

MATERIAL SAFETY DATA SHEET 10009496VOPVC WHITE

Version Number 1.1 Revision Date 12/23/2003

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1. PRODUCT AND COMPANY IDENTIFICATION

POLYONE CORPORATION 33587 Walker Road, Avon Lake, OH 44012

| NON-EMERGENCY TELEPHONE | : | Product Stewardship (770) 271-5902 |
|-------------------------------|---|--|
| Emergency telephone number | : | CHEMTREC 1-800-424-9300 (24hrs for spill, leak, fire, exposure or accident). |
| Product name | : | 10009496VOPVC WHITE |
| Product code | : | CC10009496 |
| Chemical Name | : | Mixture |
| CAS-No. | : | Mixture |
| Product Use | : | Industrial Applications |

2. COMPOSITION/INFORMATION ON INGREDIENTS

| Components | CAS-No. | Weight % |
|------------------|------------|----------|
| 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 | : Particulates, like other inert materials can be mechanically irritating. Excessive inhalation of product vapors, especially during heating or processing, may be irritating to respiratory system. | | |
| Ingestion | : May be harmful if swallowed. | | |
| Eyes | : Particulates, like other inert materials can be mechanically irritating. | | |
| Skin | : Experience shows no unusual dermatitis hazard from routine handling. | | |
| Chronic exposure | : Refer to Section 11 for Toxicological Information. | | |



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| | 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 seel medical attention. |
| | 5. FIRE-FIGHTING MEASURES |
| Flash point | : Not applicable |
| Flammable Limits | |
| Upper explosion limit | : Not applicable |
| Lower explosion limit | : Not applicable |
| Autoignition temperature | : Not applicable |
| Suitable extinguishing media | : Carbon dioxide blanket, water spray, dry powder, foamnone. |
| 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 | : Carbon dioxide (CO2), carbon monoxide (CO), oxides of nitrogen |
| Hazards | (NOx), other hazardous materials, and smoke are all possible. May emit Hydrogen Chloride (HCl) or Carbon Monoxide (CO) under fire conditions. |
| | 6. ACCIDENTAL 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. Refer to Section 12 of this MSDS for proper disposal methods. |
| | 7. HANDLING AND STORAGE |



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| | | |
| 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. EXPC |)SUI | 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: |
|------------------|----------|-----------------------|---------------|---------|
| Titanium dioxide | 10 mg/m3 | Time Weighted Average | | ACGIH |
| | _ | (TWA): | | |
| | 15 mg/m3 | PEL: | Total dust. | OSHA Z1 |

| 9. | PHYSICAL | AND CHEM | IICAL PROI | PERTIES |
|----|----------|----------|------------|---------|
| | | | | |

| Form |
|---------------------|
| Appearance |
| Color |
| Odor |
| Melting point/range |
| Boiling Point: |
| Water solubility |

: Solid : Pellets WHITE : : Very faint : Not determined : Not applicable : Insoluble

Evaporation rate Specific Gravity: Bulk density Vapor pressure Vapour density pН

Keep away from oxidizing agents and open flame. To avoid thermal

- : Not applicable
 - Not determined

:

- Not established :
- : Not applicable
- Not applicable :
- : Not applicable

10. STABILITY AND REACTIVITY

- Stability : Stable.
- Hazardous Polymerization Will not occur. :

:

Conditions to avoid

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| | | decomposition | n, do not overheat. | |
| Incompatible Materials | : | acetal copolyn processing. A destructive an mechanically quantities of t | mers and with amine c at processing condition d involve rapid degrac clean processing equip | Also, avoid contact with acetal or ontaining materials during hs, these materials are mutually lation. Thoroughly purge and pment to avoid even trace oming in contact with each other. stocks. |
| Hazardous decompositio products | n : | (NOx), hydro smoke are all or more) abov °C) may result | gen chloride (HCl), ot possible. Prolonged h ve 392 °F (200 °C) or s | noxide (CO), oxides of nitrogen her hazardous materials, and heating (approximately 30 minutes short term heating at 482 °F (250 sition and evolution of carbon |
| | 11 ' | TOYICOLOC | ICAL INFORMATI | |
| | 11. | IUAICOLOG | ICAL INFORMATI | UN |
| health data for the individ Toxicity Overview | n evaluated dual compo | l as a whole for onents which co | health effects. Exposomprise the mixture. | UN ure effects listed are based on exist have the following characteristics |
| health data for the individ Toxicity Overview | n evaluated dual compo e following | l as a whole for onents which co | health effects. Exposomprise the mixture. | ure effects listed are based on exist a have the following characteristics Target Organ |
| health data for the individ <u>Toxicity Overview</u> This product contains the <u>CAS-No.</u> | n evaluated dual compo e following | l as a whole for onents which co components w ical Name | health effects. Exposomprise the mixture. | ure effects listed are based on exist |
| health data for the individ <u>Toxicity Overview</u> This product contains the <u>CAS-No.</u> | n evaluated dual compo e following Chem Titanium d | l as a whole for onents which co components w ical Name ioxide | health effects. Exposomprise the mixture. hich in their pure form Effect Systemic effects | ure effects listed are based on exist have the following characteristics Target Organ Respiratory system. |
| health data for the individ Toxicity Overview This product contains the CAS-No. 13463-67-7 | n evaluated dual compo e following Chem Titanium di 12 | l as a whole for onents which co components w iical Name ioxide 2. ECOLOGIC | health effects. Exposomprise the mixture. hich in their pure form Effect Systemic effects | ure effects listed are based on exist n have the following characteristics Target Organ Respiratory system. |
| health data for the individ <u>Toxicity Overview</u> This product contains the <u>CAS-No.</u> | n evaluated dual compo e following Chem Titanium di 12 | l as a whole for onents which co components w ical Name ioxide | health effects. Exposomprise the mixture. hich in their pure form Effect Systemic effects | ure effects listed are based on exist have the following characteristics Target Organ Respiratory system. |
| health data for the individ Toxicity Overview This product contains the CAS-No. 13463-67-7 | n evaluated dual compo e following Chem Titanium di 12 | l as a whole for onents which co components w ical Name ioxide 2. ECOLOGIC Not readily bi | health effects. Exposomprise the mixture. hich in their pure form Effect Systemic effects CAL INFORMATION odegradable. e not readily available a | ure effects listed are based on exist have the following characteristics Target Organ Respiratory system. |
| health data for the individ Toxicity Overview This product contains the CAS-No. 13463-67-7 Persistence and degradab | n evaluated dual compo e following Chem Titanium di 12 pility : | l as a whole for onents which co components w ical Name ioxide 2. ECOLOGIC Not readily bi Chemicals are of the polyme | health effects. Exposomprise the mixture. hich in their pure form Effect Systemic effects CAL INFORMATION odegradable. e not readily available a r. | ure effects listed are based on exist a have the following characteristics Target Organ Respiratory system. |

13. DISPOSAL CONSIDERATIONS

| Product | : | Like most thermoplastic plastics the product can be recycled. Where possible recycling is preferred to disposal or incineration. 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 |



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| 14. TRANSPORT INFORMATION | | | | |
|---|-------|---|--|--|
| | | | | |
| U.S. DOT Classification | : | Not regulated for transportation. | | |
| ICAO/IATA (air) | : | Refer to specific regulation. | | |
| IMO / IMDG (maritime) | : | Refer to specific regulation. | | |
| | 15 | . REGULATORY INFORMATION | | |
| US Regulations: | | | | |
| OSHA Status | : | Classified as hazardous based on components. | | |
| TSCA Status | : | All components of this product are listed on or exempt from the TSCA Inventory. | | |
| US. EPA CERCLA Hazardous | Subs | stances (40 CFR 302) | | |
| | | | | |
| Not applicable | | | | |
| Not applicable | | | | |
| Not applicable | | | | |
| Not applicable California Proposition 65 | : | WARNING! This product contains a chemical known to the State of California to cause cancer. | | |
| California Proposition 65 | | California to cause cancer. | | |
| California Proposition | | California to cause cancer. | | |
| California Proposition 65 SARA Title III Section 302 Ext | treme | California to cause cancer. ely Hazardous Substance | | |
| California Proposition 65 SARA Title III Section 302 Ext Not applicable SARA Title III Section 313 To: Not applicable | treme | California to cause cancer. ely Hazardous Substance | | |
| California Proposition 65 SARA Title III Section 302 Ext Not applicable SARA Title III Section 313 To: Not applicable | treme | California to cause cancer. ely Hazardous Substance Chemicals: | | |
| California Proposition 65 SARA Title III Section 302 Ext Not applicable SARA Title III Section 313 To: Not applicable Canadian Regulations: | treme | California to cause cancer. ely Hazardous Substance Chemicals: | | |
| California Proposition 65 SARA Title III Section 302 Ext Not applicable SARA Title III Section 313 To: Not applicable Canadian Regulations: National Pollutant Relea | treme | California to cause cancer. ely Hazardous Substance Chemicals: | | |



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| Australia AICS | : Listed |
|-------------------|------------------|
| China IECS | : Listed |
| Europe EINECS | : Listed |
| Japan ENCS | : Not determined |
| Korea KECI | : Not determined |
| Philippines PICCS | : Not determined |
| | |

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 when used in combination with any other materials and/or in any particular process or processing conditions.