

SAFETY DATA SHEET

ASI™ MP-5405-A

Version 1.1

Revision Date 07/22/2019

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : ASI™ MP-5405-A
Product code : 100000007037

Manufacturer or supplier's details

Company : H.B. Fuller Engineering Adhesives
Address : 9001 W Fey Drive
Frankfort, IL, 60423
Telephone : 1-815-464-5606

Medical Emergency Phone Number (24 Hours): 1-888-853-1758

Transport Emergency Phone Number (CHEMTREC): 1-800-424-9300

Recommended use of the chemical and restrictions on use

Recommended use : Epoxy resin
Restrictions on use : For industrial use only.

SECTION 2. HAZARDS IDENTIFICATION

Emergency Overview

Appearance	liquid
Color	Clear liquid, light yellow to light green in color
Odor	characteristic

GHS Classification

Skin irritation : Category 2
Eye irritation : Category 2A
Skin sensitization : Category 1

GHS label elements

Hazard pictograms :



Signal Word : Warning

Hazard Statements:

H315 Causes skin irritation. H317 May cause an allergic skin reaction. H319 Causes serious eye irritation.

Precautionary Statements:

Prevention: P261 Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray. P264 Wash skin thoroughly after handling. P272 Contaminated work clothing must not be allowed out of the workplace. P280 Wear protective gloves/ eye protection/ face protection.

Response: P302 + P352 IF ON SKIN: Wash with plenty of soap and water. P305 + P351 + P338 IF

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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. P337 + P313 If eye irritation persists: Get medical advice/attention. P362 Take off contaminated clothing and wash before reuse.

Disposal: P501 Dispose of contents/ container to an approved waste disposal plant.

Potential Health Effects**Carcinogenicity:****IARC**

No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

OSHA

No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.

NTP

No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Hazardous ingredients

Chemical name	CAS-No.	Concentration [%]
Epoxy resin	25068-38-6	90 - 100

SECTION 4. FIRST AID MEASURES

- General advice : Show this material safety data sheet to the doctor in attendance.
- If inhaled : Move to fresh air.
If symptoms persist, call a physician.
- In case of skin contact : Wash off with soap and water.
Get medical attention immediately if irritation develops and persists.
Remove contaminated clothing and shoes.
Wash contaminated clothing before reuse.
- In case of eye contact : Flush eyes with water at least 15 minutes. Get medical attention if eye irritation develops or persists.
- If swallowed : Do NOT induce vomiting.
If victim is fully conscious, give a cupful of water.
Never give anything by mouth to an unconscious person.
Obtain medical attention.

SECTION 5. FIRE-FIGHTING MEASURES

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- | | |
|------------------------------------------------|-----------------------------------------------------------------------------------------------------------|
| Suitable extinguishing media | : Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. |
| Specific extinguishing methods | : |
| Further information | : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. |
| Special protective equipment for fire-fighters | : In the event of fire, wear self-contained breathing apparatus. Use personal protective equipment. |

SECTION 6. ACCIDENTAL RELEASE MEASURES

- | | |
|---------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|
| Personal precautions, protective equipment and emergency procedures | : Refer to protective measures listed in sections 7 and 8. |
| Environmental precautions | : Prevent product from entering drains.
Do not flush into surface water or sanitary sewer system. |
| Methods and materials for containment and cleaning up | : Soak up with inert absorbent material.
Shovel into suitable container for disposal. |

SECTION 7. HANDLING AND STORAGE

- | | |
|-----------------------------|-----------------------------------------------------------|
| Technical measures | : Not applicable |
| Advice on safe handling | : No special precautions required. |
| Conditions for safe storage | : Keep in a dry, cool place. |
| Materials to avoid | : No special restrictions on storage with other products. |

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredients with workplace control parameters

Contains no substances with occupational exposure limit values.

