PolvOne

MATERIAL SAFETY DATA SHEET WIRE STAPLE WHITE UV

Version Number 1.1 Revision Date 03/29/2014

Page 1 of 7 Print Date 4/6/2014

1. PRODUCT AND COMPANY IDENTIFICATION

POLYONE CORPORATION 33587 Walker Road, Avon Lake, OH 44012

| Telephone Emergency telephone number | : | 1 (440) 930-1000 or 1 (866) POLYONE CHEMTREC 1-800-424-9300 (24hrs for spill, leak, fire, exposure or accident). |
|--|---|--|
| Product name | : | WIRE STAPLE WHITE UV |
| Product code | : | CC10144144 |
| Chemical Name | : | Mixture |
| CAS-No. | : | Mixture |
| Product Use | : | Industrial Applications |

2. COMPOSITION/INFORMATION ON INGREDIENTS

| Components | CAS-No. | Weight percent |
|--|-------------|----------------|
| Formamide, N,N'-1,6-hexanediylbis[N- (2,2,6,6-tetramethyl-4-piperidinyl)- | 124172-53-8 | 5 - 10 |
| Silica, amorphous | 7631-86-9 | 1 - 5 |
| Titanium dioxide | 13463-67-7 | 30 - 60 |

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

This mixture has not been evaluated as a whole. Information provided on the health effects of this product is based on individual components. All ingredients are bound and potential for hazardous exposure as shipped is minimal. However, some vapors may be released upon heating and the end-user (fabricator) must take the necessary precautions (mechanical ventilation, respiratory protection, etc.) to protect employees from exposure.

POTENTIAL HEALTH EFFECTS

| Routes of Exposure: | : Inhalation, Ingestion, Skin contact |
|---------------------|---|
| Acute exposure | |
| Inhalation | : Resin particles, like other inert materials, can be mechanically irritating. |
| Ingestion | : May be harmful if swallowed. |
| Eyes | : Resin particles, like other inert materials, are mechanically irritating to eyes. |
| Skin | : Experience shows no unusual dermatitis hazard from routine handling. |

PolyOne.

MATERIAL SAFETY DATA SHEET WIRE STAPLE WHITE UV

Version Number 1.1 Revision Date 03/29/2014 Page 2 of 7 Print Date 4/6/2014

| Medical Conditions | | None known. |
|---|-------------|---|
| Aggravated by Exposure: | • | None known. |
| | | 4. FIRST AID MEASURES |
| Inhalation | : | Move to fresh air in case of accidental inhalation of fumes from overheating or combustion. When symptoms persist or in all cases of doubt seek medical advice. |
| Ingestion | : | Do not induce vomiting without medical advice. When symptoms persist or in all cases of doubt seek medical advice. |
| Eyes | : | Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If eye irritation persists, seek medical attention. |
| Skin | : | Wash off with soap and plenty of water. If skin irritation persists seek medical attention. |
| | | 5. FIREFIGHTING MEASURES |
| Flash point | : | not applicable |
| Flammable Limits Upper explosion limit Lower explosion limit Auto-ignition temperature Suitable extinguishing media | : : : | not applicable not applicable not applicable Carbon dioxide blanket, Water spray, Dry powder, Foam. |
| Special Fire Fighting Procedures | : | Fullface self-contained breathing apparatus (SCBA) used in positive pressure mode should be worn to prevent inhalation of airborne contaminants. |
| Unusual Fire/Explosion Hazards | : | Carbon dioxide (CO2), carbon monoxide (CO), oxides of nitrogen (NOx), other hazardous materials, and smoke are all possible. |
| | 6. A | CCIDENTAL RELEASE MEASURES |
| Personal precautions | : | Wear appropriate personal protection during cleanup, such as impervious gloves, boots and coveralls. |
| Environmental precautions | : | Should not be released into the environment. The product should not be allowed to enter drains, water courses or the soil. |
| Methods for cleaning up | : | Clean up promptly by sweeping or vacuum. Package all material in plastic, cardboard or metal containers for disposal. |
| | | 7. HANDLING AND STORAGE |

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MATERIAL SAFETY DATA SHEET WIRE STAPLE WHITE UV

| Version Number 1.1 Revision Date 03/29/2014 | | Page 3 of 7 Print Date 4/6/2014 |
|--|------|--|
| Handling | : | Take measures to prevent the build up of electrostatic charge. Heat only in areas with appropriate exhaust ventilation. |
| Storage | : | Keep containers dry and tightly closed to avoid moisture absorption and contamination. Keep in a dry, cool place. |
| 8. EXI | POSU | RE CONTROLS/PERSONAL PROTECTION |
| Respiratory protection | : | No personal respiratory protective equipment normally required. |
| Eye/Face Protection | : | Safety glasses with side-shields |
| Hand protection | : | Protective gloves |
| Skin and body protection | : | Long sleeved clothing |
| Additional Protective Measures | : | Safety shoes |
| General Hygiene Considerations | : | Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday. |
| Engineering measures | : | Heat only in areas with appropriate exhaust ventilation. Provide appropriate exhaust ventilation at machinery. |

Exposure limit(s)

| Components | Value | Exposure time | Exposure type | List: |
|-------------------|-----------|-----------------------------------|------------------------|----------|
| Silica, amorphous | 6 mg/m3 | Recommended exposure limit (REL): | | NIOSH |
| | 0.8 mg/m3 | Time Weighted Average (TWA): | | Z3 |
| | 10 mg/m3 | Time Weighted Average (TWA): | Inhalable particulate. | MX OEL |
| | 3 mg/m3 | Time Weighted Average (TWA): | Respirable dust. | MX OEL |
| Titanium dioxide | 10 mg/m3 | Time Weighted Average (TWA): | | ACGIH |
| | 15 mg/m3 | PEL: | Total dust. | OSHA Z1 |
| | 10 mg/m3 | Time Weighted Average (TWA): | Total dust. | OSHA Z1A |
| | 10 mg/m3 | Time Weighted Average (TWA): | as Ti | MX OEL |
| | 20 mg/m3 | Short Term Exposure Limit (STEL): | as Ti | MX OEL |

9. PHYSICAL AND CHEMICAL PROPERTIES

PolvOne

MATERIAL SAFETY DATA SHEET WIRE STAPLE WHITE UV

Version Number 1.1 Revision Date 03/29/2014

Page 4 of 7 Print Date <u>4/6/2014</u>

| Form Appearance Colour Odour Melting point/range Boiling Point: Water solubility | solid pellets WHITE very faint Not determined not applicable insoluble | Evapouration rate Specific Gravity Bulk density Vapour pressure Vapour density pH | Not applicable Not determined Not established not applicable not applicable not applicable |
|--|--|--|---|
| | | | |
| | 10. STABILITY ANI | O REACTIVITY | |
| Stability | : The product is stab | le if stored and handled as | prescribed. |
| Hazardous Polymerization | : Will not occur. | | |
| Conditions to avoid | : Keep away from ox decomposition, do | kidizing agents and open flant | ame. To avoid thermal |
| Incompatible Materials | : Incompatible with | strong acids and oxidizing | agents. |
| Hazardous decomposition products | | D2), carbon monoxide (CO dous materials, and smoke | · · · · · · · · · · · · · · · · · · · |

11. TOXICOLOGICAL INFORMATION

This mixture has not been evaluated as a whole for health effects. Exposure effects listed are based on existing health data for the individual components which comprise the mixture.

Toxicity Overview

This product contains the following components which in their pure form have the following characteristics:

| CAS-No. | Chemical Name | Effect | Target Organ |
|-------------|-----------------------------|------------------|---------------------------|
| 124172-53-8 | Formamide, N,N'-1,6- | Irritant | Eyes. |
| | hexanediylbis[N-(2,2,6,6- | | |
| | tetramethyl-4-piperidinyl)- | | |
| 7631-86-9 | Silica, amorphous | Irritant | Eyes, Respiratory system. |
| 13463-67-7 | Titanium dioxide | Systemic effects | Respiratory system. |

LC50 / LD50

This product contains the following components which, in their pure form, have the following toxicity data:

| CAS-No. | Chemical Name | Route | Value | Species |
|-------------|--|-------------------|-----------------------------|------------|
| 124172-53-8 | Formamide, N,N'-1,6- hexanediylbis[N-(2,2,6,6- tetramethyl-4-piperidinyl)- | LC50 Oral LD50 | > 5.0 mg/l > 2,000 mg/kg | rat rat |

Carcinogenicity

This product contains the following components which, in their pure form, have the following carcinogenicity data:

| | CAS-No. | Chemical Name | OSHA | IARC | NTP |
|--|---------|---------------|------|------|-----|
|--|---------|---------------|------|------|-----|

PolyOne.

MATERIAL SAFETY DATA SHEET WIRE STAPLE WHITE UV

Version Number 1.1 Revision Date 03/29/2014 Page 5 of 7 Print Date 4/6/2014

| Environmental Toxicity : Chemicals are not readily available as they are bound within polymer matrix. Bioaccumulation Potential : Chemicals are not readily available as they are bound within polymer matrix. Additional advice : no data available 13. DISPOSAL CONSIDERATIONS | 13463-67-7 Titaniu | m dioxide | no | 2B | no |
|---|--|---|---|--|-------------------------------|
| 12. ECOLOGICAL INFORMATION Persistence and degradability Environmental Toxicity : Not readily biodegradable. Environmental Toxicity : Chemicals are not readily available as they are bound within polymer matrix. Bioaccumulation Potential : Chemicals are not readily available as they are bound within polymer matrix. Additional advice : no data available 13. DISPOSAL CONSIDERATIONS Product : Like most thermoplastic plastics the product can be recycled. possible recycling is preferred to disposal or incineration. The generator of waste material has the responsibility for proper values classification, transportation and disposal in accordance with applicable federal, state/provincial and local regulations. Contaminated packaging : Recycling is preferred when possible. The generator of waste material has the responsibility for proper vaste classification transportation and disposal in accordance with applicable federal, state/provincial and local regulations. 14. TRANSPORT INFORMATION U.S. DOT Classification : Not regulated for transportation. ICAO/IATA : Refer to specific regulation. IMO/IMDG (maritime) : Refer to specific regulation. | The component is carcinoge The component is probably The component is possibly The component is carcinogen The component is known to | nic to humans. y carcinogenic to hum carcinogenic to huma s: be a human carcinoge | ans. en. | | |
| Environmental Toxicity : Chemicals are not readily available as they are bound within polymer matrix. Bioaccumulation Potential : Chemicals are not readily available as they are bound within polymer matrix. Additional advice : no data available I3. DISPOSAL CONSIDERATIONS Product : Like most thermoplastic plastics the product can be recycled. possible recycling is preferred to disposal or incineration. The generator of waste material has the responsibility for proper valeastification, transportation and disposal in accordance with applicable federal, state/provincial and local regulations. Contaminated packaging : Recycling is preferred when possible. The generator of waste material has the responsibility for proper waste classification transportation and disposal in accordance with applicable federal, state/provincial and local regulations. Contaminated packaging : Recycling is preferred when possible. The generator of waste material has the responsibility for proper waste classification transportation and disposal in accordance with applicable federal, state/provincial and local regulations. U.S. DOT Classification : Not regulated for transportation. ICAO/IATA : Refer to specific regulation. IMO/IMDG (maritime) : Refer to specific regulation. | 2 - The component is reasonabl | _ | _ | | |
| polymer matrix. Bioaccumulation Potential : Chemicals are not readily available as they are bound within polymer matrix. Additional advice : no data available 13. DISPOSAL CONSIDERATIONS Product : Like most thermoplastic plastics the product can be recycled. possible recycling is preferred to disposal or incineration. Th generator of waste material has the responsibility for proper v classification, transportation and disposal in accordance with applicable federal, state/provincial and local regulations. Contaminated packaging : Recycling is preferred when possible. The generator of waste material has the responsibility for proper vaste classification transportation and disposal in accordance with applicable federal, state/provincial and local regulations. U.S. DOT Classification : Not regulated for transportation. ICAO/IATA : Refer to specific regulation. IMO/IMDG (maritime) : Refer to specific regulation. | Persistence and degradability | : Not readily biod | egradable. | | |
| polymer matrix. Additional advice : no data available 13. DISPOSAL CONSIDERATIONS Product : Like most thermoplastic plastics the product can be recycled. possible recycling is preferred to disposal or incineration. Th generator of waste material has the responsibility for proper velassification, transportation and disposal in accordance with applicable federal, state/provincial and local regulations. Contaminated packaging : Recycling is preferred when possible. The generator of waste material has the responsibility for proper waste classification transportation and disposal in accordance with applicable fed state/provincial and local regulations. U.S. DOT Classification : Not regulated for transportation. ICAO/IATA : Refer to specific regulation. IMO/IMDG (maritime) : Refer to specific regulation. 15. REGULATORY INFORMATION | Environmental Toxicity | | ot readily available as | s they are bound w | vithin the |
| 13. DISPOSAL CONSIDERATIONS Product : Like most thermoplastic plastics the product can be recycled. possible recycling is preferred to disposal or incineration. The generator of waste material has the responsibility for proper variable classification, transportation and disposal in accordance with applicable federal, state/provincial and local regulations. Contaminated packaging : Recycling is preferred when possible. The generator of waste material has the responsibility for proper vaste classification transportation and disposal in accordance with applicable federal, state/provincial and local regulations. Contaminated packaging : Recycling is preferred when possible. The generator of waste material has the responsibility for proper vaste classification transportation and disposal in accordance with applicable federal, state/provincial and local regulations. U.S. DOT Classification : Not regulated for transportation. ICAO/IATA : Refer to specific regulation. IMO/IMDG (maritime) : Refer to specific regulation. 15. REGULATORY INFORMATION | Bioaccumulation Potential | | ot readily available as | s they are bound w | within the |
| Product : Like most thermoplastic plastics the product can be recycled. possible recycling is preferred to disposal or incineration. The generator of waste material has the responsibility for proper values classification, transportation and disposal in accordance with applicable federal, state/provincial and local regulations. Contaminated packaging : Recycling is preferred when possible. The generator of waste material has the responsibility for proper waste classification transportation and disposal in accordance with applicable federal, state/provincial and local regulations. Contaminated packaging : Recycling is preferred when possible. The generator of waste material has the responsibility for proper waste classification transportation and disposal in accordance with applicable fed state/provincial and local regulations. U.S. DOT Classification : Not regulated for transportation. ICAO/IATA : Refer to specific regulation. IMO/IMDG (maritime) : Refer to specific regulation. 15. REGULATORY INFORMATION | Additional advice | : no data available | 2 | | |
| possible recycling is preferred to disposal or incineration. The generator of waste material has the responsibility for proper visual classification, transportation and disposal in accordance with applicable federal, state/provincial and local regulations. Contaminated packaging : Recycling is preferred when possible. The generator of waste material has the responsibility for proper waste classification transportation and disposal in accordance with applicable federal, state/provincial and local regulations. Contaminated packaging : Recycling is preferred when possible. The generator of waste material has the responsibility for proper waste classification transportation and disposal in accordance with applicable federal, state/provincial and local regulations. U.S. DOT Classification : Not regulated for transportation. ICAO/IATA : Refer to specific regulation. IMO/IMDG (maritime) : Refer to specific regulation. 15. REGULATORY INFORMATION | | 13. DISPOSAL CO | ONSIDERATIONS | | |
| material has the responsibility for proper waste classification transportation and disposal in accordance with applicable fed state/provincial and local regulations. 14. TRANSPORT INFORMATION U.S. DOT Classification : Not regulated for transportation. ICAO/IATA : Refer to specific regulation. IMO/IMDG (maritime) : Refer to specific regulation. 15. REGULATORY INFORMATION | Product | possible recyclir generator of was classification, tra | ng is preferred to disp ste material has the re ansportation and disp | osal or incinerations of the sponsibility for provident of the sponsibility for provident of the sponsore of t | on. The oper waste with |
| U.S. DOT Classification : Not regulated for transportation. ICAO/IATA : Refer to specific regulation. IMO/IMDG (maritime) : Refer to specific regulation. 15. REGULATORY INFORMATION | Contaminated packaging | material has the transportation ar | responsibility for pro nd disposal in accorda | per waste classificance with applicat | cation, |
| ICAO/IATA : Refer to specific regulation. IMO/IMDG (maritime) : Refer to specific regulation. I5. REGULATORY INFORMATION | | 14. TRANSPORT | INFORMATION | | |
| IMO/IMDG (maritime) : Refer to specific regulation. 15. REGULATORY INFORMATION | U.S. DOT Classification | : Not regulated fo | r transportation. | | |
| 15. REGULATORY INFORMATION | ICAO/IATA | : Refer to specific | regulation. | | |
| | MO/IMDG (maritime) | : Refer to specific | regulation. | | |
| US Regulations: | | 15. REGULATOR | Y INFORMATION | | |
| | US Regulations: | | | | |
| OSHA Status : Classified as hazardous based on components. | OSHA Status | : Classified as haz | zardous based on com | ponents. | |

