

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

- **Product identifier**
- **Trade name:** 49174 (Hardman Epocap 19174 Part A)
- **Article number:** 49174
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
Royal Adhesives And Sealants, LLC
2001 W. Washington Street
South Bend IN 46628-2023
- **Information department:** Environment protection department.
- **Emergency telephone number:** ChemTrec: UNITED STATES 1(800)424-9300 INTERNATIONAL 703-527-3887

* **2 Hazards identification**

- **Classification of the substance or mixture**
Carc. 2 H351 Suspected of causing cancer.
Skin Irrit. 2 H315 Causes skin irritation.
H319 Causes serious eye irritation.
Skin Sens. 1 H317 May cause an allergic skin reaction.
H227 Combustible liquid.
Acute Tox. 5 H333 May be harmful if inhaled.
- **Classification according to Directive 67/548/EEC or Directive 1999/45/EC**
Harmful
Limited evidence of a carcinogenic effect.
Irritant
Irritating to eyes and skin. May cause sensitisation by skin contact.
Dangerous for the environment
Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- **Classification system:**
The classification was made according to the latest editions of international substances lists, and expanded upon from company and literature data.
- **Label elements**
- **Labelling according to EU guidelines:**
The product has been classified and marked in accordance with directives on hazardous materials.
- **Code letter and hazard designation of product:**
Harmful
Dangerous for the environment
- **Hazard-determining components of labelling:**
Epoxy Resin
antimony trioxide
Benzyl alcohol
- **Risk phrases:**
Irritating to eyes and skin.
Limited evidence of a carcinogenic effect.
May cause sensitisation by skin contact.
Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

(Contd. on page 2)

Material Safety Data Sheet

acc. to ISO/DIS 11014

Printing Date 08/03/2012

Revision Number 1

Reviewed on 08/03/2012

Trade name: 49174 (Hardman Epocap 19174 Part A)

(Contd. of page 1)

· **Safety phrases:**

Keep out of the reach of children.

Do not breathe gas/fumes/vapour/spray (appropriate wording to be specified by the manufacturer).

Do not empty into drains, dispose of this material and its container at hazardous or special waste collection point.

Wear suitable protective clothing, gloves and eye/face protection.

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

Use only in well-ventilated areas.

· **Special labelling of certain preparations:**

Contains epoxy constituents. See information supplied by the manufacturer.

· **Classification system:**

· **NFPA ratings (scale 0 - 4)**



Health = 2

Fire = 2

Reactivity = 0

· **HMIS-ratings (scale 0 - 4)**

HEALTH	2
FIRE	2
PHYSICAL HAZARD	0

Health = 2

Fire = 2

Physical Hazard = 0

· **Other hazards**

· **Results of PBT and vPvB assessment**

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

3 Composition/information on ingredients

· **Chemical characterization: Mixtures**

· **Description:** Mixture of the substances listed below with nonhazardous and Trade Secret addition(s).

· **Dangerous components:**

For Trade Secret information refer to 29 CFR 1910.120.

	Hydrated Alumina	50-100%
25068-38-6	Epoxy Resin ⚠ Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317	25-50%
	Trade Secret Acute Tox. 5, H333	2.5-10%
100-51-6	Benzyl alcohol ⚠ Acute Tox. 4, H302; Acute Tox. 4, H332	2.5-10%
1309-64-4	antimony trioxide ☠ Carc. 2, H351	≤2.5%
1333-86-4	Carbon black	≤0.5%

· **Additional information:** For the wording of the listed risk phrases refer to section 15.

USA

(Contd. on page 3)

Material Safety Data Sheet

acc. to ISO/DIS 11014

Printing Date 08/03/2012

Revision Number 1

Reviewed on 08/03/2012

Trade name: 49174 (Hardman Epocap 19174 Part A)

(Contd. of page 2)

4 First aid measures

- **Description of first aid measures**
- **After inhalation:**
Remove to fresh air. If not breathing, administer artificial respiration. If breathing is difficult, oxygen should be administered by qualified personnel. Call a physician or transport to a medical facility.
- **After skin contact:** Immediately wash with water and soap and rinse thoroughly.
- **After eye contact:**
Rinse opened eye for 15 minutes under running water. If eye becomes irritated, obtain medical treatment.
- **After swallowing:** Do not induce vomiting. Obtain medical advice.
- **Information for doctor:**
- **Most important symptoms and effects, both acute and delayed** No further relevant information available.
- **Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

5 Firefighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:**
CO₂, extinguishing powder or water spray. Fight larger fires with water spray.
Use fire fighting measures that suit the environment.
- **Advice for firefighters**
- **Protective equipment:** Protective clothing and respiratory protective device.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**
Wear protective equipment. Keep unprotected persons away.
- **Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Dispose of contaminated material as waste in accordance with federal state and local regulations.
Ensure adequate ventilation.
- **Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

7 Handling and storage

- **Handling:**
- **Precautions for safe handling** Ensure good ventilation/exhaustion at the workplace.
- **Information about protection against explosions and fires:** No special measures required.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** Store in a cool location away from direct heat.
- **Information about storage in one common storage facility:** Keep away from open flames and high temperatures.
- **Further information about storage conditions:** Store in cool, dry conditions in well sealed receptacles.