Personal protective equipment

- | | |
|-----------------------------|-------------------------------------------------------------------|
| Respiratory protection | : No personal respiratory protective equipment normally required. |
| Hand protection
Material | : Nitrile rubber |
| Eye protection | : Safety glasses |

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Skin and body protection	: Remove and wash contaminated clothing before re-use.
Protective measures	: Avoid contact with skin.
Hygiene measures	: Avoid contact with skin, eyes and clothing.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	: liquid
Color	: Clear liquid, light yellow to light green in color
Odor	: characteristic
Odor Threshold	: No data available
Melting point/freezing point	: not determined
Boiling point/boiling range	: not determined
Evaporation rate	: not determined
Flammability (solid, gas)	: Not classified as a flammability hazard
Upper explosion limit	: Upper flammability limit not determined
Lower explosion limit	: Lower flammability limit not determined
Density	: 1.17 g/cm3
Solubility(ies)	
Water solubility	: not determined
Partition coefficient: n-octanol/water	: No data available
Autoignition temperature	: not determined
Viscosity	
Viscosity, kinematic	: not determined

SECTION 10. STABILITY AND REACTIVITY

Chemical stability	: The product is chemically stable.
Conditions to avoid	: Not applicable
Hazardous decomposition products	: Stable under normal conditions.

SECTION 11. TOXICOLOGICAL INFORMATION**Acute toxicity**

No data available

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Skin corrosion/irritation

No data available

Serious eye damage/eye irritation

No data available

Respiratory or skin sensitization

No data available

Germ cell mutagenicity

No data available

Carcinogenicity

No data available

Reproductive toxicity

No data available

STOT-single exposure

No data available

STOT-repeated exposure

No data available

Aspiration toxicity

No data available

SECTION 12. ECOLOGICAL INFORMATION**Ecotoxicity**

No data available

Persistence and degradability

No data available

Bioaccumulative potential**Mobility in soil**

No data available

Other adverse effects

No data available

SECTION 13. DISPOSAL CONSIDERATIONS**Disposal methods**

Waste from residues

: To the best of our knowledge, this product does not meet the definition of hazardous waste under the U.S. EPA Hazardous Waste Regulations 40 CFR 261. Disposal via incineration at

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an approved facility is recommended, as industry best practice. Consult state, local or provincial authorities for more restrictive requirements.

SECTION 14. TRANSPORT INFORMATION**Special precautions for user**

Not applicable

Domestic regulation**49 CFR**

Not regulated as a dangerous good

International Regulations**IATA-DGR**

UN/ID No.	: 3082
Proper shipping name	: Environmentally hazardous substance, liquid, n.o.s. (PHENOL, 4,4'-(1-METHYLETHYLIDENE)BIS-, POLYMER WITH (CHLOROMETHYL)OXIRANE)
Class	: 9
Packing group	: III
Labels	: 9
Packing instruction (cargo aircraft)	: 964
Packing instruction (passenger aircraft)	: 964

IMDG-Code

UN number	: 3082
Proper shipping name	: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (PHENOL, 4,4'-(1-METHYLETHYLIDENE)BIS-, POLYMER WITH (CHLOROMETHYL)OXIRANE)
Class	: 9
Packing group	: III
Labels	: 9
EmS Code	: F-A, S-F
Marine pollutant	: no

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

SECTION 15. REGULATORY INFORMATION

SARA 311/312 Hazards	: Serious eye damage or eye irritation Skin corrosion or irritation
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Respiratory or skin sensitization

SARA 302 : This material does not contain any components with a section 302 EHS TPQ.

SARA 313 : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

Clean Air Act

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 112 (40 CFR 61).

US State Regulations

California Prop 65 : Please contact Supplier for more information.

