazardous waste, as defined by EU Directive 2008/98/EC.

**Disposal considerations** : Do not allow to enter drains or watercourses.

Dispose of according to all federal, state and local applicable regulations.

If this product is mixed with other wastes, the original waste product code may no

longer apply and the appropriate code should be assigned. For further information, contact your local waste authority.

#### European waste catalogue (EWC)

The European Waste Catalogue classification of this product, when disposed of as waste, is:

Waste code	Waste designation
08 01 11*	waste paint and varnish containing organic solvents or other hazardous substances

#### **Packaging**

**Methods of disposal** : The generation of waste should be avoided or minimized wherever possible. Waste

packaging should be recycled. Incineration or landfill should only be considered

when recycling is not feasible.

**Disposal considerations**: Using information provided in this safety data sheet, advice should be obtained from

the relevant waste authority on the classification of empty containers.

Empty containers must be scrapped or reconditioned.

Dispose of containers contaminated by the product in accordance with local or

national legal provisions

national legal provisions.		
Type of packaging		European waste catalogue (EWC)
CEPE Guidelines	15 01 10*	packaging containing residues of or contaminated by hazardous substances

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## SECTION 13: Disposal considerations

**Special precautions** 

: 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. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

## **SECTION 14: Transport information**

	ADR/RID	IMDG	IATA
UN number	UN1263	UN1263	UN1263
UN proper shipping name	PAINT	PAINT	PAINT
Transport hazard class(es)	3	3	3
Packing group	III	III	III
Environmental hazards	No.	No.	No.
Additional information	Special provisions 640 (E) Tunnel code (D/E)	F-E, _S-E_ -	-

user

14.6 Special precautions for : Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code : Not applicable.

## SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture EU Regulation (EC) No. 1907/2006 (REACH)

Annex XIV - List of substances subject to authorization

**Annex XIV** 

None of the components are listed.

Substances of very high concern

None of the components are listed.

Annex XVII - Restrictions : Not applicable.

on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles

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## **SECTION 15: Regulatory information**

Other EU regulations

VOC : The provisions of Directive 2004/42/EC on VOC apply to this product. Refer to the

product label and/or technical data sheet for further information.

**VOC for Ready-for-Use** 

**Mixture** 

: Not applicable.

Product/ingredient name	Carcinogenic effects	Mutagenic effects	Developmental effects	Fertility effects
toluene	-	-	Repr. 2, H361d (Unborn child)	-
1,4-dihydroxybenzene	Carc. 2, H351	Muta. 2, H341	-	-

#### Ozone depleting substances (1005/2009/EU)

Not listed.

#### Prior Informed Consent (PIC) (649/2012/EU)

Not listed.

#### **Seveso Directive**

This product may add to the calculation for determining whether a site is within the scope of the Seveso Directive on major accident hazards.

#### **National regulations**

Industrial use

: The information contained in this safety data sheet does not constitute the user's own assessment of workplace risks, as required by other health and safety legislation. The provisions of the national health and safety at work regulations apply to the use of this product at work.

#### **International regulations**

#### Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

#### Montreal Protocol (Annexes A, B, C, E)

Not listed

#### Stockholm Convention on Persistent Organic Pollutants

Not listed.

#### **Rotterdam Convention on Prior Inform Consent (PIC)**

Not listed.

#### **UNECE Aarhus Protocol on POPs and Heavy Metals**

Not listed.

## **15.2 Chemical Safety** : No Chemical Safety Assessment has been carried out.

**Assessment** 

### **SECTION 16: Other information**

CEPE code : 1

Indicates information that has changed from previously issued version.

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#### **SECTION 16: Other information**

Abbreviations and acronyms

: ATE = Acute Toxicity Estimate

CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No.

1272/20081

DMEL = Derived Minimal Effect Level DNEL = Derived No Effect Level

EUH statement = CLP-specific Hazard statement PBT = Persistent, Bioaccumulative and Toxic PNEC = Predicted No Effect Concentration RRN = REACH Registration Number

vPvB = Very Persistent and Very Bioaccumulative

#### Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Classification	Justification
Flam. Liq. 3, H226	On basis of test data
Skin Irrit. 2, H315	Calculation method
Eye Irrit. 2, H319	Calculation method
Skin Sens. 1, H317	Calculation method
Repr. 2, H361d (Unborn child)	Calculation method
Aquatic Chronic 3, H412	Calculation method

#### Full text of abbreviated H statements

H225	Highly flammable liquid and vapor.
H226	Flammable liquid and vapor.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H312	Harmful in contact with skin.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H341	Suspected of causing genetic defects.
H351	Suspected of causing cancer.
H361d (Unborn child)	Suspected of damaging the unborn child.
H373	May cause damage to organs through prolonged or repeated
	exposure.
H400	Very toxic to aquatic life.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

