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SAFETY DATA SHEET

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| Section 1. Identification | | |
|--|-------------|---|
| GHS product identifier Chemical name CAS number Other means of identification Product type | : | 00000556331 Mixture Mixture CC10237184 liquid |
| <u>Relevant identified uses of the subs</u> Product use | stance : | e or mixture and uses advised against Industrial applications. Plastics. |
| Supplier's details | : | POLYONE CORPORATION ColorMatrix Group Inc. 680 North Rocky River Drive, Berea, Ohio, 44017-1628, USA |
| | | +1 216 622 0100 |
| Emergency telephone number (with hours of operation) | : | CHEMTREC 1-800-424-9300 (24hrs for spill, leak, fire, exposure or accident). |

Section 2. Hazards identification

This mixture has not been evaluated as a whole for health effects. Information provided on health effects of this product is based on the individual components. However, some vapors or contaminants 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. See sections 8 and 11 for special precautions. After handling, always wash hands thoroughly with soap and water.

| OSHA/HCS status | : | This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200). |
|---|---|--|
| Classification of the substance or mixture | : | SKIN CORROSION/IRRITATION - Category 2 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A RESPIRATORY SENSITIZATION - Category 1 SKIN SENSITIZATION - Category 1 GERM CELL MUTAGENICITY - Category 2 |

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| GHS label elements | |
| Hazard pictograms | |
| Signal word Hazard statements | Danger Causes serious eye irritation. Causes skin irritation. May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause an allergic skin reaction. Suspected of causing genetic defects. |
| Precautionary statements | |
| General Prevention | Not applicable. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves. Wear eye or face protection. Wear protective clothing. Wear respiratory protection. Avoid breathing vapor. Wash hands thoroughly after handling. Contaminated work clothing must not be allowed out of the workplace. |
| Response | IF exposed or concerned: Get medical attention. IF INHALED: If breathing is difficult, remove person to fresh air and keep comfortable for breathing. If experiencing respiratory symptoms: Call a POISON CENTER or physician. IF ON SKIN: Wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation or rash occurs: Get medical attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention. |
| Storage | : Store in a well-ventilated place. |
| Disposal | Dispose of contents and container in accordance with all local, |
| | regional, national and international regulations. |
| Supplemental label elements | : None known. |
| Hazards not otherwise classified | : None known. |

Section 3. Composition/information on ingredients

| Substance/mixture | : | Mixture |
|-------------------|---|---------|
| Chemical name | : | Mixture |



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Other means of identification : CC10237184

CAS number/other identifiers

| Ingredient name | % | CAS number |
|---|---------|----------------|
| Sodium bicarbonate | 25 - 50 | 144-55-8 |
| Miscellaneous Compounds Distillates, petroleum, hydrotreated middle | 10 - 25 | Not available. |
| Azodicarbonamide | 10 - 25 | 123-77-3 |
| Diphenyloxide-4,4'-disulfohydrazide | 3 - 5 | 80-51-3 |
| Zinc oxide | 3 - 5 | 1314-13-2 |

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

:

:

Section 4. First aid measures

Description of necessary first aid measures

Eye contact

Inhalation

upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If necessary, call a poison center or physician. If unconscious, place in recovery position and get medical attention immediately. Maintain an open

Immediately flush eyes with plenty of water, occasionally lifting the

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| | |
| | airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours. In the event of any complaints or symptoms, avoid further exposure. |
| Skin contact | : Wash with plenty of soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse. |
| Ingestion | : Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. |

Most important symptoms/effects, acute and delayed

| Potential acute health effects | |
|--------------------------------|--|
| Eye contact Inhalation | Causes serious eye irritation. May cause allergy or asthma symptoms or breathing difficulties if inhaled. |
| Skin contact | : Causes skin irritation. May cause an allergic skin reaction. |
| Ingestion | : No known significant effects or critical hazards. |
| Over-exposure signs/symptoms | |
| Eye contact | : Adverse symptoms may include the following: pain or irritation watering redness |
| Inhalation | : Adverse symptoms may include the following: wheezing and breathing difficulties asthma |
| Skin contact | : Adverse symptoms may include the following: irritation redness |
| Ingestion | : No specific data. |
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Indication of immediate medical attention and special treatment needed, if necessary

| Notes to physician Specific treatments | : | In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours. No specific treatment. |
|---|---|--|
| Protection of first-aiders | : | No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. |

