

# SAFETY DATA SHEET **EPO-TEK GD2191 Part A**

# 1. Identification

**Product identifier** 

**Product name** EPO-TEK GD2191 Part A

Product number GD2191/A

Recommended use of the chemical and restrictions on use

Application Adhesive.

Details of the supplier of the safety data sheet

Epoxy Technology, Inc. Supplier

> 14 Fortune Drive Billerica, MA 01821

**USA** 

(978) 667-3805 (978) 663-9782 www.epotek.com

**Emergency telephone number** 

**Emergency telephone** +1 (800) 255-3924, +1 (813) 248-0585

# 2. Hazard(s) identification

# Classification of the substance or mixture

Physical hazards

Health hazards Acute Tox. 4 - H332 Skin Irrit. 2 - H315 Eye Dam. 1 - H318 Skin Sens. 1 - H317 STOT SE 1 -

H370 STOT SE 3 - H335

**Environmental hazards** Aquatic Chronic 2 - H411

# Label elements

## **Pictogram**









# Signal word

Hazard statements

Danger

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H318 Causes serious eye damage.

H332 Harmful if inhaled.

H335 May cause respiratory irritation. H370 Causes damage to organs.

H411 Toxic to aquatic life with long lasting effects.

# **EPO-TEK GD2191 Part A**

**Precautionary statements** P280 Wear protective gloves/protective clothing/eye protection/face protection.

P302+P352 If on skin: Wash with plenty of water.

P304+P340 If inhaled: Remove person to fresh air and keep comfortable for breathing. P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact

lenses, if present and easy to do. Continue rinsing.

P333+P313 If skin irritation or rash occurs: Get medical advice/attention. P501 Dispose of contents/container in accordance with national regulations.

Contains Epoxy Resin Blend, Reactive Diluent Blend, Polar Activator

## 3. Composition/information on ingredients

#### **Mixtures**

Epoxy Resin Blend
CAS number: Proprietary

Classification
Skin Irrit. 2 - H315
Eye Irrit. 2 - H319

Reactive Diluent Blend 10-30%

CAS number: Proprietary

Skin Sens. 1 - H317 Aquatic Chronic 2 - H411

# Classification

Acute Tox. 4 - H302 Acute Tox. 4 - H312 Acute Tox. 4 - H332 Skin Irrit. 2 - H315 Eye Dam. 1 - H318

Eye Dam. 1 - H318 Skin Sens. 1 - H317

Polar Activator 1-5%

CAS number: Proprietary

#### Classification

Flam. Liq. 2 - H225 Acute Tox. 3 - H301 Acute Tox. 3 - H311 Acute Tox. 3 - H331 STOT SE 1 - H370

The Full Text for all Hazard Statements are Displayed in Section 16.

#### 4. First-aid measures

# Description of first aid measures

General information Move affected person to fresh air at once. Get medical attention if any discomfort continues.

**Inhalation** Move affected person to fresh air at once. Keep affected person warm and at rest. Get

medical attention immediately.

# **EPO-TEK GD2191 Part A**

**Ingestion** Do not induce vomiting. Rinse mouth thoroughly with water. Get medical attention

immediately.

Skin Contact Remove affected person from source of contamination. Remove contaminated clothing. Wash

skin thoroughly with soap and water. Get medical attention if any discomfort continues.

Eye contact Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15

minutes. Continue to rinse for at least 15 minutes. Get medical attention if any discomfort

continues.

#### Most important symptoms and effects, both acute and delayed

General information Causes damage to organs.

**Inhalation** Harmful if inhaled. May cause respiratory irritation.

**Ingestion** May cause discomfort if swallowed.

**Skin contact** Causes skin irritation. May cause sensitization by skin contact.

**Eye contact** Causes serious eye damage.

## Indication of immediate medical attention and special treatment needed

**Notes for the doctor** Treat symptomatically.

#### 5. Fire-fighting measures

#### **Extinguishing media**

Suitable extinguishing media Extinguish with the following media: Water spray, fog or mist. Foam. Powder.

