

Safety Data Sheet
acc. to OSHA HCS

Printing Date 01/29/2014

Revision Number 2

Revision Date 01/29/2014

1 Identification

- **Product identifier**
- **Trade name:** 47020 (Hardman Epoweld 7020 Part A)
- **Article number:** 47020
- **Relevant identified uses of the substance or mixture.** Adhesive
- **Application of the substance / the mixture** Epoxy resin adhesive
- **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 Phone Number: 574-246-5000
- **Information department:** Environment protection department.
- **Emergency telephone number:** ChemTrec: UNITED STATES 1(800)424-9300 INTERNATIONAL 703-527-3887

2 Hazard(s) identification

- **Classification of the substance or mixture**



GHS08 Health hazard

Muta. 2 H341 Suspected of causing genetic defects.

Carc. 2 H351 Suspected of causing cancer.



GHS07

Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2A H319 Causes serious eye irritation.

Skin Sens. 1 H317 May cause an allergic skin reaction.

H227 Combustible liquid.

- **Label elements**
- **GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).
- **Hazard pictograms**



GHS07



GHS08

- **Signal word** Warning
- **Hazard statements**
Combustible liquid.
Causes skin irritation.
Causes serious eye irritation.
May cause an allergic skin reaction.

(Contd. on page 2)

Safety Data Sheet

acc. to OSHA HCS

Printing Date 01/29/2014

Revision Number 2

Revision Date 01/29/2014

Trade name: 47020 (Hardman Epoweld 7020 Part A)

(Contd. of page 1)

Suspected of causing genetic defects.

Suspected of causing cancer.

· Precautionary statements

If medical advice is needed, have product container or label at hand.

Keep out of reach of children.

Read label before use.

Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

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

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).

Store locked up.

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

· Classification system:

· NFPA ratings (scale 0 - 4)



Health = 3

Fire = 2

Reactivity = 0

· HMIS-ratings (scale 0 - 4)



Health = 3

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 additions.

· Dangerous components:

25068-38-6	Bisphenol A Epoxy Resin	50-100%
2426-08-6	butyl glycidyl ether	2.5-10%
	Glycidyl Ether	2.5-10%

* 4 First-aid measures

· Description of first aid measures

· After inhalation:

Supply fresh air or oxygen; call for doctor.

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

· After skin contact: Immediately wash with water and soap and rinse thoroughly.

· After eye contact: Rinse opened eye for several minutes under running water.

· After swallowing:

Induce vomiting and call for medical help.

Seek medical treatment.

(Contd. on page 3)

Safety Data Sheet

acc. to OSHA HCS

Printing Date 01/29/2014

Revision Number 2

Revision Date 01/29/2014

Trade name: 47020 (Hardman Epoweld 7020 Part A)

(Contd. of page 2)

- **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 Fire-fighting 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** Use water spray in a fire condition.

* 6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**
Wear protective equipment. Keep unprotected persons away.
Ensure adequate ventilation
- **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:** Keep ignition sources away - Do not smoke.
- **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:**
Store away from flammable substances.
Store away from oxidizing agents.
- **Further information about storage conditions:** Store in cool, dry conditions in well sealed receptacles.
- **Specific end use(s)** No further relevant information available.

* 8 Exposure controls/personal protection

- **Control parameters**
- **Components with limit values that require monitoring at the workplace:**

	2426-08-6 butyl glycidyl ether (2.5-10%)
--	--

PEL	Long-term value: 270 mg/m ³ , 50 ppm
-----	---

(Contd. on page 4)

Safety Data Sheet

acc. to OSHA HCS

Printing Date 01/29/2014

Revision Number 2

Revision Date 01/29/2014

Trade name: 47020 (Hardman Epoweld 7020 Part A)

(Contd. of page 3)

REL Short-term value: C 30* mg/m³, C 5.6* ppm
*15-min

TLV Long-term value: 16 mg/m³, 3 ppm
Skin; (SEN), NIC-DSEN

· **Additional information:** 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:**

Use approved respiratory protection equipment when airborne exposure is excessive. Consult the respirator manufacturer to determine the appropriate type of equipment for a given application. Observe respirator use limitations specified by the manufacturer.

· **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

· **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· **Eye protection:**

Safety glasses with side shields.



Tightly sealed goggles

· **Body protection:** Protective work clothing

* 9 Physical and chemical properties

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

· **General Information**

· **Appearance:**

Form: Liquid

Color: Clear

· **Odor:** Characteristic

· **Change in condition**

Melting point: Undetermined.

Boiling point: Undetermined.

