SECTION 1. IDENTIFICATION

Product name: MasterEmaco ADH 327 PART A
Product code: 000000000050543528 000000000050543528

Manufacturer or supplier's details
Company name of supplier: Master Builders Solutions US, LLC
Address: 23700 CHAGRIN BLVD
Beachwood OH 44122
Emergency telephone: ChemTel: +1-813-248-0585 USA: +1-800-255-3924

Recommended use of the chemical and restrictions on use
Recommended use: Product for construction chemicals
Restrictions on use: Reserved for industrial and professional use.

SECTION 2. HAZARDS IDENTIFICATION

GHS classification in accordance with 29 CFR 1910.1200
Skin corrosion/irritation: 2
Serious eye damage/eye irritation: Category 2A
Skin sensitization: Category 1
Germ cell mutagenicity: 2
Short-term (acute) aquatic hazard: 2
Long-term (chronic) aquatic hazard: 2

GHS label elements
Hazard pictograms: "Exclamation mark", "Flame", "Biological hazard"
Signal Word: Warning
Hazard Statements:
H319 Causes serious eye irritation.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H341 Suspected of causing genetic defects.
H401 Toxic to aquatic life.
H411 Toxic to aquatic life with long lasting effects.

Precautionary Statements:
Prevention:
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.
P273 Avoid release to the environment.
P202 Do not handle until all safety precautions have been read and understood.
P272 Contaminated work clothing should not be allowed out of the workplace.
P264 Wash face, hands and any exposed skin thoroughly after handling.

Response:
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308 + P311 IF exposed or concerned: Call a POISON CENTER/ doctor.
P303 + P352 IF ON SKIN (or hair): Wash with plenty of soap and water.
P333 + P311 If skin irritation or rash occurs: Call a POISON CENTER or doctor/physician.
P332 + P313 If skin irritation occurs: Get medical advice/ attention.
P362 + P364 Take off contaminated clothing and wash it before reuse.
P391 Collect spillage.
P337 + P311 If eye irritation persists: Call a POISON CENTER or doctor/physician.

Storage:
P405 Store locked up.

Disposal:
P501 Dispose of contents/container to appropriate hazardous waste collection point.

Other hazards
No data available.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical nature : No data available.

Components

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS-No.</th>
<th>Concentration (% w/w)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reaction product: bisphenol-A-(epichlorhydrin)-Epoxy resin (number average molecular weight &lt;= 700)</td>
<td>25068-38-6</td>
<td>&gt;= 25 - &lt; 75</td>
</tr>
<tr>
<td>Talc</td>
<td>14807-96-6</td>
<td>&gt;= 20 - &lt; 25</td>
</tr>
<tr>
<td>2,3-epoxypropyl o-tolyl ether</td>
<td>2210-79-9</td>
<td>&gt;= 10 - &lt; 15</td>
</tr>
<tr>
<td>Titanium dioxide</td>
<td>13463-67-7</td>
<td>&gt;= 5 - &lt; 7</td>
</tr>
</tbody>
</table>

SECTION 4. FIRST AID MEASURES

General advice : Move out of dangerous area.
Show this material safety data sheet to the doctor in attendance.
Do not leave the victim unattended.

If inhaled
: If unconscious, place in recovery position and seek medical advice.
If symptoms persist, call a physician.

In case of skin contact
: If skin irritation persists, call a physician.
If on skin, rinse well with water.
If on clothes, remove clothes.

In case of eye contact
: Immediately flush eye(s) with plenty of water.
Remove contact lenses.
Protect unharmed eye.
Keep eye wide open while rinsing.
If eye irritation persists, consult a specialist.

If swallowed
: Clean mouth with water and drink afterwards plenty of water.
Induce vomiting immediately and call a physician.
Keep respiratory tract clear.
Do not give milk or alcoholic beverages.
Never give anything by mouth to an unconscious person.
If symptoms persist, call a physician.
Take victim immediately to hospital.

Most important symptoms and effects, both acute and delayed
: Causes skin irritation.
May cause an allergic skin reaction.
Causes serious eye irritation.
Suspected of causing genetic defects.

Notes to physician
: Treat symptomatically.