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

Hazardous combustion Thermal decomp

products

firefighting

Thermal decomposition or combustion products may include the following substances:

Carbon monoxide (CO). Carbon dioxide (CO2).

Advice for firefighters

Protective actions during

Avoid breathing fire gases or vapors. Use water to keep fire exposed containers cool and

disperse vapors.

Special protective equipment

for firefighters

Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective

clothing.

#### 6. Accidental release measures

# Personal precautions, protective equipment and emergency procedures

**Personal precautions** Wear protective clothing as described in Section 8 of this safety data sheet.

**Environmental precautions** 

**Environmental precautions** Avoid release to the environment.

## Methods and material for containment and cleaning up

Methods for cleaning up Provide adequate ventilation. Wear suitable protective equipment, including gloves,

goggles/face shield, respirator, boots, clothing or apron, as appropriate. Absorb in vermiculite,

dry sand or earth and place into containers.

**Reference to other sections** For personal protection, see Section 8.

# 7. Handling and storage

#### Precautions for safe handling

# **EPO-TEK GD2191 Part A**

Usage precautions Avoid spilling. Avoid contact with skin and eyes. Provide adequate ventilation. Avoid inhalation

of vapors. Use approved respirator if air contamination is above an acceptable level. Persons

susceptible to allergic reactions should not handle this product.

Advice on general occupational hygiene

Provide eyewash station. Do not eat, drink or smoke when using this product. Wash after use and before eating, smoking and using the toilet. Wash contaminated clothing before reuse.

Use appropriate skin cream to prevent drying of skin.

# Conditions for safe storage, including any incompatibilities

Storage precautions Store at room temperature. Keep container tightly sealed when not in use.

Specific end uses(s)

Specific end use(s) The identified uses for this product are detailed in Section 1.2.

# 8. Exposure Controls/personal protection

#### Control parameters

# Occupational exposure limits

#### **Polar Activator**

Long-term exposure limit (8-hour TWA): ACGIH 200 ppm Short-term exposure limit (15-minute): ACGIH 250 ppm

ACGIH = American Conference of Governmental Industrial Hygienists.

## **Exposure controls**

#### Protective equipment





Appropriate engineering

controls

Provide adequate general and local exhaust ventilation.

**Eye/face protection** Wear tight-fitting, chemical splash goggles or face shield.

**Hand protection** It is recommended that chemical-resistant, impervious gloves are worn.

Other skin and body

protection

Wear appropriate clothing to prevent any possibility of liquid contact and repeated or

prolonged vapor contact.

Hygiene measures Do not smoke in work area. Wash hands at the end of each work shift and before eating,

smoking and using the toilet. Wash promptly with soap and water if skin becomes

contaminated. Promptly remove any clothing that becomes contaminated. When using do not

eat, drink or smoke.

**Respiratory protection** If ventilation is inadequate, suitable respiratory protection must be worn.

## 9. Physical and Chemical Properties

# Information on basic physical and chemical properties

Appearance Paste.

Color Tan.

Odor Mild.

Flash point > 93°C

**Evaporation rate** <BuAc

Vapour density >1

# **EPO-TEK GD2191 Part A**

Solubility(ies) Slightly soluble in water.

Other information None.

10. Stability and reactivity

**Reactivity** The following materials may react with the product: Strong oxidizing agents. Strong reducing

agents.

**Stability** Stable at normal ambient temperatures.

Possibility of hazardous

reactions

Will not polymerize.

**Conditions to avoid** Avoid heat, flames and other sources of ignition.

Materials to avoid Strong oxidizing agents. Strong acids. Strong alkalis.

Hazardous decomposition

products

Heating may generate the following products: Toxic gases/vapors/fumes of: Carbon dioxide

(CO2). Carbon monoxide (CO).