· **Flash point:** 69 °C (156 °F)

(Contd. on page 5)

Safety Data Sheet

acc. to OSHA HCS

Printing Date 01/29/2014

Revision Number 2

Revision Date 01/29/2014

Trade name: 47020 (Hardman Epoweld 7020 Part A)

(Contd. of page 4)

- | | |
|--|---|
| · Ignition temperature: | 215 °C (419 °F) |
| · Auto igniting: | Product is not selfigniting. |
| · Danger of explosion: | Product does not present an explosion hazard. |
| · Vapor pressure at 20 °C (68 °F): | 3.5 hPa (3 mm Hg) |
| · Specific gravity at 20 °C (68 °F): | 1.14 g/cm ³ (9.513 lbs/gal) |
| · Solubility in / Miscibility with Water: | Not miscible or difficult to mix. |
| · Solvent content: | |
| Organic solvents: | 0.0 % |
| VOC (Per EPA 24) | N/A GMS/L |
| · Other information | No further relevant information available. |

10 Stability and reactivity

- **Reactivity**
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid heat, flames, sparks, hot surfaces, ignition sources.**
- **Incompatible materials:** Reacts with oxidizing agents.
- **Hazardous decomposition products:** Carbon monoxide and carbon dioxide

11 Toxicological information

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

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

2426-08-6 butyl glycidyl ether

Oral	LD50	2050 mg/kg (rat)
Dermal	LD50	2520 mg/kg (rabbit)

- **Primary irritant effect:**
- **on the skin:** Skin irritant.
- **on the eye:** Irritating effect.
- **Sensitization:** Skin Contact - Sensitization possible through skin contact.
- **Additional toxicological information:**
- **Carcinogenic categories**

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

None of the ingredients is listed.

· **NTP (National Toxicology Program)**

None of the ingredients is listed.

USA

(Contd. on page 6)

Safety Data Sheet

acc. to OSHA HCS

Printing Date 01/29/2014

Revision Number 2

Revision Date 01/29/2014

Trade name: 47020 (Hardman Epoweld 7020 Part A)

(Contd. of page 5)

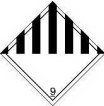

12 Ecological information

- **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:** At present there are no ecotoxicological assessments.
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

13 Disposal considerations

- **Waste treatment methods**
- **Recommendation:** Must be specially treated adhering to official regulations.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.

14 Transport information

- | | |
|-------------------------------------|---|
| · UN-Number | |
| · DOT, ADR, IMDG, IATA | UN3082 |
| · UN proper shipping name | |
| · DOT | Environmentally hazardous substances, liquid, n.o.s. (Bisphenol A Epoxy Resin) |
| · ADR | 3082 Environmentally hazardous substances, liquid, n.o.s. (Bisphenol A Epoxy Resin) |
| · IMDG | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Bisphenol A Epoxy Resin), MARINE POLLUTANT |
| · IATA | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Bisphenol A Epoxy Resin) |
| · Transport hazard class(es) | |
| · DOT, ADR, IMDG, IATA | |
| |   |
| · Class | 9 Miscellaneous dangerous substances and articles. |
| · Label | 9 |

(Contd. on page 7)

USA

Safety Data Sheet

acc. to OSHA HCS

Printing Date 01/29/2014

Revision Number 2

Revision Date 01/29/2014

Trade name: 47020 (Hardman Epoweld 7020 Part A)

(Contd. of page 6)

· Packing group · DOT, ADR, IMDG, IATA	III
· Environmental hazards:	Product contains environmentally hazardous substances: Bisphenol A Epoxy Resin
· Marine pollutant:	Symbol (fish and tree)
· Special marking (ADR):	Symbol (fish and tree)
· Special marking (IATA):	Symbol (fish and tree)
· Special precautions for user	Warning: Miscellaneous dangerous substances and articles
· Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.
· Transport/Additional information:	Not dangerous according to the above specifications.
· DOT · Remarks:	Special marking with the symbol (fish and tree).
· UN "Model Regulation":	UN3082, Environmentally hazardous substances, liquid, n.o.s. (Bisphenol A Epoxy Resin), 9, III

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):
--

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:

None of the ingredients is listed.

· 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.
--

· Cancerogenity categories

· EPA (Environmental Protection Agency)
--

None of the ingredients is listed.

· TLV (Threshold Limit Value established by ACGIH)

None of the ingredients listed.

· MAK (German Maximum Workplace Concentration)

2426-08-6 butyl glycidyl ether	3B
--------------------------------	----

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

None of the ingredients is listed.

(Contd. on page 8)

Safety Data Sheet

acc. to OSHA HCS

Printing Date 01/29/2014

Revision Number 2

Revision Date 01/29/2014

Trade name: 47020 (Hardman Epoweld 7020 Part A)

(Contd. of page 7)

· **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

· **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

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.

· **Creation Date:** 10/08/2009

· **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

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent