SAFETY DATA SHEET

Acrylic Undercoater Sealer

Section 1. Identification : Acrylic Undercoater Sealer **GHS** product identifier : 272SS Other means of identification **Product type** : Liquid Relevant identified uses of the substance or mixture and uses advised against Not applicable. **Supplier's details** : Essential Industries, Inc. P.O. Box 12 Merton, WI 53056-0012 Phone: 262-538-1122 **Emergency telephone** : 800-843-6174 (24 Hours) number (with hours of operation) Section 2. Hazards identification

| OSHA/HCS status | : While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this MSDS contains valuable information critical to the safe handling and proper use of the product. This MSDS should be retained and available for employees and other users of this product. |
|--|--|
| Classification of the substance or mixture | : Not classified. |
| | Percentage of the mixture consisting of ingredient(s) of unknown toxicity: 13.4% There is no toxicity data available for the polymer in this product, which is exempt and categorized in a low concern functional group under the EPA's Toxic Substances Control Act (TSCA). |
| GHS label elements | |
| Signal word | : No signal word. |
| Hazard statements | : No known significant effects or critical hazards. |
| Precautionary statements | |
| General | : Read label before use. Keep out of reach of children. If medical advice is needed, have product container or label at hand. |
| Prevention | : Not applicable |
| Response | : Not applicable |
| Storage | : Not applicable |
| Disposal | : Not applicable |
| Hazards not otherwise classified | : None known. |

Version : 0.01

Section 3. Composition/information on ingredients

Substance/mixture Other means of identification

: Mixture

: Not available

CAS number/other identifiers

| CAS number | : Not applicable |
|--------------|------------------|
| Product code | : 272SS |

| Ingredient name | % | CAS number |
|-------------------------------|-------|------------|
| 2-(2-ethoxyethoxy)ethanol | 1 - 5 | 111-90-0 |
| tris(2-butoxyethyl) phosphate | 1 - 5 | 78-51-3 |
| ethanediol | 1 - 5 | 107-21-1 |

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 | Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs. |
|--------------|---|
| Inhalation | : Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur. |
| Skin contact | Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. |
| Ingestion | : Wash out mouth with water. 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. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur. |

Most important symptoms/effects, acute and delayed

| Potential acute health eff | ects |
|--------------------------------|---|
| Eye contact | : No known significant effects or critical hazards. |
| Inhalation | : No known significant effects or critical hazards. |
| Skin contact | : No known significant effects or critical hazards. |
| Ingestion | : No known significant effects or critical hazards. |
| Over-exposure signs/syn | nptoms |
| Eye contact | : No specific data. |
| Inhalation | : No specific data. |
| Skin contact | : No specific data. |
| Ingestion | : No specific data. |
| Indication of immediate m | edical attention and special treatment needed, if necessary |
| Notes to physician | Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled. |
| Specific treatments | : No specific treatment. |
| Date of issue/Date of revision | : 12/19/2014. Date of previous issue : No previous validation. Version : 0.01 2/10 |

Section 4. First aid measures

Protection of first-aiders : No action shall be taken involving any personal risk or without suitable training.

See toxicological information (Section 11)

| Section 5. Fire-fighting measures | | |
|--|---|--|
| Extinguishing media | | |
| Suitable extinguishing media | : Use an extinguishing agent suitable for the surrounding fire. | |
| Unsuitable extinguishing media | : None known. | |
| Specific hazards arising from the chemical | : In a fire or if heated, a pressure increase will occur and the container may burst. | |
| Hazardous thermal decomposition products | : Decomposition products may include the following materials: carbon dioxide carbon monoxide phosphorus 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

| 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. 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 co | ont | ainment 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. 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. Note: see Section 1 for emergency contact information and Section 13 for waste disposal. |
| | | |

| Date of issue/Date of revision : 12/19/2014. | Date of previous issue | : No previous validation. | Version : 0.01 | 3/10 |
|--|------------------------|---------------------------|----------------|------|
|--|------------------------|---------------------------|----------------|------|