## Full text of classifications [CLP/GHS]

Acute Tox. 4, H302	ACUTE TOXICITY (oral) - Category 4
Acute Tox. 4, H312	ACUTE TOXICITY (dermal) - Category 4
Acute Tox. 4, H332	ACUTE TOXICITY (inhalation) - Category 4
Aquatic Acute 1, H400	AQUATIC HAZARD (ACUTE) - Category 1
Aquatic Chronic 2, H411	AQUATIC HAZARD (LONG-TERM) - Category 2
Aquatic Chronic 3, H412	AQUATIC HAZARD (LONG-TERM) - Category 3
Asp. Tox. 1, H304	ASPIRATION HAZARD - Category 1
Carc. 2, H351	CARCINOGENICITY - Category 2
EUH066	Repeated exposure may cause skin dryness or cracking.
Eye Dam. 1, H318	SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1
Eye Irrit. 2, H319	SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2
Flam. Liq. 2, H225	FLAMMABLE LIQUIDS - Category 2
Flam. Liq. 3, H226	FLAMMABLE LIQUIDS - Category 3
Muta. 2, H341	GERM CELL MUTAGENICITY - Category 2
Repr. 2, H361d (Unborn child)	TOXIC TO REPRODUCTION (Unborn child) - Category 2

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## **SECTION 16: Other information**

Skin Irrit. 2, H315	SKIN CORROSION/IRRITATION - Category 2
Skin Sens. 1, H317	SKIN SENSITIZATION - Category 1
STOT RE 2, H373	SPECIFIC TARGET ORGAN TOXICITY (REPEATED
·	EXPOSURE) - Category 2
STOT SE 3, H335	SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE)
·	(Respiratory tract irritation) - Category 3
STOT SE 3, H336	SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE)
	(Narcotic effects) - Category 3

#### Full text of abbreviated R phrases

R11- Highly flammable.

R10- Flammable.

R40- Limited evidence of a carcinogenic effect.

R68- Possible risk of irreversible effects.

R63- Possible risk of harm to the unborn child.

R20- Harmful by inhalation.

R22- Harmful if swallowed.

R20/21- Harmful by inhalation and in contact with skin.

R20/22- Harmful by inhalation and if swallowed.

R48/20- Harmful: danger of serious damage to health by prolonged exposure through inhalation.

R65- Harmful: may cause lung damage if swallowed.

R41- Risk of serious damage to eyes.

R38- Irritating to skin.

R36/37- Irritating to eyes and respiratory system.

R36/38- Irritating to eyes and skin.

R43- May cause sensitization by skin contact.

R66- Repeated exposure may cause skin dryness or cracking.

R67- Vapors may cause drowsiness and dizziness.

R50- Very toxic to aquatic organisms.

R51/53- Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

R52/53- Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

#### Full text of classifications [DSD/DPD]

F - Highly flammable

Carc. Cat. 3 - Carcinogen category 3

Muta. Cat. 3 - Mutagen category 3

Repr. Cat. 3 - Toxic to reproduction category 3

Xn - Harmful

Xi - Irritant

N - Dangerous for the environment

#### **Notice to reader**

#### FOR PROFESSIONAL USE ONLY

IMPORTANT NOTE The information in this data sheet is not intended to be exhaustive and is based on the present state of our knowledge and on current laws: any person using the product for any purpose other than that specifically recommended in the technical data sheet without first obtaining written confirmation from us as to the suitability of the product for the intended purpose does so at his own risk. It is always the responsibility of the user to take all necessary steps to fulfill the demands set out in the local rules and legislation. Always read the Material Data Sheet and the Technical Data Sheet for this product if available. All advice we give or any statement made about the product by us (whether in this data sheet or otherwise) is correct to the best of our knowledge but we have no control over the quality or the condition of the substrate or the many factors affecting the use and application of the product. Therefore, unless we specifically agree in writing otherwise, we do not accept any liability whatsoever for the performance of the product or for any loss or damage arising out of the use of the product. All products supplied and technical advice given are subject to our standard terms and conditions of sale. You should request a copy of this document and review it carefully. The information contained in this data sheet is subject to modification from time to time in the light of experience and our policy of continuous development. It is the user's responsibility to verify that this data sheet is current prior to using the product.

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#### Head Office

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Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Commission Regulation (EU) 2015/830

Aviox 37124 CF Primer



## **SECTION 16: Other information**

AkzoNobel Aerospace Coatings, Rijksstraatweg 31 2171 AJ Sassenheim. http://www.akzonobel.com/aerospace

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