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

| Suitable extinguishing media Unsuitable extinguishing media | : | In case of fire, use water spray (fog), foam, dry chemical or CO_2 . None known. |
|--|---|--|
| Specific hazards arising from the chemical Hazardous thermal decomposition products | : | In a fire or if heated, a pressure increase will occur and the container may burst. Decomposition products may include the following materials: carbon dioxide carbon monoxide nitrogen oxides sulfur oxides metal oxide/oxides |
| Special protective actions for fire- fighters | : | Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. |
| Special protective equipment for fire-fighters | : | Fire-fighters should wear appropriate protective equipment and self- contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. |

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

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| | |
| For non-emergency personnel : | No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment. |
| For emergency responders : | If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel". |
| Environmental precautions : | Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). |
| Methods and materials for containment | and cleaning up |
| Small spill : | Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor. |
| Large spill : | Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non- combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal. |

Section 7. Handling and storage

Precautions for safe handling

| Protective measures | : | Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems or asthma, allergies or chronic or recurrent respiratory disease should not be employed in any process in which this product is used. Avoid exposure - obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapor or mist. Use only with adequate ventilation. Wear appropriate respirator |
|---------------------|---|--|
|---------------------|---|--|





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|---|--|
| Advice on general occupational hygiene | when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container. Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See |
| Conditions for safe storage, including any incompatibilities | also Section 8 for additional information on hygiene measures. Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store in a well-ventilated place. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. |

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

| Ingredient name | Exposure limits |
|--------------------------------------|---|
| Sodium bicarbonate | |
| | |
| | |
| Miscellaneous Compounds Distillates, | |
| petroleum, hydrotreated middle | |
| | |
| Azodicarbonamide | |
| | |
| Diphenyloxide-4,4'-disulfohydrazide | ACGIH TLV (2000-03-01) |
| 1 5 7 5 | TLV-TWA: Threshold Limit Value - Time weighted average PEL: |
| | Permissible Exposure Level 0.1 mg/m3 Form: Inhalable fraction |
| | |



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| Zinc oxide | OSHA PEL 1989 (1989-03-01) |
|----------------------------------|--|
| | PEL: Permissible Exposure Level 5 mg/m3 Form: Fume |
| | Short Term Exposure Limit value for a 15-minute reference |
| | period expressed in parts per million or in mg/m3. 10 mg/m3 |
| | Form: Fume |
| | PEL: Permissible Exposure Level 10 mg/m3 Form: Total dust |
| | PEL: Permissible Exposure Level 5 mg/m3 Form: Respirable |
| | fraction |
| | OSHA PEL (1993-06-30) |
| | PEL: Permissible Exposure Level 5 mg/m3 Form: Fume |
| | PEL: Permissible Exposure Level 15 mg/m3 Form: Total dust |
| | PEL: Permissible Exposure Level 5 mg/m3 Form: Respirable |
| | fraction |
| | NIOSH REL (1994-06-01) |
| | Time Weighted Average (TWA) 5 mg/m3 Form: Dust and fumes |
| | Short Term Exposure Limit value for a 15-minute reference |
| | period expressed in parts per million or in mg/m3. 10 mg/m3 |
| | Form: Fume |
| | Ceiling, is a a limit indicating the maximum concentration of a |
| | chemical substances in the breathing zone that should not be |
| | exceeded. 15 mg/m3 Form: Dust |
| | ACGIH TLV (2003-01-01) |
| | TLV-TWA: Threshold Limit Value - Time weighted average PEL: |
| | Permissible Exposure Level 2 mg/m3 Form: Respirable fraction |
| | TLV-STEL: Threshold Limit Value - Short Time Exposure Leve |
| | 10 mg/m3 Form: Respirable fraction |
| | |
| Annuonviete encineering controls | Liss only with adaquate ventilation. If user operations generate dust |
| Appropriate engineering controls | : Use only with adequate ventilation. If user operations generate dust, |
| | fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to |
| | airborne contaminants below any recommended or statutory limits. |
| Environmental experime controls | |
| Environmental exposure controls | : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of |
| | environmental protection legislation. In some cases, fume scrubbers, |
| | filters or engineering modifications to the process equipment will be |
| | necessary to reduce emissions to acceptable levels. |
| | necessary to reduce emissions to acceptable revers. |
| Individual protection measures | |
| Hygiene measures | : Wash hands, forearms and face thoroughly after handling chemical |
| | products, before eating, smoking and using the lavatory and at the en |
| | of the working period. Appropriate techniques should be used to |
| | remove potentially contaminated clothing. Contaminated work |
| | clothing should not be allowed out of the workplace. Wash |
| | contaminated clothing before reusing. Ensure that eyewash stations |
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|--|--|
| Eye/face protection | and safety showers are close to the workstation location. Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles. |
| Skin protection | |
| Hand protection | : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated. |
| Body protection | Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. |
| Other skin protection | : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this |
| Respiratory protection | product. Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. |