SECTION 5. FIRE-FIGHTING MEASURES

Suitable extinguishing media
: Water spray
Foam
Dry powder
Carbon dioxide (CO2)

Unsuitable extinguishing media
: High volume water jet

Specific hazards during fire fighting
: Do not allow run-off from fire fighting to enter drains or water courses.

Further information
: Collect contaminated fire extinguishing water separately. This must not be discharged into drains.
Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

Special protective equipment for fire-fighters
: Wear self-contained breathing apparatus for firefighting if necessary.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures
: Use personal protective equipment.

Environmental precautions
: Prevent product from entering drains.
Prevent further leakage or spillage if safe to do so.
If the product contaminates rivers and lakes or drains inform respective authorities.
Methods and materials for containment and cleaning up:
Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).
Keep in suitable, closed containers for disposal.

SECTION 7. HANDLING AND STORAGE

Advice on protection against fire and explosion:
Product is not explosive.
Normal measures for preventive fire protection.

Advice on safe handling:
Do not breathe vapors/dust.
Avoid exposure - obtain special instructions before use.
Avoid contact with skin and eyes.
For personal protection see section 8.
Smoking, eating and drinking should be prohibited in the application area.
Dispose of rinse water in accordance with local and national regulations.
Persons susceptible to skin sensitization problems or asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this mixture is being used.

Conditions for safe storage:
Keep container tightly closed in a dry and well-ventilated place.
Containers which are opened must be carefully resealed and kept upright to prevent leakage.
Observe label precautions.
Electrical installations / working materials must comply with the technological safety standards.
Further information on storage conditions:
Keep only in the original container in a cool, dry, well-ventilated place away from ignition sources, heat or flame.
Protect from direct sunlight.

Materials to avoid:
Observe VCI storage rules.

Further information on storage stability:
No data available.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredients with workplace control parameters

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS-No.</th>
<th>Value type (Form of exposure)</th>
<th>Control parameters / Permissible concentration</th>
<th>Basis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Titanium dioxide</td>
<td>13463-67-7</td>
<td>TWA value</td>
<td>10 mg/m³</td>
<td>ACGIHTLV</td>
</tr>
<tr>
<td></td>
<td></td>
<td>PEL (Total dust)</td>
<td>15 mg/m³</td>
<td>29 CFR 1910.1000 (Table Z-1)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWA value (Total dust)</td>
<td>10 mg/m³</td>
<td>29 CFR 1910.1000 (Table Z-1-A)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWA (total)</td>
<td>15 mg/m³</td>
<td>OSHA Z-1</td>
</tr>
<tr>
<td>dust)</td>
<td>TWA (Total dust) 10 mg/m³</td>
<td>OSHA P0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-------</td>
<td>--------------------------</td>
<td>---------</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>TWA 10 mg/m³ (Titanium dioxide)</td>
<td>ACGIH</td>
<td></td>
<td></td>
</tr>
<tr>
<td>talc</td>
<td>14807-96-6</td>
<td>TWA value (Respirable fraction) 2 mg/m³</td>
<td>ACGIHTLV</td>
<td></td>
</tr>
<tr>
<td></td>
<td>TWA (Dust) 20 Million particles per cubic foot</td>
<td>OSHA Z-3</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>TWA (Respirable dust fraction) 2 mg/m³</td>
<td>OSHA P0</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>TWA (Respirable) 2 mg/m³</td>
<td>NIOSH REL</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>TWA 0.1 fibres per cubic centimeter</td>
<td>ACGIH</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>TWA (Respirable particulate matter) 2 mg/m³</td>
<td>ACGIH</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Engineering measures**: No applicable information available.

**Personal protective equipment**

**Respiratory protection**: When workers are facing concentrations above the occupational exposure limits they must use appropriate certified respirators.

**Hand protection**

**Remarks**: The suitability for a specific workplace should be discussed with the producers of the protective gloves.

**Eye protection**: Eye wash bottle with pure water
Tightly fitting safety goggles
Wear face-shield and protective suit for abnormal processing problems.

**Skin and body protection**: Impervious clothing
Choose body protection according to the amount and concentration of the dangerous substance at the work place.

**Protective measures**: Do not inhale gases/vapours/aerosols.
Avoid contact with the skin, eyes and clothing.
Avoid exposure - obtain special instructions before use.
Handle in accordance with good building materials hygiene and safety practice.
Wearing of closed work clothing is recommended.

