

SAFETY DATA SHEET EPO-TEK 431 Part A

1. Identification

Product identifier

Product name EPO-TEK 431 Part A

Product number 431/A

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, SDS@epotek.com

Emergency telephone number

Emergency telephone ChemTel: +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 Skin Sens. 1 - H317

Environmental hazards Aquatic Chronic 3 - H412

Label elements

Hazard symbols



Signal word Danger

Hazard statements H315 Causes skin irritation.

H318 Causes serious eye damage. H317 May cause an allergic skin reaction.

H412 Harmful to aquatic life with long lasting effects.

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Precautionary statements P261 Avoid breathing vapor/ spray.

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.

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

Contains Reactive Diluent, Epoxy Resin Blend

Other hazards

Harmful dust may be released during cutting or grinding process.

Hazards not otherwise classified (HNOC)

Contains epoxy constituents. May produce an allergic reaction.

3. Composition/information on ingredients

Mixtures

Reactive Diluent
CAS number: Proprietary

Classification
Acute Tox. 4 - H302
Eye Dam. 1 - H318

Epoxy Resin Blend 1-5%

CAS number: Proprietary

STOT SE 3 - H336

Classification

Skin Irrit. 2 - H315 Eye Irrit. 2A - H319 Skin Sens. 1 - H317 Aquatic Chronic 2 - H411

The full text for all hazard statements is 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 any discomfort continues.

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 and get medical attention.

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.

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Ingestion May cause discomfort if swallowed.

Skin contact Allergic rash. Prolonged contact may cause redness, irritation and dry skin.

Eye contact Irritating to eyes. Symptoms following overexposure may include the following: Redness.

Pain

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: Dry chemicals. Foam. Carbon dioxide (CO2).

Special hazards arising from the substance or mixture

Hazardous combustion

products

Oxides of carbon. Thermal decomposition or combustion may liberate carbon oxides and

other toxic gases or vapors.

Advice for firefighters

Protective actions during

firefighting

Avoid breathing fire gases or vapors. Cool containers exposed to heat with water spray and

remove them from the fire area if it can be done without risk.

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 Do not discharge into drains or watercourses or onto the ground. 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. Good personal hygiene procedures

should be implemented. Avoid inhalation of vapors.

Conditions for safe storage, including any incompatibilities

Storage precautions Store at moderate temperatures in dry, well ventilated area. 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.

8. Exposure controls/Personal protection

Ingredient comments WEL = Workplace Exposure Limits

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 Wear protective gloves made of the following material: Impermeable material.

Other skin and body

protection

Wear appropriate clothing to prevent any possibility of skin contact.

Hygiene measures Do not smoke in work area. Wash 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 Brown.

Odor Mild.

Flash point 93°C

Evaporation rate <BuAc

Vapor density >1

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 excessive heat for prolonged periods of time.

Materials to avoid Strong oxidizing agents. Strong reducing agents.

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Hazardous decomposition

products

Fire creates: Carbon monoxide (CO). Carbon dioxide (CO2).

11. Toxicological information

Information on toxicological effects

Acute toxicity - oral

ATE oral (mg/kg) 5,950.36

Acute toxicity - dermal

ATE dermal (mg/kg) 166,139.4

Acute toxicity - inhalation

ATE inhalation (gases ppm) 387,658.61
ATE inhalation (vapours mg/l) 1,661.39
ATE inhalation (dusts/mists 18.65

mg/l)

Inhalation Gas or vapor in high concentrations may irritate the respiratory system.

Ingestion May cause discomfort if swallowed.

Skin Contact May cause sensitisation by skin contact. Prolonged contact may cause redness, irritation and

dry skin.

Eye contact Irritating to eyes.

12. Ecological information

Ecotoxicity Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic

environment.

Acute aquatic toxicity

Acute toxicity - fish Not available.

Persistence and degradability

Persistence and degradability No data available.

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

General information Dangerous for the environment. May cause long-term adverse effects in the aquatic

environment.

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

local Waste Disposal Authority.

EPO-TEK 431 Part A

14. Transport information

General The product is not covered by international regulations on the transport of dangerous goods

(IMDG, IATA, DOT).

UN Number

UN No. (International) Not applicable.
UN No. (DOT) Not applicable.

UN proper shipping name

Proper shipping name

(International)

Not applicable.

Proper shipping name (DOT) Not applicable.

Transport hazard class(es)

Transport Labels

No transport warning sign required.

(International)

DOT transport labels

No transport warning sign required.

Packing group

Packing group (International) Not applicable.

DOT packing group Not applicable.

Environmental hazards

Environmentally Hazardous Substance

No.

Special precautions for user

Not applicable.

DOT reportable quantityNot applicable.

DOT TIH Zone Not applicable.

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)

None of the ingredients are listed.