Section 9. Physical and chemical properties

Appearance

| Physical state | : liquid [liquid] |
|----------------|-------------------|
| Color | : NOT APPLICABLE |
| Odor | : Faint odor. |
| Odor threshold | : Not available. |
| рН | : Not available. |
| Melting point | : Not available. |
| Boiling point | : Not available. |
| Flash point | : Not available. |
| Burning time | : Not available. |
| Burning rate | : Not available. |
| | |

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| | | NT |
|--|---|---------------------------|
| Evaporation rate | : | Not available. |
| Flammability (solid, gas) | : | Not available. |
| Lower and upper explosive | : | Lower: Not available. |
| (flammable) limits | | Upper: Not available. |
| Vapor pressure | : | Not available. |
| Vapor density | : | Not available. |
| Relative density | : | Not available. |
| Solubility | : | Not available. |
| Solubility in water | : | insoluble in water. |
| Partition coefficient: n- octanol/water | : | Not available. |
| Auto-ignition temperature | : | Not available. |
| Decomposition temperature | : | Not available. |
| SADT | : | Not available. |
| Viscosity | : | Dynamic: Not available. |
| - | | Kinematic: Not available. |

Section 10. Stability and reactivity

| Reactivity | : | No specific test data related to reactivity available for this product or its ingredients. |
|-------------------------------------|---|--|
| Chemical stability | : | Stable under recommended storage and handling conditions (see Section 7). |
| Possibility of hazardous reactions | : | Under normal conditions of storage and use, hazardous reactions will not occur. |
| Conditions to avoid | : | Keep away from extreme heat and oxidizing agents. |
| Incompatible materials | : | Keep away from strong acids. Oxidizer. |
| Hazardous decomposition products | : | Under normal conditions of storage and use, hazardous decomposition products should not be produced. |

Section 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.

Information on toxicological effects

Acute toxicity

| Product/ingredient name | Result | Species | Dose | Exposure | |
|-------------------------|-----------|---------|-------------|----------|--|
| Sodium bicarbonate | | | | | |
| | LD50 Oral | Rat | 4,220 mg/kg | - | |
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| Miscellaneous Compounds Distillates, petroleum, hydrotreated middle | | | | |
|---|-----------|---------------------------|-------------|---|
| Azodicarbonamide | | | | |
| | LD50 Oral | Rat | 6,400 mg/kg | - |
| Diphenyloxide-4,4'-disulfohy | drazide | | | |
| | LD50 Oral | Rat | 2,300 mg/kg | - |
| Zinc oxide | | | | |
| Conclusion/Summary | : N | Aixture.Not fully tested. | | |

Irritation/Corrosion

| Product/ingredient name | Result | Species | Score | Exposure | Observation |
|---------------------------------------|-------------------------|----------------|--------------|-----------|-------------|
| Sodium bicarbonate | Eyes - Mild irritant | Rabbit | | 0.008 hrs | - |
| | Skin - Mild | Human | | 72 hrs | - |
| | irritant | | | | |
| Zinc oxide | Eyes - Mild | Rabbit | | 24 hrs | - |
| | irritant | | | | |
| | Skin - Mild | Rabbit | | 24 hrs | - |
| | irritant | | | | |
| Conclusion/Summary | _ | | | | |
| Skin | | lixture.Not fu | | | |
| Eyes | | lixture.Not fu | | | |
| Respiratory | : N | lixture.Not fu | illy tested. | | |
| <u>Sensitization</u> | | | | | |
| Conclusion/Summary | | | | | |
| Skin | | lixture.Not fu | | | |
| Respiratory | : N | lixture.Not fu | illy tested. | | |
| <u>Mutagenicity</u> | | | | | |
| Conclusion/Summary | : N | lixture.Not fu | ally tested. | | |
| Carcinogenicity | | | | | |
| Conclusion/Summary | : N | lixture.Not fu | ally tested. | | |
| Reproductive toxicity | | | | | |
| Conclusion/Summary | : N | lixture.Not fu | illy tested. | | |
| e e e e e e e e e e e e e e e e e e e | | | • | | |
| Teratogenicity | | | | | |
| Conclusion/Summary | : N | lixture.Not fu | ally tested. | | |
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Specific target organ toxicity (single exposure) Not available.

