



Safety Data Sheet

CLEAR H/S W/B MODIFIED URETHANE SATIN



1. Identification

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| Product identifier | CLEAR H/S W/B MODIFIED URETHANE SATIN | | |
| Product code | WB-0230 | | |
| Other means of identification | None. | | |
| Recommended use of the chemical and restrictions on use | A protective and/or decorative finish or accompanying paint product. | | |
| Manufacturer | GEMINI INDUSTRIES, INC. 2300 Holloway Drive El Reno, OK 73036 Tel. 1-800-262-5710 Fax 1-405-262-9310 www.geminicoatings.com | | |
| Emergency phone number | 24-hour Emergency (Spill, Leak, Exposure or accident) INFOTRAC 800-535-5053 Outside USA, Call Collect 1-352-323-3500 (French & English) HAZMAT Response and MSDS Help: EMI 800-510-8510 | | |

2. Hazard identification

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| Summary | Do not breathe vapours, mists or aerosols. Avoid contact with skin, eyes and clothing. Do not ingest. If ingested consult physician immediately and show this Safety Data Sheet. Wear eye protection, gloves and other protective clothing that are adapted to the task being performed and the risks involved. |
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WHMIS 2015/OSHA HCS 2012/GHS



Skin irritation (Category 2)
Eye irritation (Category 2B)
Specific target organ toxicity, repeated exposure (Category 1)

WARNING

- H372: Causes damage to lungs through prolonged or repeated exposure by inhalation
- H315: Causes skin irritation
- H320: Causes eye irritation
- P260: Do not breathe mist, vapours and spray.
- P264: Wash skin thoroughly after handling.
- P270: Do not eat, drink or smoke when using this product.
- P280: Wear protective gloves, protective clothing and eye protection.
- P302+352: IF ON SKIN: Wash with soap and water.
- P332+313: If skin irritation occurs: Get medical advice or attention.
- P314: Get Medical advice/attention if you feel unwell.
- P305+351+338: IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.
- P337+313: If eye irritation persists: Get medical advice or attention.
- P321: Specific treatment (see on this label).
- P362+364: Take off contaminated clothing and wash before reuse.
- P501: Dispose of contents and container to an approved waste disposal plant.

3. Composition/information on ingredients

| Common name | CAS | Weight % content |
|---|-----------|------------------|
| Propylene glycol monomethyl ether acetate | 108-65-6 | 3 - 5 % |
| Stoddard solvent (Mineral Spirits) | 8052-41-3 | 3 - 4 % |
| 2-Butoxyethanol | 111-76-2 | 0.5 - 2 % |

4. First-aid measures

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| Inhalation | Move person to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen by trained personnel. If a problem develops or persists, seek medical attention. |
| Skin contact | Wash skin with warm water and mild soap. Remove contaminated clothing and wash before reuse. If a problem develops or persists, seek medical attention. |
| Eye contact | IMMEDIATELY! Flush with water for at least 15 minutes. Remove contact lenses. Hold eyelids apart to rinse properly. If a problem develops or persists, seek medical attention. |
| Ingestion | DO NOT induce vomiting, unless recommended by medical personnel. Never give anything by mouth if victim is unconscious or convulsing. If victim is conscious wash out mouth with water and give small amounts of water to drink. If spontaneous vomiting occurs, keep head below hip level to prevent aspiration into the lungs. Seek medical attention or contact a Poison Centre immediately. |
| Other | No information available. |
| Symptoms | May cause dry skin and irritation. May cause irritation to skin and eyes. |
| Notes to the physician | Treat symptomatically. If lavage is performed, suggest endotracheal and/or esophageal control. Danger from lung aspiration must be weighed against toxicity when considering emptying the stomach. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient. Seek medical attention or contact a Poison Centre if large quantities are ingested or inhaled. |

5. Fire-fighting measures

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| Suitable extinguishing media | Dry chemicals, alcohol resistant foam, carbon dioxide (CO ₂). If water is used, fog nozzles are preferable. |
| Specific hazards arising from the chemical | This product is an aqueous solution which does not support combustion unless the water has been evaporated. Do not apply to hot surfaces. In a fire or if heated, a pressure increase will occur and the container may burst. Emits toxic fumes under fire conditions. |
| Special protective equipment | Firefighters must wear self contained breathing apparatus with full face mask. Firefighting suit may not be efficient against chemicals. |
| Special protective actions for fire-fighters | Use water spray to cool fire-exposed containers. Prevent run-off from fire control or dilution from entering streams, sewers or drinking water supply. |

6. Accidental release measures

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| Personal precautions, protective equipment and emergency procedures | Do not touch spilled material. Make sure to wear personal protective equipment mentioned in this Safety Data Sheet. |
| Environmental precautions | Prevent entry in sewer and other enclosed area. For a large spill, consult the Department of Environment or the relevant authorities. |