Section 7. Handling and storage

| Precautions for safe handling | |
|--|---|
| Protective measures | Put on appropriate personal protective equipment (see Section 8). |
| Advice on general occupational hygiene | 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 also Section 8 for additional information on hygiene measures. |
| Conditions for safe storage, including any incompatibilities | 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 and food and drink. 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 2-(2-ethoxyethoxy)ethanol ethanediol | | Exposure limits | |
|--|--|---|--|
| | | AIHA WEEL (United States, 10/2011). TWA: 25 ppm 8 hours. ACGIH TLV (United States, 6/2013). C: 100 mg/m ³ Form: Aerosol OSHA PEL 1989 (United States, 3/1989). CEIL: 50 ppm CEIL: 125 mg/m ³ | |
| Appropriate engineering controls | : Good general ventilation contaminants. | on should be sufficient to control worker exposure to airborne | |
| Environmental exposure controls | they comply with the re cases, fume scrubbers | 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. | |
| ndividual protection meas | ures | | |
| Hygiene measures | eating, smoking and u Appropriate technique Wash contaminated cl | s and face thoroughly after handling chemical products, before sing the lavatory and at the end of the working period. s should be used to remove potentially contaminated clothing. lothing before reusing. Ensure that eyewash stations and safety he workstation location. | |
| Eye/face protection | assessment indicates gases or dusts. If con | 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: safety glasses with side-shields. | |
| Skin protection | | | |
| Hand protection | | pervious gloves complying with an approved standard should be handling chemical products if a risk assessment indicates this i | |

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.

| Date of issue/Date of revision : 12/1 | 2014. Date of previous issue | : No previous validation. | Version : 0.0 | 1 4/10 |
|---------------------------------------|------------------------------|---------------------------|---------------|--------|
|---------------------------------------|------------------------------|---------------------------|---------------|--------|

Section 8. Exposure controls/personal protection

| 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 product. |
|------------------------|---|
| Respiratory protection | : 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

| <u>Appearance</u> | |
|---|---|
| Physical state | : Liquid |
| Color | : Milky White |
| Odor | : Bland |
| Odor threshold | : Not available |
| рН | : 9.2 to 9.8 |
| Melting point | : 0°C (32°F) |
| Boiling point | : 100°C (212°F) |
| Flash point | : Closed cup: >93.334°C (>200°F) |
| Evaporation rate | : Not available |
| Flammability (solid, gas) | : Not available |
| Lower and upper explosive (flammable) limits | : Not available |
| Vapor pressure | : <4 kPa (<30 mm Hg) [room temperature] |
| Vapor density | : <1 [Air = 1] |
| Specific gravity | : 1.02 g/cm ³ |
| Solubility | : Not available |
| Partition coefficient: n- octanol/water | : Not available |
| Auto-ignition temperature | : Not available |
| Viscosity | : Not available |
| VOC content | : 0.2% |
| VOCs are calculated following the requirements up | nder 40 CFR, Part 59, Subpart C for Consumer Products and Subpart D for Architectural Coatings. |

Section 10. Stability and reactivity

| Reactivity | : No specific test data related to reactivity available for this product or its ingredients. |
|------------------------------------|--|
| Chemical stability | : The product is stable. |
| Possibility of hazardous reactions | : Under normal conditions of storage and use, hazardous reactions will not occur. |
| Conditions to avoid | : No specific data. |
| Incompatible materials | : No specific data. |
| Hazardous decomposition products | : Under normal conditions of storage and use, hazardous decomposition products should not be produced. |
| Date of issue/Date of revision | : 12/19/2014. Date of previous issue : No previous validation. Version : 0.01 5/10 |