(Contd. on page 4)

USA

Material Safety Data Sheet

acc. to ISO/DIS 11014

Printing Date 08/03/2012

Revision Number 1

Reviewed on 08/03/2012

Trade name: 49174 (Hardman Epocap 19174 Part A)

(Contd. of page 3)

· **Specific end use(s)** No further relevant information available.

8 Exposure controls/personal protection

· **Additional information about design of technical systems:** No further data.

· **Control parameters**

· **Components with limit values that require monitoring at the workplace:**

100-51-6 Benzyl alcohol (2.5-10%)

WEEL 10 ppm

1309-64-4 antimony trioxide ($\leq 0.5\%$)

PEL 0.5 mg/m³

REL 0.5 mg/m³
as Sb

TLV 0.5 mg/m³
as Sb

1333-86-4 Carbon black ($\leq 0.5\%$)

PEL 3.5 mg/m³

REL 3.5* mg/m³
*0.1 in presence of PAHs, as PAHs; 10-hr TWA

TLV 3* mg/m³
*inhalable fraction

· **Additional information:**

This product contains Carbon Black which is not considered hazardous in a wet or encapsulated state. However, if a formula containing hazardous fillers is reduced to a respirable fraction by grinding or putting into an airborne powder, the powder is considered a hazardous material.

The lists that were valid during the creation were used as basis.

· **Exposure controls**

· **Personal protective equipment (see listings below)**

· **General protective and hygienic measures:**

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

· **Breathing equipment:**

Not required.

In the absence of adequate ventilation, use NIOSH-certified respiratory protection for particulate matter/organic vapor. Comply with OSHA 29 CFR 1910.134.

· **Protection of hands:**

Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

· **Material of gloves**

Nitrile rubber, NBR

Chloroprene rubber, CR

· **Eye protection:**

Safety glasses with side shields.



Tightly sealed goggles

(Contd. on page 5)

USA

Material Safety Data Sheet

acc. to ISO/DIS 11014

Printing Date 08/03/2012

Revision Number 1

Reviewed on 08/03/2012

Trade name: 49174 (Hardman Epocap 19174 Part A)

(Contd. of page 4)

- **Body protection:**
Emergency showers and eye wash stations should be available.
Protective work clothing

* 9 Physical and chemical properties

- **Information on basic physical and chemical properties**

- **General Information**

- **Appearance:**

Form: Liquid

Color: Black

- **Odor:** Characteristic

- **Odour threshold:** Not determined.

- **pH-value:** Not determined.

- **Change in condition**

Melting point: Undetermined.

Boiling point: Undetermined.

- **Flash point:** 90°C (194 °F)

- **Flammability (solid, gaseous):** Not applicable.

- **Ignition temperature:**

Decomposition temperature: Not determined.

- **Auto igniting:** Product is not selfigniting.

- **Danger of explosion:** Product does not present an explosion hazard.

- **Flammable limits:**

Lower: Not determined.

Upper: Not determined.

- **Vapor pressure:** Not determined.

- **Specific gravity at 20°C (68 °F):** 1.69 g/cm³ (14.103 lbs/gal)

- **Relative density** Not determined.

- **Vapour density** Not determined.

- **Evaporation rate** Not determined.

- **Solubility in / Miscibility with**

Water: Not miscible or difficult to mix.

- **Segregation coefficient (n-octanol/water):** Not determined.

- **Viscosity:**

Dynamic: Not determined.

Kinematic: Not determined.

- **Solvent content:**

Organic solvents: 3.2 %

VOC (Per EPA 24) N/A GMS/L

Solids content: 96.8 %

- **Other information** No further relevant information available.

USA

(Contd. on page 6)

Material Safety Data Sheet

acc. to ISO/DIS 11014

Printing Date 08/03/2012

Revision Number 1

Reviewed on 08/03/2012

Trade name: 49174 (Hardman Epocap 19174 Part A)

(Contd. of page 5)

10 Stability and reactivity

- **Reactivity**
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions** Strong oxidizing agents.
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** Carbon Monoxide, Carbon Dioxide, Aldehydes, acids.