SARA Extremely Hazardous Substances EPCRA Reportable Quantities

None of the ingredients are listed.

SARA 313 Emission Reporting

None of the ingredients are listed.

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)

None of the ingredients are listed.

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

None of the ingredients are listed.

Massachusetts "Right To Know" List

None of the ingredients are listed.

Rhode Island "Right To Know" List

None of the ingredients are listed.

Minnesota "Right To Know" List

None of the ingredients are listed.

New Jersey "Right To Know" List

None of the ingredients are listed.

Pennsylvania "Right To Know" List

None of the ingredients are 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.

Australia - AICS

All the ingredients are listed or exempt.

Japan - ENCS

All 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 10/19/2020

Revision 2

Supersedes date 3/27/2015

Hazard statements in full H302 Harmful if swallowed.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction. H318 Causes serious eye damage. H319 Causes serious eye irritation.

H336 May cause drowsiness or dizziness.

H411 Toxic to aquatic life with long lasting effects. H412 Harmful to aquatic life with long lasting effects.

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SAFETY DATA SHEET EPO-TEK 431 Part B

1. Identification

Product identifier

Product name EPO-TEK 431 Part B

Product number 431/B

Recommended use of the chemical and restrictions on use

Application Adhesive.

Uses advised against Restricted to professional users. Use only for intended applications.

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, SDS@epotek.com

Emergency telephone number

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

2. Hazard(s) identification

Classification of the substance or mixture

Physical hazards Not Classified

Health hazards Acute Tox. 4 - H302 Skin Corr. 1C - H314 Eye Dam. 1 - H318 Repr. 1B - H360D

Environmental hazards Not Classified

Label elements

Hazard symbols







Signal word Danger

Hazard statements H302 Harmful if swallowed.

H314 Causes severe skin burns and eye damage.

H360D May damage the unborn child.

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

P301+P330+P331 If swallowed: Rinse mouth. Do NOT induce vomiting.

P303+P361+P353 If on skin (or hair): Take off immediately all contaminated clothing. Rinse

skin with water/ shower.

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.

P501 Dispose of contents/ container in accordance with national regulations.

Contains Substituted Imidazole Blend, Imidazole

3. Composition/information on ingredients

Mixtures

Substituted Imidazole Blend
CAS number: Proprietary

60-100%

Classification

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

Imidazole 30-60%

CAS number: 288-32-4

Classification

Acute Tox. 4 - H302 Skin Corr. 1C - H314 Eye Dam. 1 - H318 Repr. 1B - H360D

The full text for all hazard statements is displayed in Section 16.

4. First-aid measures

Description of first aid measures

Inhalation Move affected person to fresh air and keep warm and at rest in a position comfortable for

breathing. When breathing is difficult, properly trained personnel may assist affected person

by administering oxygen.

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

induce vomiting. Remove affected person from source of contamination. Give plenty of water to drink. Get medical attention immediately. Move affected person to fresh air and keep warm

and at rest in a position comfortable for breathing.

Skin Contact Remove contaminated clothing. Wash skin thoroughly with soap and water. Get medical

attention if irritation persists after washing.

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 promptly if symptoms

occur after washing.

Most important symptoms and effects, both acute and delayed

General information Co

Contains a substance/a group of substances which may damage the unborn child. Pregnant or breastfeeding women should not work with this product if there is any risk of exposure.

EPO-TEK 431 Part B

Inhalation Gas or vapor in high concentrations may irritate the respiratory system.

Ingestion Harmful if swallowed. May cause chemical burns in mouth, esophagus and stomach. May

cause nausea, headache, dizziness and intoxication. May cause stomach pain or vomiting.

Skin contact Causes severe burns.

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 Dry chemicals. Foam. Carbon dioxide (CO2).

Special hazards arising from the substance or mixture

Hazardous combustion products

Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or

vapors.

Advice for firefighters

Protective actions during

firefighting

Avoid breathing fire gases or vapors. Cool containers exposed to heat with water spray and

remove them from the fire area if it can be done without risk.

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 suitable protective equipment, including gloves, goggles/face shield, respirator, boots,

clothing or apron, as appropriate.

Environmental precautions

Environmental precautions Avoid release to the environment.

Methods and material for containment and cleaning up

Methods for cleaning up Eliminate all sources of ignition. No smoking, sparks, flames or other sources of ignition near

spillage. Provide adequate ventilation. Absorb spillage with sand or other inert absorbent.

Collect and place in suitable waste disposal containers and seal securely.

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

7. Handling and storage

Precautions for safe handling

Usage precautions Restricted to professional users. Pregnant or breastfeeding women should not work with this

product if there is any risk of exposure. Handle all packages and containers carefully to minimize spills. Avoid inhalation of vapors and contact with skin and eyes. Wear protective

clothing as described in Section 8 of this safety data sheet.

Advice on general occupational hygiene

Pregnant or breastfeeding women should not work with this product if there is any risk of exposure. Provide eyewash station and safety shower. Do not eat, drink or smoke when using this product. Wash promptly if skin becomes contaminated. 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.

8. Exposure controls/Personal protection

Ingredient comments No exposure limits known for ingredient(s). Contains a substance/a group of substances

which may damage the unborn child.

Exposure controls

Protective equipment





Appropriate engineering

controls

Provide adequate general and local exhaust ventilation.

Personal protection Pregnant or breastfeeding women should not work with this product if there is any risk of

exposure. Restricted to professional users.

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

and using the toilet. Promptly remove any clothing that becomes contaminated. Wash promptly with soap and water if skin 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 Liquid.

Color Amber.

Odor Slight.

Odor threshold No specific test data are available.

pH No specific test data are available.

Melting point No specific test data are available.

Initial boiling point and range No specific test data are available.

Flash point > 93°C

Evaporation rate <BuAc

Flammability (solid, gas) No specific test data are available.

Upper/lower flammability or

explosive limits

No specific test data are available.

Vapor pressure No specific test data are available.

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Vapor density >1

Relative density No specific test data are available.

Solubility(ies) Slightly soluble in water.

Partition coefficient

No specific test data are available.

Auto-ignition temperature

No specific test data are available.

Decomposition Temperature

No specific test data are available.

Viscosity No specific test data are available.

Other information Not known.

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 and when used as recommended.

Possibility of hazardous

reactions

Will not polymerize.

Conditions to avoid Avoid excessive heat for prolonged periods of time. Avoid heat, flames and other sources of

ignition.

Materials to avoid Strong oxidizing agents. Strong reducing agents.

Hazardous decomposition

products

Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or

vapors.

11. Toxicological information

Information on toxicological effects

Acute toxicity - oral

ATE oral (mg/kg) 500.24

Inhalation Gas or vapor in high concentrations may irritate the respiratory system. Inhalation of dust

during cutting, grinding or sanding operations involving this product may cause irritation of the

respiratory tract.

Ingestion Harmful if swallowed. May cause chemical burns in mouth, esophagus and stomach. May

cause stomach pain or vomiting. May cause nausea, headache, dizziness and intoxication.

Skin Contact Causes severe burns.

Eye contact Causes serious eye damage.

Acute and chronic health

hazards

May damage the unborn child. Pregnant or breastfeeding women should not work with this

product if there is any risk of exposure.

12. Ecological information

Acute aquatic toxicity

Acute toxicity - fish Not available.

Persistence and degradability

Persistence and degradability The product is moderately biodegradable.

Bioaccumulative potential

Bio-Accumulative Potential The product contains potentially bioaccumulating substances.

Partition coefficient No specific test data are available.

Mobility in soil

Mobility Semi-mobile.

Other adverse effects

Other adverse effects Not known.

13. Disposal considerations

Waste treatment methods

Disposal methodsDispose 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. (TDG) 3267 UN No. (IMDG) 3267 UN No. (ICAO) 3267

UN No. (DOT) UN3267

UN proper shipping name

Proper shipping name (TDG) CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (CONTAINS Imidazole)

Proper shipping name (IMDG) CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (CONTAINS Imidazole)

Proper shipping name (ICAO) CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (CONTAINS Imidazole)

Proper shipping name (DOT) CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (CONTAINS Imidazole)

Transport hazard class(es)

DOT hazard class 8

DOT hazard label 8

TDG class 8

TDG label(s) 8

IMDG Class 8

ICAO class/division 8

Transport labels



DOT transport labels



Packing group

TDG Packing Group

IMDG packing group III

ICAO packing group

DOT packing group

Environmental hazards

Environmentally Hazardous Substance

No.

Special precautions for user

IMDG Code segregation

18. Alkalis

group

EmS F-A, S-B

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)

None of the ingredients are listed.

SARA Extremely Hazardous Substances EPCRA Reportable Quantities

None of the ingredients are listed.

SARA 313 Emission Reporting

None of the ingredients are listed.

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)

None of the ingredients are listed.

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

None of the ingredients are listed.

Massachusetts "Right To Know" List

None of the ingredients are listed.

Rhode Island "Right To Know" List

None of the ingredients are listed.

Minnesota "Right To Know" List

None of the ingredients are listed.

New Jersey "Right To Know" List

None of the ingredients are listed.

Pennsylvania "Right To Know" List

None of the ingredients are 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.

Australia - AICS

All the ingredients are listed or exempt.

Japan - ENCS

All 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 10/19/2020

Revision 2

Supersedes date 3/27/2015

Hazard statements in full H302 Harmful if swallowed.

H314 Causes severe skin burns and eye damage.

H315 Causes skin irritation.

H318 Causes serious eye damage. H360D May damage the unborn child.

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.