# 11. Toxicological information

# Information on toxicological effects

General information Causes damage to organs.

**Inhalation** Harmful if inhaled. May cause respiratory system irritation.

**Ingestion** May cause discomfort if swallowed.

**Skin Contact**Causes skin irritation. May cause sensitisation by skin contact.

**Eye contact** Causes serious eye damage.

12. Ecological Information

**Ecotoxicity**The product contains a substance which is toxic to aquatic organisms and which may cause

long-term adverse effects in the aquatic environment.

**Toxicity** 

Acute toxicity - fish Not available.

Persistence and degradability

Persistence and degradability No data available.

# **EPO-TEK GD2191 Part A**

Bioaccumulative potential

**Bio-Accumulative Potential** No data available on bioaccumulation.

Mobility in soil

**Mobility** The product has poor water-solubility.

Other adverse effects

Other adverse effects Not known.

# 13. Disposal considerations

# Waste treatment methods

Disposal methods Dispose of waste to licensed waste disposal site in accordance with the requirements of the

local Waste Disposal Authority.

#### 14. Transport information

#### **UN Number**

UN No. (DOT) 3082 UN No. (IMDG) 3082

**UN No. (ICAO)** 3082

# UN proper shipping name

Proper shipping name (DOT) ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (CONTAINS Epoxy

Resin Blend)

Proper shipping name

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (CONTAINS Epoxy

(IMDG)

Resin Blend)

Proper shipping name (ICAO) ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (CONTAINS Epoxy

Resin Blend)

# Transport hazard class(es)

DOT hazard class 9

DOT hazard label Class 9

IMDG Class 9

ICAO class/division 9

## Transport labels



# Packing group

DOT pack group

IMDG packing group

ICAO packing group III

**Environmental hazards** 

# **EPO-TEK GD2191 Part A**

# **Environmentally Hazardous Substance**



## Special precautions for user

**EmS** F-A, S-F

Transport in bulk according to Not applicable.

Annex II of MARPOL 73/78

and the IBC Code

# 15. Regulatory information

# **US Federal Regulations**

## SARA Section 302 Extremely Hazardous Substances Tier II Threshold Planning Quantities

None of the ingredients are listed.

# CERCLA/Superfund, Hazardous Substances/Reportable Quantities (EPA)

The following ingredients are listed:

#### **Polar Activator**

5,000 lbs (2270 Kg)

# SARA Extremely Hazardous Substances EPCRA Reportable Quantities

None of the ingredients are listed.

# SARA 313 Emission Reporting

The following ingredients are listed:

**Polar Activator** 

## **CAA Accidental Release Prevention**

None of the ingredients are listed.

## **OSHA Highly Hazardous Chemicals**

None of the ingredients are listed.

# **US State Regulations**

# California Proposition 65 Carcinogens and Reproductive Toxins

None of the ingredients are listed.

# California Air Toxics "Hot Spots" (A-I)

The following ingredients are listed:

**Polar Activator** 

# California Air Toxics "Hot Spots" (A-II)

None of the ingredients are listed.

# Massachusetts "Right To Know" List

The following ingredients are listed:

**Polar Activator** 

# **EPO-TEK GD2191 Part A**

# Rhode Island "Right To Know" List

The following ingredients are listed:

Polar Activator

# Minnesota "Right To Know" List

The following ingredients are listed:

**Polar Activator** 

# New Jersey "Right To Know" List

The following ingredients are listed:

**Polar Activator** 

# Pennsylvania "Right To Know" List

The following ingredients are listed:

**Polar Activator** 

#### Inventories

#### **EU - EINECS/ELINCS**

Some of the ingredients are listed or exempt.

#### Canada - DSL/NDSL

All the ingredients are listed or exempt.

#### US - TSCA

All the ingredients are listed or exempt.

# US - TSCA 12(b) Export Notification

None of the ingredients are listed.

