

SAFETY DATA SHEET EPO-TEK® H77 Black Part A

1. Identification

Product identifier

Product name EPO-TEK® H77 Black Part A

Product number H77 Black/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 +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

Pictogram





Signal word Danger

Hazard statements H315 Causes skin irritation.

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

H412 Harmful to aquatic life with long lasting effects.

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 Epoxy Resin Blend, Reactive Diluent

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

Epoxy Resin Blend 10-30%

CAS number: Proprietary

Classification

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

Reactive Diluent 5-10%

CAS number: Proprietary

Classification

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

Skin Sens. 1 - H317

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 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 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.

Ingestion May cause discomfort if swallowed.

Skin contact Skin irritation. Allergic rash.

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: 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 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. Avoid inhalation of vapors.

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.

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.

Eye/face protection The following protection should be worn: Chemical splash goggles.

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. 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 Black.

Odor Mild.

Flash point 204°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. Avoid heat, flames and other sources of

ignition.

Materials to avoid Strong oxidizing agents. Strong reducing agents.

Hazardous decomposition

products

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

11. Toxicological information

Information on toxicological effects

Revision date: 12/11/2017 Revision: 2 Supersedes date: 2/18/2015

EPO-TEK® H77 Black Part A

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

overexposure may include the following: Coughing.

Ingestion May cause discomfort if swallowed.

Skin Contact Irritating to skin. May cause sensitisation by skin contact.

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 No information 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

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

(IMDG, IATA, DOT).

UN Number

Not applicable.

UN proper shipping name

Not applicable.

Transport hazard class(es)

No transport warning sign required.

DOT transport labels

No transport warning sign required.

Transport labels

No transport warning sign required.

Packing group

Not applicable.

Environmental hazards

Environmentally Hazardous Substance

No.

Special precautions for user

Not applicable.

DOT TIH Zone Not applicable.

Transport in bulk according to

Annex II of MARPOL 73/78

and the IBC Code

15. Regulatory information

Regulatory References Proprietary information protected pursuant to WTO's Agreement on Trade-Related Aspects of

Intellectual Property Rights (TRIPS), Section 7, Art. 39.

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)

Not applicable.

None of the ingredients are required to be listed.

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

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 12/11/2017

Revision 2

Supersedes date 2/18/2015

Hazard statements in full H302 Harmful if swallowed.

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.

H332 Harmful if inhaled.

H411 Toxic to aquatic life with long lasting effects.

H412 Harmful to aquatic life with long lasting effects.

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.



SAFETY DATA SHEET EPO-TEK® H77 Black Part B

1. Identification

Product identifier

Product name EPO-TEK® H77 Black Part B

Product number H77 Black/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.

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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 Eye Dam. 1 - H318 Resp. Sens. 1 - H334 Skin Sens. 1 - H317

Environmental hazards Not Classified

Label elements

Pictogram





Signal word Danger

Hazard statements H317 May cause an allergic skin reaction.

H318 Causes serious eye damage.

 $\label{eq:H334} \ \text{May cause allergy or asthma symptoms or breathing difficulties if inhaled}.$

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

P342+P311 If experiencing respiratory symptoms: Call a poison center/ doctor. P501 Dispose of contents/ container in accordance with national regulations.

Contains Substituted Anhydride, Phthalic Anhydride

3. Composition/information on ingredients

Mixtures

Substituted Anhydride 60-100%

CAS number: Proprietary

Classification

Eye Dam. 1 - H318 Resp. Sens. 1 - H334 Skin Sens. 1 - H317

Phthalic Anhydride 1-5%

CAS number: 85-44-9

Classification

Acute Tox. 4 - H302 Skin Irrit. 2 - H315 Eye Dam. 1 - H318 Resp. Sens. 1 - H334 Skin Sens. 1 - H317 STOT SE 3 - H335

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

Composition comments The Data Shown is in accordance with the latest EC Directives.

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 May cause an asthma-like shortness of breath. Irritation of nose, throat and airway. Vapors

may cause headache, fatigue, dizziness and nausea.

Ingestion May cause discomfort if swallowed.

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

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 Extinguish with the following media: Dry chemicals. Foam. Water spray.

Special hazards arising from the substance or mixture

Hazardous combustion

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

products

vapors.

Advice for firefighters

Special protective equipment

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

for firefighters 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 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. Avoid inhalation of vapors. Provide

adequate ventilation.

Conditions for safe storage, including any incompatibilities

Storage precautions Store at room temperature. Keep container tightly closed.

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

Control parameters

Occupational exposure limits

Phthalic Anhydride

Long-term exposure limit (8-hour TWA): ACGIH 1 ppm

Short-term exposure limit (15-minute): ACGIH

ACGIH = American Conference of Governmental Industrial Hygienists.

Exposure controls

Protective equipment





Appropriate engineering

controls

Provide adequate general and local exhaust ventilation. Avoid inhalation of vapors.

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. 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 Liquid.

Color Amber.

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 violently 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. Avoid excessive heat for prolonged periods

of time. Avoid contact with acids and alkalis. Avoid contact with the following materials:

Oxidizing agents. Reducing agents.

Materials to avoid Strong oxidizing agents. Strong reducing agents.

Hazardous decomposition

products

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

11. Toxicological information

Information on toxicological effects

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

overexposure may include the following: Coughing.

Ingestion May cause discomfort if swallowed.

Skin Contact May cause sensitisation by skin contact.

Eye contact Risk of serious damage to eyes.

12. Ecological Information

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

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

local Waste Disposal Authority.

14. Transport information

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

(IMDG, IATA, DOT).

UN Number

Not applicable.

UN proper shipping name

Not applicable.

Transport hazard class(es)

No transport warning sign required.

DOT transport labels

No transport warning sign required.

Transport labels

No transport warning sign required.

Packing group

Not applicable.

Environmental hazards

Environmentally Hazardous Substance

No.

Special precautions for user

Not 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

Regulatory References Proprietary information protected pursuant to WTO's Agreement on Trade-Related Aspects of

Intellectual Property Rights (TRIPS), Section 7, Art. 39.

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)

The following ingredients are listed:

Phthalic Anhydride

5,000 lbs (2270 Kg)

SARA Extremely Hazardous Substances EPCRA Reportable Quantities

None of the ingredients are required to be listed.

SARA 313 Emission Reporting

The following ingredients are listed:

Phthalic Anhydride

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)

The following ingredients are listed:

Phthalic Anhydride

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

None of the ingredients are required to be listed.

Massachusetts "Right To Know" List

The following ingredients are listed:

Phthalic Anhydride

Rhode Island "Right To Know" List

The following ingredients are listed:

Phthalic Anhydride

Minnesota "Right To Know" List

The following ingredients are listed:

Phthalic Anhydride

New Jersey "Right To Know" List

The following ingredients are listed:

Phthalic Anhydride

Pennsylvania "Right To Know" List

The following ingredients are listed:

Phthalic Anhydride

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

Some of the ingredients are listed or exempt.

Japan - MITI

Some of the ingredients are listed or exempt.

Korea - KECI

Some of the ingredients are listed or exempt.

China - IECSC

All the ingredients are listed or exempt.

Philippines - PICCS

Some of the ingredients are listed or exempt.

16. Other information

Revision date 12/11/2017

Revision 2

Supersedes date 2/18/2015

Hazard statements in full H302 Harmful if swallowed.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H318 Causes serious eye damage.

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H335 May cause respiratory irritation.

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.