11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**

· **LD/LC50 values that are relevant for classification:**

1309-64-4 antimony trioxide

Oral	LD50	>20000 mg/kg (rat)
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- **Primary irritant effect:**
- **on the skin:** May irritate the skin.
- **on the eye:** May irritate the eye.
- **Sensitization:** Skin Contact - Sensitization possible through skin contact.
- **Additional toxicological information:**
Preexisting eye, skin and respiratory disorders may be aggravated by exposure to this product.
- **Carcinogenic categories**

· **IARC (International Agency for Research on Cancer)**

1309-64-4	antimony trioxide	2B
1333-86-4	Carbon black	2B

· **NTP (National Toxicology Program)**

None of the ingredients is listed.

12 Ecological information

- **Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.
- **Behavior in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **Ecotoxicological effects:**
- **Remark:** Toxic for fish
- **Additional ecological information:**
- **General notes:**
Water hazard class 2 (Self-assessment): hazardous for water
Do not allow product to reach ground water, water course or sewage system.
Also poisonous for fish and plankton in water bodies.
Toxic for aquatic organisms
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

(Contd. on page 7)

Material Safety Data Sheet

acc. to ISO/DIS 11014

Printing Date 08/03/2012

Revision Number 1

Reviewed on 08/03/2012

Trade name: 49174 (Hardman Epocap 19174 Part A)

(Contd. of page 6)

· **Other adverse effects** No further relevant information available.

13 Disposal considerations

- **Waste treatment methods**
- **Recommendation:**
Disposal must be made according Federal, State and local regulations.
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packagings:**
- **Recommendation:**
Disposal must be made according to official regulations.
Packagings that cannot be cleansed are to be disposed of in the same manner as the product.

14 Transport information

- | | |
|--|--|
| · UN-Number | |
| · DOT, ADR, ADN, IMDG, IATA | Void |
| · UN proper shipping name | |
| · DOT, ADR, ADN, IMDG, IATA | Void |
| · Transport hazard class(es) | |
| · DOT, ADR, ADN, IMDG, IATA | |
| · Class | Void |
| · Packing group | |
| · DOT, ADR, IMDG, IATA | Void |
| · Special precautions for user | Not applicable. |
| · Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code | Not applicable. |
| · Transport/Additional information: | Epoxy Resin - This product is not considered to be DOT hazardous when transported via any mode within the United States. However, if this product is transported to or within the European Community it is considered to be an Environmentally Hazardous Substance, Liquid Epoxy Resin, UN3082, Class 9. |
| · UN "Model Regulation": | - |

15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Sara**

· **Section 355 (extremely hazardous substances):**

None of the ingredients is listed.

· **Section 313 (Specific toxic chemical listings):**

1309-64-4 antimony trioxide

· **TSCA (Toxic Substances Control Act):**

All components of this product are on the TSCA Inventory or are exempt from TSCA Inventory requirements.

(Contd. on page 8)

USA

Material Safety Data Sheet

acc. to ISO/DIS 11014

Printing Date 08/03/2012

Revision Number 1

Reviewed on 08/03/2012

Trade name: 49174 (Hardman Epocap 19174 Part A)

(Contd. of page 7)

· **Proposition 65**

· **Chemicals known to cause cancer:**

1309-64-4	antimony trioxide
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· **Chemicals known to cause reproductive toxicity:**

None of the ingredients is listed.

· **(DSL) Canada Domestic Substance List**

All components of this product are on the DSL(Canada Domestic Substance list) or are exempt from DSL requirements.

· **Carcinogenicity categories**

· **EPA (Environmental Protection Agency)**

None of the ingredients is listed.

· **TLV (Threshold Limit Value established by ACGIH)**

1309-64-4	antimony trioxide	A2
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1333-86-4	Carbon black	A4
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· **MAK (German Maximum Workplace Concentration)**

1309-64-4	antimony trioxide	2
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1333-86-4	Carbon black	3B
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· **NIOSH-Ca (National Institute for Occupational Safety and Health)**

1333-86-4	Carbon black	
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· **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

· **Product related hazard informations:**

The product has been classified and marked in accordance with directives on hazardous materials.

· **Hazard-determining components of labelling:**

Epoxy Resin

antimony trioxide

Benzyl alcohol

· **Risk phrases:**

Irritating to eyes and skin.

Limited evidence of a carcinogenic effect.

May cause sensitisation by skin contact.

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

· **Special labeling of certain preparations:**

Contains epoxy constituents. See information supplied by the manufacturer.

· **National regulations:**

· **Water hazard class:** Water hazard class 2 (Self-assessment): hazardous for water.

· **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

* **16 Other information**

(Contd. on page 9)

USA

Material Safety Data Sheet

acc. to ISO/DIS 11014

Printing Date 08/03/2012

Revision Number 1

Reviewed on 08/03/2012

Trade name: 49174 (Hardman Epocap 19174 Part A)

(Contd. of page 8)

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· **Department issuing MSDS:** Environment protection department.

· **Abbreviations and acronyms:**

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

ICAO: International Civil Aviation Organization

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

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