## Australia - AICS

All the ingredients are listed or exempt.

#### Japan - MITI

Some of the ingredients are listed or exempt.

#### Korea - KECI

All the ingredients are listed or exempt.

# China - IECSC

All the ingredients are listed or exempt.

## Philippines - PICCS

All the ingredients are listed or exempt.

## 16. Other information

Revision date 1/15/2016

Revision 1

# **EPO-TEK GD2191 Part A**

Hazard statements in full H225 Highly flammable liquid and vapor.

H301 Toxic if swallowed.

H302 Harmful if swallowed.

H311 Toxic in contact with skin.

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.

H331 Toxic if inhaled.

H332 Harmful if inhaled.

H335 May cause respiratory irritation.

H370 Causes damage to organs.

H411 Toxic to aquatic life with long lasting effects.

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# SAFETY DATA SHEET EPO-TEK GD2191 Part B

1. Identification

**Product identifier** 

Product name EPO-TEK GD2191 Part B

Product number GD2191/B

Recommended use of the chemical and restrictions on use

**Application** Adhesive.

Details of the supplier of the safety data sheet

**Supplier** Epoxy Technology, Inc.

14 Fortune Drive Billerica, MA 01821

USA

(978) 667-3805 (978) 663-9782 www.epotek.com

**Emergency telephone number** 

**Emergency telephone** +1 (800) 255-3924, +1 (813) 248-0585

2. Hazard(s) identification

Classification of the substance or mixture

Physical hazards Not Classified

**Health hazards** Skin Irrit. 2 - H315 Eye Dam. 1 - H318

Environmental hazards Not Classified

Label elements

**Pictogram** 



Signal word Danger

**Hazard statements** H318 Causes serious eye damage.

H315 Causes skin irritation.

**Precautionary statements** P280 Wear protective gloves/protective clothing/eye protection/face protection.

P302+P352 If on skin: Wash with plenty of water.

P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact

lenses, if present and easy to do. Continue rinsing.

P332+P313 If skin irritation occurs: Get medical advice/attention. P362+P364 Take off contaminated clothing and wash it before reuse.

Contains Substituted Imidazole, Reactive Diluent

# **EPO-TEK GD2191 Part B**

## 3. Composition/information on ingredients

#### **Mixtures**

Substituted Imidazole 10-30%

CAS number: Proprietary

Classification

Acute Tox. 4 - H302 Skin Irrit. 2 - H315 Eye Dam. 1 - H318 STOT SE 3 - H335

Reactive Diluent 5-10%

CAS number: Proprietary

Classification

Acute Tox. 4 - H302 Eye Dam. 1 - H318 STOT SE 3 - H336

The Full Text for all Hazard Statements are Displayed in Section 16.

#### 4. First-aid measures

# Description of first aid measures

Inhalation Move affected person to fresh air at once. Rinse nose and mouth with water. Get medical

attention if any discomfort continues.

**Ingestion** Never give anything by mouth to an unconscious person. Do not induce vomiting. Rinse

mouth thoroughly with water. Get medical attention if any discomfort continues.

**Skin Contact** Remove affected person from source of contamination. Remove contaminated clothing. Wash

skin thoroughly with soap and water. Get medical attention if irritation persists after washing.

Eye contact Remove affected person from source of contamination. Remove any contact lenses and open

eyelids wide apart. Continue to rinse for at least 15 minutes. Get medical attention

immediately. Continue to rinse.

# Most important symptoms and effects, both acute and delayed

Inhalation Inhalation of dusts during cutting, grinding or sanding of this product may cause irritation of

the respiratory tract.

**Ingestion** May cause discomfort if swallowed.

**Skin contact** Causes skin irritation.

**Eye contact** Severe irritation, burning and tearing. Corneal damage.

# Indication of immediate medical attention and special treatment needed

Notes for the doctor Treat symptomatically.

#### 5.Fire-fighting measures

# Extinguishing media

**Suitable extinguishing media** Dry chemicals. Foam. Water spray.

# Special hazards arising from the substance or mixture

# **EPO-TEK GD2191 Part B**

Hazardous combustion

products

Thermal decomposition or combustion products may include the following substances:

Carbon monoxide (CO). Carbon dioxide (CO2).

Advice for firefighters

Protective actions during

firefighting

Avoid breathing fire gases or vapors. Use water to keep fire exposed containers cool and

disperse vapors.

Special protective equipment

for firefighters

Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective

clothina.

## 6. Accidental release measures

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

Personal precautions Wear protective clothing as described in Section 8 of this safety data sheet.

**Environmental precautions** 

**Environmental precautions** Avoid release to the environment.

## Methods and material for containment and cleaning up

Methods for cleaning up Stop leak if possible without risk. Absorb in vermiculite, dry sand or earth and place into

containers. Flush contaminated area with plenty of water. Avoid the spillage or runoff entering

drains, sewers or watercourses.

Reference to other sections For personal protection, see Section 8.

#### 7. Handling and storage

#### Precautions for safe handling

Usage precautions Avoid spilling. Avoid contact with skin and eyes. Keep away from heat, sparks and open

flame. Do not eat, drink or smoke when using the product. Provide adequate ventilation.

Protect against direct sunlight.

Advice on general

occupational hygiene

Provide eyewash station. Do not eat, drink or smoke when using this product. Wash promptly if skin becomes contaminated. Wash after use and before eating, smoking and using the

toilet. Wash contaminated clothing before reuse. Use appropriate skin cream to prevent drying

of skin.

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

Storage precautions Store at room temperature. Keep container tightly sealed when not in use.

Storage class Chemical storage.

Specific end uses(s)

Specific end use(s) The identified uses for this product are detailed in Section 1.2.

#### 8. Exposure Controls/personal protection

Ingredient comments No exposure limits known for ingredient(s).

Exposure controls

Protective equipment





Appropriate engineering controls

Provide adequate general and local exhaust ventilation.

# **EPO-TEK GD2191 Part B**

**Eye/face protection** Wear tight-fitting, chemical splash goggles or face shield.

**Hand protection** It is recommended that chemical-resistant, impervious gloves are worn.

Other skin and body

protection

Wear appropriate clothing to prevent any possibility of skin contact.

Hygiene measures Provide eyewash station. Do not smoke in work area. Wash hands at the end of each work

shift and before eating, smoking and using the toilet. Promptly remove any clothing that becomes contaminated. Use appropriate skin cream to prevent drying of skin. When using do

not eat, drink or smoke.

**Respiratory protection** If ventilation is inadequate, suitable respiratory protection must be worn.

#### 9. Physical and Chemical Properties

#### Information on basic physical and chemical properties

Appearance Paste.

Color Tan.

Odor Slight.

Flash point > 93°C

**Evaporation rate** <BuAc

Solubility(ies) Insoluble in water.

Other information None.

# 10. Stability and reactivity

Reactivity The following materials may react violently with the product: Acids. Alkalis. Oxidizing

materials. Strong reducing agents. Heavy metals.

Stability Stable at normal ambient temperatures and when used as recommended.

Possibility of hazardous

reactions

Will not polymerize.

Conditions to avoid Avoid heat, flames and other sources of ignition. Avoid contact with the following materials:

Oxidizing agents. Reducing agents. Avoid contact with acids and alkalis.

Materials to avoid Strong alkalis. Strong oxidizing agents. Strong reducing agents. Other metals or alloys. Strong

acids.

Hazardous decomposition

products

Fire creates: Carbon monoxide (CO). Carbon dioxide (CO2). Metal fumes and oxides.

# 11. Toxicological information

#### Information on toxicological effects

**Inhalation** Inhalation of dust during cutting, grinding or sanding operations involving this product may

cause irritation of the respiratory tract.