The ingredients of this product are reported in the following inventories:

TSCA	All substances listed as active on the TSCA inventory
DSL	All components of this product are on the Canadian DSL
AICS	On the inventory, or in compliance with the inventory
KECI	On the inventory, or in compliance with the inventory
PICCS	On the inventory, or in compliance with the inventory
IECSC	On the inventory, or in compliance with the inventory
TCSI	On the inventory, or in compliance with the inventory

Inventories Legend TSCA (USA), DSL (Canada), REACH(Europe), AICS (Australia), NZIoC (New Zealand), ENCS (Japan), KECI (Korea), PICCS (Philippines), IECSC (China), TWINV (Taiwan)

SECTION 16. OTHER INFORMATION

Prepared by: Global Regulatory Department - phone: 1-651-236-5842 - email: msds.request@hbfuller.com

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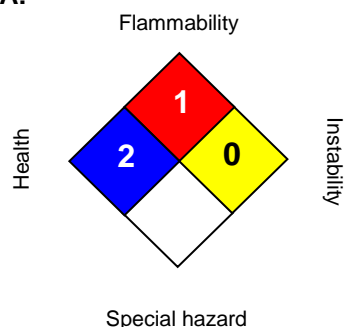
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Further information

NFPA:



HMIS III:

HEALTH	2
FLAMMABILITY	1
PHYSICAL HAZARD	0

0 = not significant, 1 =Slight,
2 = Moderate, 3 = High
4 = Extreme, * = Chronic

The information and recommendations set forth herein are believed to be accurate. Because some of the information is derived from information provided to the H.B. Fuller Company from its suppliers, and because the H.B. Fuller Company has no control over the conditions of handling and use, the H.B. Fuller Company makes no warranty, expressed or implied, regarding the accuracy of the data or the results to be obtained from the use thereof. The information is supplied solely for your information and consideration, and the H.B. Fuller Company assumes no responsibility for use or reliance thereon. It is the responsibility of the user of H.B. Fuller Company products to comply with all applicable federal, state and local laws and regulations.

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Revision Date 02/19/2019

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : ASI MP-5405-B
Product code : 100000007079

Manufacturer or supplier's details

Company : H.B. Fuller Engineering Adhesives
Address : 9001 W Fey Drive
Frankfort, IL, 60423
Telephone : 1-815-464-5606

Medical Emergency Phone Number (24 Hours): 1-888-853-1758

Transport Emergency Phone Number (CHEMTREC): 1-800-424-9300

Recommended use of the chemical and restrictions on use

Recommended use : Epoxy curing agent
Restrictions on use : For industrial use only.

SECTION 2. HAZARDS IDENTIFICATION



Emergency Overview

Appearance	liquid
Color	Clear to light yellow
Odor	rotten-egg like

GHS Classification

Skin corrosion : Category 1
Serious eye damage : Category 1
Skin sensitization : Category 1

GHS label elements

Hazard pictograms :  

Signal Word : Danger

Hazard Statements:

H314 Causes severe skin burns and eye damage. H317 May cause an allergic skin reaction.

Precautionary Statements:

Prevention: P261 Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray. P264 Wash skin thoroughly after handling. P272 Contaminated work clothing must not be allowed out of the workplace. P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

Response: 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

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water/shower. P304 + P340 + P310 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/doctor. P305 + P351 + P338 + P310 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/doctor. P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention. P363 Wash contaminated clothing before reuse.

Storage: P405 Store locked up.

Disposal: P501 Dispose of contents/ container to an approved waste disposal plant.

Potential Health Effects

Carcinogenicity:

IARC

No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

OSHA

No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.

NTP

No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Hazardous ingredients

Chemical name	CAS-No.	Concentration [%]
Poly[oxy(methyl-1,2-ethanediyl)], .alpha.-hydro-.omega.-hydroxy-, ether with 2,2-bis(hydroxymethyl)-1,3-propanediol (4:1), 2-hydroxy	72244-98-5	70 - 90
tertiary amine	90-72-2	10 - 20

SECTION 4. FIRST AID MEASURES

- General advice : Show this material safety data sheet to the doctor in attendance.
- If inhaled : Move to fresh air.
If not breathing, give artificial respiration.
Keep patient warm and at rest.
Consult a physician after significant exposure.
- In case of skin contact : Take off all contaminated clothing immediately.
Wash off immediately with soap and plenty of water.
Call a physician if irritation develops or persists.
Wash contaminated clothing before re-use.
- In case of eye contact : Hold eyelids apart and flush eyes with plenty of water for at least 15 minutes. Get medical attention.
Protect unharmed eye.
- If swallowed : If swallowed, call a poison control center or doctor

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immediately.
Do NOT induce vomiting.
If victim is fully conscious, give a cupful of water.
If possible drink milk afterwards.

