

Material Safety Data Sheet
acc. to ISO/DIS 11014

Printing Date 06/08/2010

Revision Number 2

Reviewed on 11/06/2009

1 Identification of substance

- **Product details**
- **Trade name:** 52420 (Hardman Epocure EP-2420-TC Part B)
- **Article number:** 52420
- **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:**
- **CAS No. Description**
 Aliphatic Amine
- **Identification number(s)** N/A
- **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.

3 Hazards identification

- **Hazard description:** Not applicable.
- **Information pertaining to particular dangers for man and environment:** Not applicable.
- **Classification system:**
- **NFPA ratings (scale 0 - 4)**



- **HMIS-ratings (scale 0 - 4)**



- **GHS label elements**
 Corrosion **Danger**
 3.2/1C - Causes severe skin burns and eye damage.
- **Prevention:**
 Do not breathe dust/fume/gas/mist/vapours/spray.
- **Response:**
 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.
 Continue rinsing.
 Immediately call a POISON CENTER or doctor/physician.
- **Storage:**
 Store locked up.

(Contd. on page 2)

Material Safety Data Sheet

acc. to ISO/DIS 11014

Printing Date 06/08/2010

Revision Number 2

Reviewed on 11/06/2009

Trade name: 52420 (Hardman Epocure EP-2420-TC Part B)

(Contd. of page 1)

- **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.
- **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; immediately call for medical help.

* 5 Fire fighting measures

- **Suitable extinguishing agents:**
CO₂, extinguishing powder or water spray. Fight larger fires with water spray.
Use fire fighting measures that suit the environment.
- **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.
- **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:**
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- **Additional information:** The lists that were valid during the creation were used as basis.

(Contd. on page 3)

Material Safety Data Sheet

acc. to ISO/DIS 11014

Printing Date 06/08/2010

Revision Number 2

Reviewed on 11/06/2009

Trade name: 52420 (Hardman Epocure EP-2420-TC Part B)

(Contd. of page 2)

- **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 skin.
 - Avoid contact with the eyes.
- **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
- **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:	Colorless
Odor:	Amine-like

· Change in condition

Melting point:	Undetermined.
Boiling point:	Undetermined.

· **Flash point:** > 120°C (> 248°F)

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

· **Specific gravity at 20°C (68°F):** 1.01 g/cm³

· 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

USA

(Contd. on page 4)

Material Safety Data Sheet

acc. to ISO/DIS 11014

Printing Date 06/08/2010

Revision Number 2

Reviewed on 11/06/2009

Trade name: 52420 (Hardman Epocure EP-2420-TC Part B)

(Contd. of page 3)

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, Nitrogen Oxides, Ammonia.

11 Toxicological information

- **Acute toxicity:**

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

4246-51-9 Aliphatic Polyamine

Oral	LD50	3160 mg/kg (rat)
Dermal	LD50	2500 mg/kg (rabbit)

- **Primary irritant effect:**

- **on the skin:** Corrosive to the skin.

- **on the eye:**

Strong irritant with the danger of severe eye injury.

Vapors may be irritating to the eyes.

- **Sensitization:** Skin Contact - Sensitization possible through skin contact.

- **Additional toxicological information:**

Ingestion - May cause severe irritation to mouth, throat and stomach.

Inhalation - Vapors may be severely irritating to the respiratory tract.

When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

Irritant

12 Ecological information

- **Additional ecological information:**

- **General notes:**

Water hazard class 1 (Self-assessment): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

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.

USA

(Contd. on page 5)

Material Safety Data Sheet

acc. to ISO/DIS 11014

Printing Date 06/08/2010

Revision Number 2

Reviewed on 11/06/2009

Trade name: 52420 (Hardman Epocure EP-2420-TC Part B)

(Contd. of page 4)

14 Transport information

· DOT regulations:



- **Hazard class:** 8
- **Identification number:** UN1760
- **Packing group:** III
- **Proper shipping name (technical name):** Corrosive Liquids, n.o.s. (Aliphatic Amine)
- **Label:** 8
This product meets the criteria

· Land transport ADR/RID (cross-border):



- **ADR/RID class:** 8 Corrosive substances
- **UN-Number:** 1760
- **Packaging group:** III
- **Description of goods:** 1760 CORROSIVE LIQUID, N.O.S.

· Maritime transport IMDG:



- **UN Number:** 1760
- **Label:** 8
- **Packaging group:** III
- **Propper shipping name:** CORROSIVE LIQUID, N.O.S.

· Air transport ICAO-TI and IATA-DGR:



- **UN/ID Number:** 1760
- **Label:** 8
- **Packaging group:** III
- **Propper shipping name:** CORROSIVE LIQUID, N.O.S.

· **UN "Model Regulation":** UN1760, CORROSIVE LIQUID, N.O.S. (Aliphatic Amine), 8, III

15 Regulations

· Sara

· Section 355 (extremely hazardous substances):

Substance is not listed.

(Contd. on page 6)

Material Safety Data Sheet

acc. to ISO/DIS 11014

Printing Date 06/08/2010

Revision Number 2

Reviewed on 11/06/2009

Trade name: 52420 (Hardman Epocure EP-2420-TC Part B)

(Contd. of page 5)

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

Substance is not listed.

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

Substance is listed.

· **Proposition 65**

· **Chemicals known to cause cancer:**

Substance is not listed.

· **Chemicals known to cause reproductive toxicity:**

Substance is not 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)**

Substance is not listed.

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

Substance is not listed.

· **NTP (National Toxicology Program)**

Substance is not listed.

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

.

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

Substance is not listed.

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

Substance is not listed.

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

Substance is not listed.

· **Product related hazard informations:**

Observe the general safety regulations when handling chemicals.

The substance is not subject to classification according to the sources of literature known to us.

· **National regulations:**

· **Water hazard class:** Water hazard class 1 (Self-assessment): slightly 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.

(Contd. on page 7)

USA

Material Safety Data Sheet

acc. to ISO/DIS 11014

Printing Date 06/08/2010

Revision Number 2

Reviewed on 11/06/2009

Trade name: 52420 (Hardman Epocure EP-2420-TC Part B)

(Contd. of page 6)

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)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)

ICAO: International Civil Aviation Organization

ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

ACGIH: American Conference of Governmental Industrial Hygienists

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

USA