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MATERIAL SAFETY DATA SHEET WIRE STAPLE WHITE UV

Version Number 1.1 Revision Date 03/29/2014 Page 6 of 7 Print Date 4/6/2014

TSCA Status : All components of this product are listed on or exempt from the TSCA Inventory.

US. EPA CERCLA Hazardous Substances (40 CFR 302)

not applicable

California Proposition : Not applicable 65

SARA Title III Section 302 Extremely Hazardous Substance

Unless specific chemicals are identified under this section, this product is Not Applicable under this regulation

SARA Title III Section 313 Toxic Chemicals:

Unless specific chemicals are identified under this section, this product is Not Applicable under this regulation

Canadian Regulations:

National Pollutant Release Inventory (NPRI)

:

not applicable

WHMIS Classification : D2A

WHMIS Ingredient Disclosure List

| CAS-No. | |
|-----------|--|
| 7631-86-9 | |

DSL

All of the components of this product are listed on the Canadian Inventories or are exempt. However, at least one component of this product is on the Canadian Non-Domestic Substances List (NDSL). Quantity use in Canada is restricted by regulations.

National Inventories:

| Australia AICS | : | Listed |
|----------------|---|----------------|
| China IECS | : | Listed |
| Europe EINECS | : | Listed |
| Japan ENCS | : | Not determined |

MATERIAL SAFETY DATA SHEET WIRE STAPLE WHITE UV

Version Number 1.1 Revision Date 03/29/2014 Page 7 of 7 Print Date *4/6/2014*

Korea KECI : Listed

Philippines PICCS : Listed

16. OTHER INFORMATION

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.