SECTION 5. FIRE-FIGHTING MEASURES

- Suitable extinguishing media : Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
- Specific extinguishing methods :
- Further information : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
- Special protective equipment for fire-fighters : Wear an approved positive pressure self-contained breathing apparatus in addition to standard fire fighting gear.

SECTION 6. ACCIDENTAL RELEASE MEASURES

- Personal precautions, protective equipment and emergency procedures : Refer to protective measures listed in sections 7 and 8.
- Environmental precautions : Prevent product from entering drains.
Do not flush into surface water or sanitary sewer system.
- Methods and materials for containment and cleaning up : Soak up with inert absorbent material.
Shovel into suitable container for disposal.

SECTION 7. HANDLING AND STORAGE

- Local/Total ventilation : Use only with adequate ventilation.
- Advice on safe handling : Wear personal protective equipment.
Do not get on skin or clothing.
Use only in an area equipped with a safety shower.
- Conditions for safe storage : Keep containers tightly closed in a dry, cool and well-ventilated place.
- Materials to avoid : No special restrictions on storage with other products.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION**Ingredients with workplace control parameters**

Contains no substances with occupational exposure limit values.

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Personal protective equipment

- Respiratory protection : Use respiratory protection unless adequate local exhaust ventilation is provided or exposure assessment demonstrates that exposures are within recommended exposure guidelines.
- Filter type : Combined particulates and organic vapor type
- Hand protection
Material : butyl-rubber
- Eye protection : Safety goggles
Face-shield
Ensure that eyewash stations and safety showers are close to the workstation location.
- Skin and body protection : Long sleeved clothing
Chemical resistant apron
- Protective measures : Avoid contact with skin.
- Hygiene measures : Avoid contact with skin, eyes and clothing.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

- Appearance : liquid
- Color : Clear to light yellow
- Odor : rotten-egg like
- Odor Threshold : No data available
- Melting point/freezing point : not determined
- Boiling point/boiling range : not determined
- Evaporation rate : not determined
- Flammability (solid, gas) : Not classified as a flammability hazard
- Upper explosion limit : Upper flammability limit
not determined
- Lower explosion limit : Lower flammability limit
not determined
- Density : 1.12 g/cm³
- Solubility(ies)
Water solubility : not determined
- Partition coefficient: n-
octanol/water : No data available
- Autoignition temperature : not determined
- Viscosity
Viscosity, kinematic : not determined

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SECTION 10. STABILITY AND REACTIVITY

Chemical stability : The product is chemically stable.

Hazardous decomposition : Stable under normal conditions.
products**SECTION 11. TOXICOLOGICAL INFORMATION****Acute toxicity****Product:**Acute oral toxicity : Acute toxicity estimate : > 5,000 mg/kg
Method: Calculation methodAcute dermal toxicity : Acute toxicity estimate : > 5,000 mg/kg
Method: Calculation method**Components:****tertiary amine:**

Acute oral toxicity : LD50 Oral Rat: 1,000 mg/kg

Acute dermal toxicity : LD50 Dermal Rat: 1,280 mg/kg

Skin corrosion/irritation

No data available

Serious eye damage/eye irritation

No data available

Respiratory or skin sensitization

No data available

Germ cell mutagenicity

No data available

Carcinogenicity

No data available

Reproductive toxicity

No data available

STOT-single exposure

No data available

STOT-repeated exposure

No data available

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Aspiration toxicity

No data available

SECTION 12. ECOLOGICAL INFORMATION**Ecotoxicity**

No data available

Persistence and degradability

No data available

Bioaccumulative potential**Mobility in soil**

No data available

Other adverse effects

No data available

SECTION 13. DISPOSAL CONSIDERATIONS**Disposal methods**

Waste from residues : To the best of our knowledge, this product does not meet the definition of hazardous waste under the U.S. EPA Hazardous Waste Regulations 40 CFR 261. Disposal via incineration at an approved facility is recommended, as industry best practice. Consult state, local or provincial authorities for more restrictive requirements.