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| Methods and materials for containment and cleaning up | Ventilate the area well. Stop leak, if it's possible to do so without risk. Remove containers from the area of the spill, if possible without risk. Absorb with inert material (soil, sand, vermiculite) or wipe up or scrape up and place in an appropriate waste disposal container clearly identified. Dispose via a licensed waste disposal contractor. Finish cleaning the contaminated surface by rinsing with soapy water. |
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7. Handling and storage

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| Precautions for safe handling | Use only in well ventilated area. Avoid high temperatures and intense heat. Wear eye protection, gloves and other protective clothing that are adapted to the task being performed and the risks involved. Avoid prolonged or repeated breathing of vapour or mists. Avoid contact with skin, eyes and clothing. Do not ingest. Do not eat, do not drink and do not smoke during use. Wash hands, forearms and face thoroughly after handling this compound and before eating, drinking or using toiletries. Remove contaminated clothing and wash before reuse. Keep containers tightly closed when not used. Since empty containers retain product residues (vapour, liquid), all hazard precautions given in this sheet must be observed. Do not reuse empty container. |
| Conditions for safe storage, including any incompatibilities | Store tightly closed and in properly labelled container in a dry, cool and well ventilated place. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Keep away from direct sunlight and heat. Store away from oxidizing materials and incompatible materials (see section 10). Keep from freezing. |
| Storage temperature | 10 to 35°C (50 to 95°F) |

8. Exposure controls/personal protection

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| Immediately Dangerous to Life or Health | Stoddard solvent (Mineral Spirits): 20000 mg/m ³ . 2-Butoxyethanol: 700 ppm. | | | |
| Stoddard solvent (Mineral Spirits) | STEL | | 580 mg/m ³ | BC |
| | TWA (8h) | | 290 mg/m ³ | BC |
| | | 100 ppm | 525 mg/m ³ | ACGIH , ON, RSST |
| Propylene glycol monomethyl ether acetate | STEL | 75 ppm | | BC |
| | TWA (8h) | 50 ppm | | BC , US AIHA |
| | | 50 ppm | 270 mg/m ³ | ON |
| 2-Butoxyethanol | TWA (8h) | 20 ppm | | ACGIH , BC, ON |
| | | 20 ppm | 97 mg/m ³ | RSST |
| Appropriate engineering controls | Provide sufficient mechanical ventilation (general and/or local exhaust) to keep the airborne concentrations of vapours, mists, aerosols or dust below their respective occupational exposure limits. | | | |
| Individual protection measures | | | | |
| Eye | Wear chemical splash goggles. | | | |
| Hands | Wear nitrile or neoprene gloves. Before using, user should confirm impermeability. Discard gloves with tears, pinholes, or signs of wear. Gloves must only be worn on clean hands. Wash gloves with water before removing them. After using gloves, hands should be washed and dried thoroughly. Disposable nitrile gloves can also be used, but discard after single use. | | | |
| Skin | Personal protective equipment for the body should be selected based on the task being performed and the risks involved. Wear normal work clothing covering arms and legs as required by employer code. Wear synthetic apron, if necessary, to prevent repeated or prolonged contact with skin. | | | |
| Respiratory | Respiratory protection equipment (RPE) must be selected, fitted, maintained and inspected in accordance with regulations and CSA Standard Z 94.4 and approved by NIOSH / MSHA. In case of insufficient ventilation or in confined or enclosed space and for an assigned protection factor (APF) up to 10 times of exposure limit, wear a half mask respirator with organic vapour cartridges. For an APF until maximum 100 times of exposure limit, wear a full face mask respirator with organic vapour | | | |

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| | cartridges. |
| Feet | Wear rubber boots to clean up a spill. |

9. Physical and chemical properties

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| Physical state | Liquid | Flammability | Non-flammable. |
| Colour | Clear | Flammability limits | N/Av. |
| Odour | | Flash point | >98.9°C (210°F) Tagliabue closed cup |
| Odour threshold | N/Av. | Auto-ignition temperature | N/Av. |
| pH | N/Av. | Sensibility to electrostatic charges | N/Av. |
| Melting point | N/Av. | Sensibility to sparks and/or friction | N/Av. |
| Freezing point | N/Av. | Vapour density | 4.6 (Air = 1) |
| Boiling point | 56.1°C (133°F) | Relative density | 1.04 kg/L (Water = 1) |
| Solubility | Soluble in water. | Partition coefficient n-octanol/water | N/Av. |
| Evaporation rate | N/Av. | Decomposition temperature | N/Av. |
| Vapour pressure | 0.133kPa (1 mm Hg) | Viscosity | N/Av. |
| Percent Volatile | 66.3% | Molecular mass | N/Av. |
| N/Av.: Not Available N/Av.: Not Available Und.: Undetermined N/E: Not Established | | | |

10. Stability and reactivity

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| Reactivity | No information available. |
| Chemical stability | Stable under recommended storage conditions. |
| Possibility of hazardous reactions (including polymerizations) | A dangerous reaction will not occur. |
| Conditions to avoid | Avoid contact with incompatible materials. Avoid high temperatures and intense heat. |
| Incompatible materials | Strong oxidants, strong bases, strong acids. |
| Hazardous decomposition products | No known decomposition products. |