# **EPO-TEK GD2191 Part B**

Ingestion May cause discomfort if swallowed.

**Skin Contact** Causes skin irritation.

**Eye contact** Risk of serious damage to eyes. A single exposure may cause the following adverse effects:

Corneal damage.

# 12. Ecological Information

**Toxicity** 

Acute toxicity - fish Not available.

Persistence and degradability

**Persistence and degradability** The product is moderately biodegradable.

Bioaccumulative potential

**Bio-Accumulative Potential** No data available on bioaccumulation.

Mobility in soil

Mobility Mobile.

Other adverse effects

Other adverse effects Not known.

# 13. Disposal considerations

Waste treatment methods

**Disposal methods**Dispose of waste to licensed waste disposal site in accordance with the requirements of the

local Waste Disposal Authority.

# 14. Transport information

General Not regulated.

**Environmental hazards** 

**Environmentally Hazardous Substance** 

No.

# 15. Regulatory information

# **US Federal Regulations**

SARA Section 302 Extremely Hazardous Substances Tier II Threshold Planning Quantities

None of the ingredients are required to be listed.

CERCLA/Superfund, Hazardous Substances/Reportable Quantities (EPA)

None of the ingredients are required to be listed.

# **EPO-TEK GD2191 Part B**

# SARA Extremely Hazardous Substances EPCRA Reportable Quantities

None of the ingredients are required to be listed.

#### SARA 313 Emission Reporting

None of the ingredients are required to be listed.

# **CAA Accidental Release Prevention**

None of the ingredients are required to be listed.

#### **OSHA Highly Hazardous Chemicals**

None of the ingredients are required to be listed.

#### **US State Regulations**

# California Proposition 65 Carcinogens and Reproductive Toxins

None of the ingredients are required to be listed.

# California Air Toxics "Hot Spots" (A-I)

None of the ingredients are required to be listed.

#### California Air Toxics "Hot Spots" (A-II)

None of the ingredients are required to be listed.

#### Massachusetts "Right To Know" List

None of the ingredients are required to be listed.

#### Rhode Island "Right To Know" List

None of the ingredients are required to be listed.

## Minnesota "Right To Know" List

None of the ingredients are required to be listed.

## New Jersey "Right To Know" List

None of the ingredients are required to be listed.

# Pennsylvania "Right To Know" List

None of the ingredients are required to be listed.

#### Inventories

#### **EU - EINECS/ELINCS**

All the ingredients are listed or exempt.

# Canada - DSL/NDSL

All the ingredients are listed or exempt.

#### **US-TSCA**

All the ingredients are listed or exempt.

#### US - TSCA 12(b) Export Notification

None of the ingredients are listed or exempt.

#### Australia - AICS

All the ingredients are listed or exempt.

#### Japan - MITI

Some of the ingredients are listed or exempt.

# **EPO-TEK GD2191 Part B**

Korea - KECI

All the ingredients are listed or exempt.

China - IECSC

All the ingredients are listed or exempt.

Philippines - PICCS

All the ingredients are listed or exempt.

#### 16. Other information

Revision date 1/15/2016

Revision 1

Hazard statements in full H302 Harmful if swallowed.

H315 Causes skin irritation.

H318 Causes serious eye damage. H335 May cause respiratory irritation. H336 May cause drowsiness or dizziness.

Information contained in this publication or as otherwise supplied to Users is believed to be accurate and is given in good faith, but it is for the Users to satisfy themselves of the suitability of the product for their own particular purpose. Epoxy Technology, Inc. gives no warranty as to the fitness of the product for any particular purpose and any implied warranty or condition (statutory or otherwise) is excluded except to the extent that exclusion is prevented by law. Epoxy Technology, Inc. accepts no liability for loss or damage (other than that arising from death or personal injury caused by defective product, if proved), resulting from reliance on this information. Freedom under Patents, Copyright and Designs cannot be assumed.