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

| Product/ingredient name | Result | Species | Dose | Exposure |
|-------------------------------|-----------|---------|------------|----------|
| 2-(2-ethoxyethoxy)ethanol | LD50 Oral | Rat | 7500 mg/kg | - |
| tris(2-butoxyethyl) phosphate | LD50 Oral | Rat | 3 g/kg | - |
| ethanediol | LD50 Oral | Rat | 4700 mg/kg | - |

Irritation/Corrosion

| Product/ingredient name | Result | Species | Score | Exposure | Observation |
|-------------------------------|--------------------------|---------|-------|----------------------------|-------------|
| 2-(2-ethoxyethoxy)ethanol | Eyes - Mild irritant | Rabbit | - | 125 milligrams | - |
| | Eyes - Moderate irritant | Rabbit | - | 500 milligrams | - |
| | Skin - Mild irritant | Rabbit | - | 24 hours 500 milligrams | - |
| tris(2-butoxyethyl) phosphate | Eyes - Mild irritant | Rabbit | - | 24 hours 500 milligrams | - |
| | Skin - Mild irritant | Rabbit | - | 24 hours 500 milligrams | - |
| ethanediol | Eyes - Mild irritant | Rabbit | - | 24 hours 500 milligrams | - |
| | Eyes - Mild irritant | Rabbit | - | 1 hours 100 milligrams | - |
| | Eyes - Moderate irritant | Rabbit | - | 6 hours 1440 milligrams | - |
| | Skin - Mild irritant | Rabbit | - | 555 milligrams | - |

Sensitization

Not available.

Mutagenicity

Not available.

Carcinogenicity

Not available.

Reproductive toxicity

Not available.

Teratogenicity

Not available.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure) Not available.

Aspiration hazard

Not available.

Information on the likely : Not available routes of exposure

. Dotontial couto boolth offect

Potential acute health effects

Date of issue/Date of revision

: 12/19/2014. Date of previous issue

Section 11. Toxicological information

| | nogioal internation |
|--------------------------------|--|
| Eye contact | : No known significant effects or critical hazards. |
| Inhalation | : No known significant effects or critical hazards. |
| Skin contact | : No known significant effects or critical hazards. |
| Ingestion | : No known significant effects or critical hazards. |
| | |
| Symptoms related to the phy | sical, chemical and toxicological characteristics |
| Eye contact | : No specific data. |
| Inhalation | : No specific data. |
| Skin contact | : No specific data. |
| Ingestion | : No specific data. |
| | |
| Delayed and immediate effec | <u>ts and also chronic effects from short and long term exposure</u> |
| <u>Short term exposure</u> | |
| Potential immediate effects | : Not available |
| Potential delayed effects | : Not available |
| <u>Long term exposure</u> | |
| Potential immediate | : Not available |
| effects | |
| Potential delayed effects | : Not available |
| Potential chronic health effe | ects |
| Not available. | |
| General | : No known significant effects or critical hazards. |
| Carcinogenicity | : No known significant effects or critical hazards. |
| Mutagenicity | : No known significant effects or critical hazards. |
| 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

| R | oute | ATE value |
|---|------|---------------|
| 0 | oral | 84990.2 mg/kg |

Section 12. Ecological information

Toxicity

Section 12. Ecological information

| Product/ingredient name | Result | Species | Exposure |
|-------------------------------|---|---|----------------------|
| 2-(2-ethoxyethoxy)ethanol | Acute LC50 3340000 µg/l Fresh water | Daphnia - Daphnia magna - Neonate | 48 hours |
| | Acute LC50 6010000 µg/l Fresh water | Fish - Ictalurus punctatus | 96 hours |
| tris(2-butoxyethyl) phosphate | Acute LC50 11200 µg/l Fresh water | Fish - Pimephales promelas | 96 hours |
| ethanediol | Acute LC50 100000 µg/l Marine water | Crustaceans - Crangon crangon - Adult | 48 hours |
| | Acute LC50 10000000 μg/l Fresh water Acute LC50 8050000 μg/l Fresh water | Daphnia - Daphnia magna Fish - Pimephales promelas | 48 hours 96 hours |

Persistence and degradability

Not available.

