

Material Safety Data Sheet
acc. to ISO/DIS 11014

Printing Date 07/20/2010

Revision Number 1




Reviewed on 10/08/2009

1 Identification of substance

- **Product details**
- **Trade name:** 46505 (Hardman Epocap 16505 Part A)
- **Article number:** 46505
- **Manufacturer/Supplier:**
 Royal Adhesives And Sealants, LLC
 2001 W. Washington Street
 South Bend IN 46628-2023
- **Information department:** Environment protection department.
- **Emergency information:** ChemTrec: UNITED STATES 1(800)424-9300 INTERNATIONAL 202-483-7616

2 Composition/Data on components

- **Chemical characterization**
- **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.

25068-38-6	Epoxy Resin	Warning:  3.2/2, 3.3/2A, 3.4.S/1  4.1.C/2	25-50%
471-34-1	calcium carbonate		25-50%
	Trade Secret	Warning:  3.2/2, 3.4.S/1	2.5-10%
	Amorphous Fumed Silica		≤2.5%
14808-60-7	Quartz (SiO ₂)		≤2.5%

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

3 Hazards identification

- **Hazard description:**
 Irritant
 Dangerous for the environment
- **Information pertaining to particular dangers for man and environment:**
 Irritating to eyes and skin.
 May cause sensitisation by skin contact.
 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
 Contains epoxy constituents. See information supplied by the manufacturer.
- **Classification system:**
 The classification was made according to the latest editions of international substances lists, and expanded upon from company and literature data.
- **NFPA ratings (scale 0 - 4)**



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· **HMIS-ratings (scale 0 - 4)**

HEALTH	2	Health = 2
FIRE	1	Fire = 1
PHYSICAL HAZARD	0	Physical Hazard = 0

· **GHS label elements**

Exclamation mark **Warning**

3.2/2 - Causes skin irritation.

3.3/2A - Causes serious eye irritation.

3.4/1 - May cause an allergic skin reaction.

Environment

4.1/2 - Toxic to aquatic life with long lasting effects.

· **Prevention:**

Avoid breathing dust/fume/gas/mist/vapours/spray.

Wear protective gloves/protective clothing/eye protection/face protection.

· **Response:**

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing.

Specific treatment (see on this label).

Take off contaminated clothing and wash before reuse.

· **Disposal:**

Dispose of contents/container in accordance with local/regional/national/international regulations.

4 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.

Supply fresh air and to be sure call for a doctor.

In case of unconsciousness place patient stably in side position for transportation.

Call a doctor immediately.

Overexposure, remove to fresh air and seek medical attention.

· **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.

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

· **After swallowing:**

Contact a doctor, medical facility, or poison control center for advice about whether to induce vomiting.

Swallowing small amounts of this product during normal handling is not likely to cause harmful effects.

Swallowing large amounts may be harmful.

Seek medical treatment.

5 Fire fighting measures

· **Suitable extinguishing agents:** CO₂, extinguishing powder or water spray. Fight larger fires with water spray.

· **Protective equipment:** Protective clothing and respiratory protective device.

6 Accidental release measures

· **Person-related safety precautions:** Wear protective equipment. Keep unprotected persons away.

· **Measures for environmental protection:** Do not allow to enter sewers/ surface or ground water.

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· **Measures for cleaning/collecting:**

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.

7 Handling and storage

· **Handling:**

- **Information for safe handling:** Ensure good ventilation/exhaustion at the workplace.
- **Information about protection against explosions and fires:** No special measures required.

· **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.

8 Exposure controls and personal protection

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

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

471-34-1 calcium carbonate (25-50%)

PEL	15* 5** mg/m ³ *total dust **respirable fraction
REL	10* 5** mg/m ³ *total dust **respirable fraction
TLV	TLV withdrawn

14808-60-7 Quartz (SiO₂) (≤2.5%)

PEL	see Quartz listing
REL	0.05* mg/m ³ *respirable dust
TLV	0.025* mg/m ³ *as respirable fraction

· **Additional information:**

This product contains crystalline silica (Quartz) which is not 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.

· **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 when chemical exposure is excessive or above an established exposure limit. 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.

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- **Material of gloves**
Nitrile rubber, NBR
Chloroprene rubber, CR
- **Eye protection:**
Safety glasses with side shields.



Tightly sealed goggles

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

9 Physical and chemical properties

· General Information

Form:	Liquid
Color:	Off White
Odor:	Characteristic

· Change in condition

Melting point:	Undetermined.
Boiling point:	Undetermined.

Flash point:	> 96°C (> 205°F)
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Auto igniting:	Product is not selfigniting.
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Danger of explosion:	Product does not present an explosion hazard.
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Specific gravity at 20°C (68°F):	1.55 g/cm ³
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· Solubility in / Miscibility with

Water:	Not miscible or difficult to mix.
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· Solvent content:

Organic solvents:	0.0 %
VOC (Per EPA 24)	N/A GMS/L

Solids content:	100.0 %
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10 Stability and reactivity

- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Materials to be avoided:**
- **Dangerous reactions** Strong oxidizing agents.
- **Dangerous products of decomposition:** Carbon Monoxide, Carbon Dioxide, Aldehydes, acids.

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11 Toxicological information

- **Acute toxicity:**
- **Primary irritant effect:**
- **on the skin:**
May irritate the skin.
Irritant to skin and mucous membranes.
- **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.

12 Ecological information

- **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

13 Disposal considerations

- **Product:**
- **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

- **DOT regulations:** Non-hazardous via all transport modes.
- **Hazard class:** -
Non-Hazardous
- **Land transport ADR/RID (cross-border):**
- **ADR/RID class:** -
Not Regulated
- **Maritime transport IMDG:**
- **IMDG Class:** Not Regulated
- **Air transport ICAO-TI and IATA-DGR:**
- **ICAO/IATA Class:** Not Regulated
- **UN "Model Regulation":** -

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· **Environmental hazards:** Product contains environmentally hazardous substances: Epoxy Resin

· **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.

15 Regulations

· **Sara**

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

None of the ingredients is listed.

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

None of the ingredients is listed.

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

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

· **Proposition 65**

· **Chemicals known to cause cancer:**

14808-60-7 Quartz (SiO₂)

· **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.

· **Carcinogen categories**

· **EPA (Environmental Protection Agency)**

None of the ingredients is listed.

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

14808-60-7 Quartz (SiO₂) I

· **NTP (National Toxicology Program)**

14808-60-7 Quartz (SiO₂) K

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

14808-60-7 Quartz (SiO₂) A2

· **MAK (German Maximum Workplace Concentration)**

14808-60-7 Quartz (SiO₂) I

· **NIOSH-Ca (National Institute for Occupational Safety and Health)**

14808-60-7 Quartz (SiO₂)

· **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
Trade Secret

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· **Risk phrases:**

Irritating to eyes and skin.

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.

* 16 Other information

Although the information and recommendations set forth in this MSDS are presented in good faith and are believed to be correct as of the date of this MSDS, Royal Adhesives & Sealants makes no representations as to the completeness or accuracy thereof. Information is supplied on the condition that the persons receiving and using it will make their own determination as to the suitability for their purpose prior to use. In no event will Royal Adhesives & Sealants or any affiliate thereof be responsible for damages of any nature whatsoever resulting from the use or reliance on the information set forth in the MSDS.

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

· **Abbreviations and acronyms:**

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

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

DOT: US Department of Transportation

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

ACGIH: American Conference of Governmental Industrial Hygienists

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

USA