**Hygiene measures**: When using do not eat or drink.
When using do not smoke.
Wash hands before breaks and at the end of workday.

**SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

**Appearance**: paste

**Color**: white
Odor: resinous

Odor Threshold: No data available

pH: not applicable

Melting point: No applicable information available.

boiling temperature: approx. 248 °F / 120 °C

Flash point: 480 °F / 249 °C

Evaporation rate: No applicable information available.

Flammability (solid, gas): not highly flammable

Upper explosion limit / Upper flammability limit: No applicable information available.

Lower explosion limit / Lower flammability limit: No applicable information available.

Vapor pressure: No applicable information available.

Relative vapor density: Heavier than air.

Relative density: No applicable information available.

Density: approx. 1.44 g/cm³ (68 °F / 20 °C)

Solubility(ies)
Water solubility: emulsifiable (68 °F / 20 °C)

Solubility in other solvents: No applicable information available.

Partition coefficient: n-octanol/water: not applicable

Autoignition temperature: No data available

Decomposition temperature: No decomposition if stored and handled as prescribed/indicated.

Viscosity
Viscosity, dynamic: No applicable information available.

Viscosity, kinematic: No applicable information available.

Explosive properties: Not explosive
Not explosive

Oxidizing properties: Based on its structural properties the product is not classified as oxidizing.
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Sublimation point : No applicable information available.
Molecular weight : No data available
Metal corrosion rate : Corrosive effects to metal are not anticipated.

SECTION 10. STABILITY AND REACTIVITY

Reactivity : No decomposition if stored and applied as directed.
Chemical stability : No decomposition if stored and applied as directed.
Possibility of hazardous reac-
tions : No decomposition if stored and applied as directed.
Conditions to avoid : See SDS section 7 - Handling and storage.
Incompatible materials : Strong acids
                      : Strong bases
                      : Strong oxidizing agents
                      : Strong reducing agents
Hazardous decomposition products : No hazardous decomposition products if stored and handled
                                  as prescribed/indicated.

SECTION 11. TOXICOLOGICAL INFORMATION

Acute toxicity
Not classified based on available information.

Product:
Acute oral toxicity : Remarks: No applicable information available.
Acute inhalation toxicity : Remarks: No applicable information available.
Acute dermal toxicity : Remarks: No applicable information available.

Skin corrosion/irritation
Causes skin irritation.

Product:
Remarks : May cause skin irritation and/or dermatitis.

Serious eye damage/eye irritation
Causes serious eye irritation.

Product:
Remarks : May cause irreversible eye damage.

Respiratory or skin sensitization

Skin sensitization
May cause an allergic skin reaction.

Respiratory sensitization
Not classified based on available information.
Product:
Remarks : Causes sensitization.

Germ cell mutagenicity
Suspected of causing genetic defects.

Carcinogenicity
Not classified based on available information.

Reproductive toxicity
Not classified based on available information.

STOT-single exposure
Not classified based on available information.

STOT-repeated exposure
Not classified based on available information.

Aspiration toxicity
Not classified based on available information.

Further information
Product:
Remarks : No data available

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Product:
Ecotoxicology Assessment
Chronic aquatic toxicity : Toxic to aquatic life with long lasting effects.

Persistence and degradability

Product:
Biodegradability : Remarks: Taking into consideration the properties of several ingredients, the product is estimated not to be readily biodegradable according to OECD classification.

Stability in water : Remarks: The product is slightly soluble in water. It can be eliminated from water by abiotic processes.

Bioaccumulative potential

Product:
Bioaccumulation : Remarks: Because of the product's consistency and low water solubility, bioavailability is improbable.
Components:

talc:
Partition coefficient: n-octanol/water : Remarks: not applicable

2,3-epoxypropyl o-tolyl ether:
Partition coefficient: n-octanol/water : log Pow: 2.16 (77 °F / 25 °C)
Method: other (calculated)

Titanium dioxide:
Partition coefficient: n-octanol/water : Remarks: not applicable

Mobility in soil

Product:
Distribution among environmental compartments : Remarks: The substance will not evaporate into the atmosphere from the water surface. Following exposure to soil, adsorption to solid soil particles is probable, therefore contamination of groundwater is not expected. Following exposure to soil, adsorption to solid soil particles is unlikely, therefore contamination of groundwater is expected.