Bioaccumulative potential

| Product/ingredient name | LogPow | BCF | Potential |
|-------------------------------|--------|-----|-----------|
| 2-(2-ethoxyethoxy)ethanol | -0.54 | - | low |
| tris(2-butoxyethyl) phosphate | 3.75 | 5.8 | low |
| ethanediol | -1.36 | - | low |

Mobility in soil

| Soil/water partition | : Not available |
|----------------------|-----------------|
| coefficient (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. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

| | DOT Classification | IMDG | ΙΑΤΑ | |
|-------------------------------|-------------------------|----------------------------|--------------------------------|-----|
| UN number | Not regulated | Not regulated | Not regulated | |
| UN proper shipping name | - | - | - | |
| Transport hazard class(es) | - | - | - | |
| Packing group | - | - | - | |
| Date of issue/Date of revisio | n : 12/19/2014. Date of | previous issue : No previo | ous validation. Version : 0.01 | 8/1 |

Section 14. Transport information

| Environmental hazards | No. | No. | No. |
|--------------------------|-----|-----|-----|
| Additional information | - | - | - |

Special precautions for user : Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport in bulk according : Not available. to Annex II of MARPOL 73/78 and the IBC Code

Section 15. Regulatory information

U.S. Federal regulations : United States inventory (TSCA 8b): All components are listed or exempted.

| Clean Air Act Section 112 | : Listed |
|---------------------------|----------|
| (b) Hazardous Air | |
| Pollutants (HAPs) | |
| <u>SARA 311/312</u> | |

Classification : Not applicable

Composition/information on ingredients

| Name | % | hazard | Sudden release of pressure | Reactive | Immediate (acute) health hazard | Delayed (chronic) health hazard |
|-------------------------------|-------|--------|----------------------------------|----------|--|--|
| 2-(2-ethoxyethoxy)ethanol | 1 - 5 | No. | No. | No. | Yes. | No. |
| tris(2-butoxyethyl) phosphate | 1 - 5 | No. | No. | No. | Yes. | No. |
| ethanediol | 1 - 5 | No. | No. | No. | Yes. | No. |

SARA 313

| | Product name | CAS number | % |
|--|--------------|----------------------|------------|
| i official and a second s | _ (| 111-90-0 107-21-1 | 3.4 1.7 |

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

International regulations

Canada inventory

: All components are listed or exempted.

Section 16. Other information

Hazardous Material Information System (U.S.A.)



: 12/19/2014. Date of previous issue

Section 16. Other information

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks Although HMIS® ratings are not required on SDSs under 29 CFR 1910. 1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.

The customer is responsible for determining the PPE code for this material.

National Fire Protection Association (U.S.A.)



Reprinted with permission from NFPA 704-2001, Identification of the Hazards of Materials for Emergency Response Copyright ©1997, National Fire Protection Association, Quincy, MA 02269. This reprinted material is not the complete and official position of the National Fire Protection Association, on the referenced subject which is represented only by the standard in its entirety.

Copyright ©2001, National Fire Protection Association, Quincy, MA 02269. This warning system is intended to be interpreted and applied only by properly trained individuals to identify fire, health and reactivity hazards of chemicals. The user is referred to certain limited number of chemicals with recommended classifications in NFPA 49 and NFPA 325, which would be used as a guideline only. Whether the chemicals are classified by NFPA or not, anyone using the 704 systems to classify chemicals does so at their own risk.

History

| Date of printing Date of issue/Date of revision | : 12/19/2014. : 12/19/2014. |
|---|--|
| Date of previous issue | : No previous validation. |
| Key to abbreviations | ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor GHS = Globally Harmonized System of Classification and Labelling of Chemicals 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 |
| References | : Not available |

Indicates information that has changed from previously issued version.

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named 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.