Specific target organ toxicity (repeated exposure) Not available.

| Aspiration hazard | | |
|--|------|--|
| Product/ingredient name | | Result |
| Miscellaneous Compounds Distillates, hydrotreated middle | petr | roleum, ASPIRATION HAZARD - Category 1 |
| Information on the likely routes of exposure | : | Not available. |
| Potential acute health effects | | |
| Eye contact | : | Causes serious eye irritation. |
| Inhalation | : | May cause allergy or asthma symptoms or breathing difficulties if inhaled. |
| Skin contact | : | Causes skin irritation. May cause an allergic skin reaction. |
| Ingestion | : | No known significant effects or critical hazards. |
| Symptoms related to the physical, ch | emi | ical and toxicological characteristics |
| | | |
| Eye contact | : | Adverse symptoms may include the following: pain or irritation watering |
| | | redness |
| Inhalation | : | Adverse symptoms may include the following: wheezing and breathing difficulties asthma |
| Skin contact | : | Adverse symptoms may include the following: irritation |
| | | redness |
| Ingestion | : | No specific data. |
| Delayed and immediate effects and a | lso | chronic effects from short and long term exposure |
| Short term exposure | | |
| Potential immediate effects | : | Not available. |
| Potential delayed effects | : | Not available. |
| Long term exposure | | |
| | | |
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| Potential immediate effects Potential delayed effects | : | Not available. Not available. |
|--|---|---|
| Potential chronic health effects | | |
| Conclusion/Summary | : | Mixture.Not fully tested. |
| General | : | Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels. |
| Carcinogenicity | : | No known significant effects or critical hazards. |
| Mutagenicity | : | Suspected of causing genetic defects. |
| Teratogenicity | : | No known significant effects or critical hazards. |
| Developmental effects | : | No known significant effects or critical hazards. |
| Fertility effects | : | No known significant effects or critical hazards. |

Numerical measures of toxicity

Acute toxicity estimates

| Route | ATE value |
|------------------------------|-------------|
| Oral | 5,025 mg/kg |
| Route | ATE value |
| Inhalation (dusts and mists) | 6.224 mg/l |

Section 12. Ecological information

Toxicity

| Product/ingredient name | Result | Species | Exposure |
|-------------------------|---------------------------------|------------------------|----------|
| Sodium bicarbonate | | | |
| | Acute LC50 8,600,000 µg/l Fresh | Fish - Fish | 96 h |
| | water | | |
| | Acute LC50 8,600,000 µg/l Fresh | Fish - Fish | 96 h |
| | water | | |
| | Acute LC50 8,600,000 µg/l Fresh | Fish - Fish | 96 h |
| | water | | |
| | Acute LC50 8,250,000 µg/l Fresh | Fish - Fish | 96 h |
| | water | | |
| | Acute LC50 7,550 mg/l Fresh | Fish - Fish | 96 h |
| | water | | |
| | Acute LC50 767.87 mg/l Marine | Aquatic invertebrates. | 48 h |
| | water | Crustaceans | |