Other adverse effects

Product:
Additional ecological information : An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.
Toxic to aquatic life.
Toxic to aquatic life with long lasting effects.

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods
Waste from residues : Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of in accordance with national, state and local regulations.
Contaminated packaging : Do not discharge into drains/surface waters/groundwater.
Contaminated packaging should be emptied as far as possible and disposed of in the same manner as the substance/product.

SECTION 14. TRANSPORT INFORMATION

International Regulations

UNRTDG
UN number : UN 3082
Proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
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Class: 9
Subsidiary risk: EHSM
Packing group: III
Labels: 9 (EHSM)

IATA-DGR
UN/ID No.: UN 3082
Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
(BISPHENOL-A-EPICHLORHYDRIN RESINS M <=700)

Class: 9
Subsidiary risk: EHSM
Packing group: III
Labels: Miscellaneous, Environmentally hazardous
Packing instruction (cargo aircraft): 964
Packing instruction (passenger aircraft): 964

IMDG-Code
UN number: UN 3082
Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
(BISPHENOL-A-EPICHLORHYDRIN RESINS M <=700)

Class: 9
Subsidiary risk: EHSM
Packing group: III
Labels: 9 (EHSM)
EmS Code: F-A, S-F
Marine pollutant: yes

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
Not applicable for product as supplied.

Domestic regulation

49 CFR
Not regulated as a dangerous good

Special precautions for user
The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

SECTION 15. REGULATORY INFORMATION

US State Regulations

Pennsylvania Right To Know
Titanium dioxide 13463-67-7
talc 14807-96-6

New Jersey Right To Know
Titanium dioxide 13463-67-7
talc 14807-96-6
California Prop. 65

WARNING: This product can expose you to chemicals including 1-chloro-2,3-epoxypropane, which is/are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

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

TSCA: On the inventory, or in compliance with the inventory

SECTION 16. OTHER INFORMATION

Further information

NFPA 704:

HMIS® IV:

Full text of other abbreviations

29 CFR 1910.1000 (Table Z-1-A) : OSHA - Table Z-1-A (29 CFR 1910.1000)
29 CFR 1910.1000 (Table Z-1) : OSHA - Table Z-1 (Limits for Air Contaminants) 29 CFR 1910.1000
ACGIH : USA. ACGIH Threshold Limit Values (TLV)
ACGIHTLV : American Conference of Governmental Industrial Hygienists - threshold limit values (US)
NIOSH REL : USA. NIOSH Recommended Exposure Limits
OSHA P0 : USA. OSHA - TABLE Z-1 Limits for Air Contaminants - 1910.1000
OSHA Z-1 : USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants
OSHA Z-3 : USA. Occupational Exposure Limits (OSHA) - Table Z-3 Mineral Dusts
29 CFR 1910.1000 (Table Z-1-A) / TWA value : Time Weighted Average (TWA):
29 CFR 1910.1000 (Table Z-1) / Permissible exposure limit
SAFETY DATA SHEET

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Version
Revision Date: 07/31/2020
SDS Number: 000000259978
Date of last issue: -
Date of first issue: 07/31/2020

1) / PEL
ACGIH / TWA : 8-hour, time-weighted average
ACGIHTLV / TWA value : Time Weighted Average (TWA):
NIOSH REL / TWA : Time-weighted average concentration for up to a 10-hour
workday during a 40-hour workweek
OSHA P0 / TWA : 8-hour time weighted average
OSHA Z-1 / TWA : 8-hour time weighted average
OSHA Z-3 / TWA : 8-hour time weighted average

AICS - Australian Inventory of Chemical Substances; ASTM - American Society for the Testing of Materials; bw - Body weight; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DOT - Department of Transportation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; EHS - Extremely Hazardous Substance; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; HMIS - Hazardous Materials Identification System; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECCSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50% of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; MSHA - Mine Safety and Health Administration; n.o.s. - Not Otherwise Specified; NFPA - National Fire Protection Association; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; RCRA - Resource Conservation and Recovery Act; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RQ - Reportable Quantity; SADT - Self-Accelerating Decomposition Temperature; SARA - Superfund Amendments and Reauthorization Act; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

Revision Date : 07/31/2020

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