SECTION 14. TRANSPORT INFORMATION**Special precautions for user**

Not applicable

Domestic regulation**49 CFR**

UN/ID/NA number : 2735
Proper shipping name : Amines, liquid, corrosive, n.o.s.
(2,4,6-TRIS[(DIMETHYLAMINO)METHYL]PHENOL)
Class : 8
Packing group : III
Labels : 8
ERG Code : 153
Marine pollutant : no

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International Regulations**IATA-DGR**

UN/ID No. : 2735
Proper shipping name : Amines, liquid, corrosive, n.o.s.
(2,4,6-TRIS[(DIMETHYLAMINO)METHYL]PHENOL)
Class : 8
Packing group : III
Labels : 8
Packing instruction (cargo aircraft) : 856
Packing instruction (passenger aircraft) : 852

IMDG-Code

UN number : 2735
Proper shipping name : AMINES, LIQUID, CORROSIVE, N.O.S.
(2,4,6-TRIS[(DIMETHYLAMINO)METHYL]PHENOL)
Class : 8
Packing group : III
Labels : 8
EmS Code : F-A, S-B
Marine pollutant : no

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

SECTION 15. REGULATORY INFORMATION

SARA 311/312 Hazards : Skin corrosion or irritation
Serious eye damage or eye irritation
Respiratory or skin sensitization

SARA 302 : This material does not contain any components with a section 302 EHS TPQ.

SARA 313 : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

Clean Air Act

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 112 (40 CFR 61).

US State Regulations

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California Prop 65 : Please contact Supplier for more information.

The ingredients of this product are reported in the following inventories:

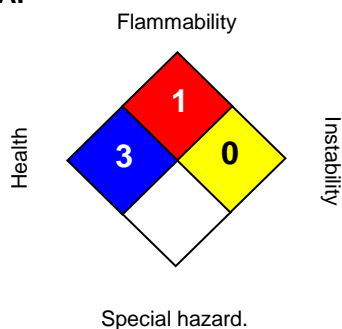
TSCA	On TSCA Inventory
DSL	All components of this product are on the Canadian DSL
REACH	Not in compliance with the inventory
AICS	On the inventory, or in compliance with the inventory
NZIoC	Not in compliance with the inventory
ENCS	On the inventory, or in compliance with the inventory
KECI	On the inventory, or in compliance with the inventory
PICCS	On the inventory, or in compliance with the inventory
IECSC	On the inventory, or in compliance with the inventory
TCSI	On the inventory, or in compliance with the inventory
Inventories Legend TSCA (USA), DSL (Canada), REACH(Europe), AICS (Australia), NZIoC (New Zealand), ENCS (Japan), KECI (Korea), PICCS (Philippines), IECSC (China), TWINV (Taiwan)	

SECTION 16. OTHER INFORMATION

Prepared by: Global Regulatory Department - phone: 1-651-236-5842 - email: msds.request@hbfuller.com

Further information

NFPA:



HMIS III:

HEALTH	3
FLAMMABILITY	1
PHYSICAL HAZARD	0

0 = not significant, 1 =Slight,
2 = Moderate, 3 = High
4 = Extreme, * = Chronic

The information and recommendations set forth herein are believed to be accurate. Because some of the information is derived from information provided to the H.B. Fuller Company from its suppliers, and because the H.B. Fuller Company has no control over the conditions of handling and use, the H.B. Fuller Company makes no warranty, expressed or implied, regarding the accuracy of the data or the results to be obtained from the use thereof. The information is supplied solely for your information and consideration, and the H.B. Fuller Company assumes no responsibility for use or reliance thereon. It is the responsibility of the user of H.B. Fuller Company products to comply with all applicable federal, state and local laws and regulations.

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