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| | Acute LC50 1,415.51 mg/l Marine | Aquatic invertebrates. | 48 h |
|--|---|-----------------------------------|------------------------|
| | water | Crustaceans | |
| | Acute EC50 650,000 µg/l Fresh water | Aquatic plants - Algae | 96 h |
| | Chronic NOEC 576 mg/l Fresh water | Aquatic invertebrates. Daphnia | 21 d |
| Zinc oxide | | - | |
| | Acute LC50 2,246,000 µg/l Fresh water | Fish - Fish | 96 h |
| | Acute LC50 1.1 mg/l Fresh water | Fish - Fish | 96 h |
| | Acute LC50 2.525 mg/l Fresh water | Fish - Fish | 96 h |
| | Acute LC50 3.969 mg/l Fresh water | Fish - Fish | 96 h |
| | Acute LC50 98 µg/l Fresh water | Aquatic invertebrates. Daphnia | 48 h |
| | Acute EC50 0.622 mg/l Fresh water | Aquatic invertebrates. Daphnia | 48 h |
| | Acute EC50 1 mg/l Fresh water | Aquatic invertebrates. Daphnia | 48 h |
| | Acute LC50 1.25 mg/l Fresh water | Aquatic invertebrates. Daphnia | 48 h |
| | Acute EC50 0.481 mg/l Fresh water | Aquatic invertebrates. Daphnia | 48 h |
| | Acute IC50 46 µg/l Fresh water | Aquatic plants - Algae | 72 h |
| | Acute IC50 63 µg/l Fresh water | Aquatic plants - Algae | 72 h |
| | Acute IC50 1.85 mg/l Marine water | Aquatic plants - Algae | 96 h |
| | Acute IC50 2.97 mg/l Marine water | Aquatic plants - Algae | 96 h |
| | Acute IC50 2.36 mg/l Marine water | Aquatic plants - Algae | 96 h |
| Remarks - Acute - Aquatic invertebrates.: | Dangerous for the environment: May environment. | cause long term adverse e | ffects in the aquation |
| Conclusion/Summary | | onment: May cause long te ent. | rm adverse effects |
| Persistence and degradability | Y | | |
| Conclusion/Summary | : Not available. | | |
| | | | 1 |

Dangerous for the environment: May cause long term adverse effects Conclusion/Summary : in the aquatic environment.

Bioaccumulative potential

| Product/ingredient name | LogPow | BCF | Potential | |
|-------------------------|--------|-------|-----------|--|
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| Azodicarbonamide | 1 | - | low |
|---------------------|---|-----------|------|
| Diphenyloxide-4,4'- | | 3.00 | low |
| disulfohydrazide | | | |
| Zinc oxide | | 60,960.00 | high |

Mobility in soil

| Soil/water partition coefficient | : | Not available. |
|----------------------------------|---|---|
| (KOC) | | |
| Other adverse effects | : | No known significant effects or critical hazards. |

Section 13. Disposal considerations

Disposal methods The generation of waste should be avoided or minimized wherever : possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

United States - RCRA Acute hazardous waste "P" List: Not listed

United States - RCRA Toxic hazardous waste "U" List: Not listed

Section 14. Transport information

| U.S. DOT Classification | : | Not regulated for transportation. |
|-------------------------|---|---|
| ICAO/IATA | : | UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Zinc Oxide), 9, PGIII, Marine Pollutant |
| IMO/IMDG (maritime) | : | UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Zinc Oxide), 9, PGIII, Marine Pollutant |

Section 15. Regulatory information

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| U.S. Federal regulations | : | United States - TSCA 12(b) - Chemical export notification: None of the components are listed. United States - TSCA 4(a) - Final Test Rules: Not listed United States - TSCA 4(a) - ITC Priority list: Not listed United States - TSCA 4(a) - Proposed test rules: Not listed United States - TSCA 4(f) - Priority risk review: Not listed United States - TSCA 5(a)2 - Final significant new use rules: Not listed United States - TSCA 5(a)2 - Proposed significant new use rules: Not listed United States - TSCA 5(a)2 - Proposed significant new use rules: Not listed United States - TSCA 5(e) - Substances consent order: Not listed United States - TSCA 6 - Final risk management: Not listed United States - TSCA 6 - Proposed risk management: Not listed United States - TSCA 8(a) - Chemical risk rules: Not listed United States - TSCA 8(a) - Dioxin/Furane precusor: Not listed United States - TSCA 8(a) - Dioxin/Furane precusor: Not listed United States - TSCA 8(a) - Chemical Data Reporting (CDR): Not determined United States - TSCA 8(a) - Preliminary assessment report (PAIR): Listed Diphenyloxide-4,4'-disulfohydrazide United States - TSCA 8(d) - Health and safety studies: Not listed United States - EPA Clean water act (CWA) section 307 - Priority pollutants: Listed Zinc oxide |
|--|---|--|
| | | Hazardous substances: Listed United States - EPA Clean air act (CAA) section 112 - Accidental release prevention - Flammable substances: Not listed United States - EPA Clean air act (CAA) section 112 - Accidental release prevention - Toxic substances: Not listed United States - Department of commerce - Precursor chemical: Not listed |
| Clean Air Act Section 112(b) | : | Not listed |
| Hazardous Air Pollutants (HAPs) Clean Air Act Section 602 Class I | : | Not listed |
| Substances Clean Air Act Section 602 Class II | : | Not listed |
| Substances DEA List I Chemicals (Precursor | : | Not listed |
| Chemicals) DEA List II Chemicals (Essential Chemicals) | : | Not listed |



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US. EPA CERCLA Hazardous Substances (40 CFR 302)

:

not applicable

SARA 311/312

Classification

Immediate (acute) health hazard Delayed (chronic) health hazard

Composition/information on ingredients

| Name | % | Classification |
|---|---------|----------------|
| Sodium bicarbonate | 25 - 50 | AH |
| Miscellaneous Compounds Distillates, petroleum, hydrotreated middle | 10 - 25 | АН |
| Azodicarbonamide | 10 - 25 | АН |
| Diphenyloxide-4,4'- disulfohydrazide | 3 - 5 | F, AH, CH |
| Zinc oxide | 3 - 5 | AH |

SARA 313

| | Product name | CAS number | % |
|-----------------------|--------------|------------|-------|
| Form R - Reporting | Zinc oxide | 1314-13-2 | 3 - 5 |
| requirements | | | |
| Supplier notification | Zinc oxide | 1314-13-2 | 3 - 5 |
| | | | |

SARA 313 notifications must not be detached from the SDS and any copying and redistribution of the SDS shall include copying and redistribution of the notice attached to copies of the SDS subsequently redistributed.

| State regulations | | |
|-------------------|---|-------|
| Massachusetts | : The following components are lis Zinc oxide | sted: |
| New York | : None of the components are listed | d. |
| New Jersey | : The following components are lis Diphenyloxide-4,4'-disulfohydra Zinc oxide | |
| Pennsylvania | : The following components are lis Zinc oxide | sted: |



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California Prop. 65

This PolyOne product does not contain any chemical known to the State of California to cause cancer, or birth defects or other reproductive harm, in concentrations that require a warning notice under California's Proposition 65. This statement relies in part on information provided by the buyer of this PolyOne product. PolyOne does not control or have complete knowledge of the end uses to which that buyer or any other entity in the chain of distribution and marketing may put this PolyOne product. Therefore, the buyer of this PolyOne product, each entity that uses this PolyOne product in formulating another product, and each entity in the chain of distribution and marketing of any product that includes the material in this PolyOne product must make its own decision as to giving a Proposition 65 warning.

| United States inventory (TSCA 8b) | : | All components are listed or exempted. |
|--|---|---|
| Canada inventory | : | All components are listed or exempted. |
| International regulations | | |
| International lists | : | Australia inventory (AICS): All components are listed or exempted. Taiwan inventory (CSNN): Not determined. Malaysia Inventory (EHS Register): Not determined. EINECS: All components are listed or exempted. Japan inventory: Not determined. China inventory (IECSC): All components are listed or exempted. Korea inventory: All components are listed or exempted. New Zealand Inventory of Chemicals (NZIoC): All components are listed or exempted. Philippines inventory (PICCS): All components are listed or exempted. |
| Chemical Weapons Convention List Schedule I Chemicals | : | Not listed |
| Chemical Weapons Convention List Schedule II Chemicals | : | Not listed |
| Chemical Weapons Convention List Schedule III Chemicals | : | Not listed |

Section 16. Other information

History

| <u>mistory</u> | | |
|--------------------------------|---|---|
| Date of printing | : | 04/08/2016 |
| Date of issue/Date of revision | : | 04/07/2016 |
| Date of previous issue | : | 00/00/0000 |
| Version | : | 1.0 |
| Key to abbreviations | : | ATE = Acute Toxicity Estimate |
| - | | BCF = Bioconcentration Factor |
| | | GHS = Globally Harmonized System of Classification and Labelling of |
| | | |
| | | Chemicals |
| | | |

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IATA = International Air Transport Association IBC = Internediate Bulk Container IMDG = International Maritime Dangerous Goods LogPow = logarithm of the octanol/water partition coefficient MARPOL 73/78 = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution) UN = United Nations Not available.

References

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the abovenamed supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist. Particularly this information may not be valid for such material used in conjunction with any other materials or in any process, unless specified in the text.