11. Toxicological information

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| Numerical measures of toxicity | <p>Propylene glycol monomethyl ether acetate Ingestion 8532 mg/kg Rat LD50 Inhalation 28.7 mg/l/4h Rat LC50 Skin >5000 mg/kg Rabbit LD50</p> <p>Stoddard solvent (Mineral Spirits) Ingestion >5000 mg/kg Rat LD50 Inhalation >12 mg/l/4h Rat LC50 Skin >3000 mg/kg Rabbit LD50</p> <p>2-Butoxyethanol Ingestion 560 mg/kg Rat LD50 Inhalation 2.21 mg/l/4h Rat LC50 Skin 220 mg/kg Rabbit LD50</p> |
| Likely routes of exposure | <p>Skin, eyes, inhalation, ingestion.</p> |
| Delayed, immediate and chronic effects | <p>Eye contact May cause eye irritation. Propylene glycol monomethyl ether acetate is not irritating to the eyes (rabbits, OECD GL 405). 2-Butoxyethanol can cause eye irritation (rabbits, OECD 405).</p> <p>Skin contact May cause skin irritation. Prolonged and repeated contact may cause drying and cracking of the skin. Stoddard solvent (CAS no 8052-41-3) may cause moderate irritation and slight edemas when applied to the skin of the rabbit for 4 hours. Propylene glycol monomethyl ether acetate is not irritating to the skin (rabbits, OECD GL 404). 2-Butoxyethanol is a skin irritant (Rabbit - 20 hours, BASF test).</p> <p>Inhalation May cause respiratory tract irritation. Excessive inhalation is harmful. High concentrations may cause central nervous system depression characterized by headache, dizziness, vertigo, nausea, drowsiness and fatigue. The severity of symptoms may vary depending on exposure conditions. Numerous studies on human, especially from the monitoring of painters, suggest that long-term occupational exposure to white spirit (all types) cause chronic toxic encephalopathy (adverse central nervous system effects).</p> <p>Ingestion May cause gastro-intestinal irritation with nausea and vomiting.</p> <p>Respiratory or skin sensitization Ingredients present at levels greater than or equal to 0.1% of this product are skin or respiratory sensitizers.</p> <p>IARC/NTP Classification No ingredients listed.</p> <p>Carcinogenicity Ingredients present at levels greater than or equal to 0.1% of this product are not listed as a carcinogen by IARC, ACGIH, NIOSH, NTP or OSHA.</p> <p>Mutagenicity Ingredients in this product present at levels greater than or equal to 0.1% are not known to cause mutagenic effect.</p> <p>Reproductive toxicity 2-butoxyethanol may have negative effects on reproduction and fertility at doses which were severely toxic to the animals (TOXNET). Ingredients in this product present at levels greater than or equal to 0.1% are not known to cause effects on reproduction.</p> <p>Specific target organ toxicity - single exposure No target organ is listed.</p> <p>Specific target organ toxicity - repeated exposure Central nervous system.</p> |
| Interactive effects | <p>No information available for this product.</p> |
| Other information | <p>The acute toxicity estimate (ATE) by inhalation of the mixture was calculated to be greater than 20 mg/L/4h. This value is not classified according to GHS. The oral and skin acute toxicity estimates (ATE) of the mixture were calculated to be greater than 2000 mg/kg. These values are not classified according to WHMIS 2015 and OSHA HCS 2012.</p> |


12. Ecological information

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| Ecological toxicity | Fish - Oncorhynchus mykiss - Rainbow trout | LC50 1474 mg/L; 96 h (2-butoxyethanol) |
| | Aquatic invertebrates - Daphnia magna | EC50 1550 mg/L; 48 h (2-butoxyethanol) |
| | Fish - Branchydanio Renio - fresh water | CESO >100mg/L; 21 d (2-butoxyethanol) |
| | Aquatic Invertebrate - Crustaceans, Daphnia Magna | CESO 100mg/L; 21 d (2-butoxyethanol) |
| | Algae, Pseudokirchneriella subcapitata | EC50 1840mg/L; 72h (2-butoxyethanol) |
| | Aquatic Invertebrate - Daphnia magna | EC50 0.42-2.3 mg/L; 48 h (Stoddard solvent) |
| | Algae, Pseudokirchneriella subcapitata | EC50 1.5mg/L; 72 h (Stoddard solvent) |
| | Fish - Oncorhynchus mykiss - Rainbow trout | LC50 100-180 mg/L; 96 h (CAS no 108-65-6) |
| Aquatic Invertebrate - Daphnia magna | EC50 >500 mg/L; 48 h (CAS no 108-65-6) | |
| Persistence | The product contains components that may persist in the environment. | |
| Degradability | Stoddard solvent (Mineral Spirits) is not rapidly degrading, according to Biochemical Oxygen Demand (BOD) of 12-13% (EHC187, 1996). Propylene glycol monomethyl ether acetate is readily biodegradable (83% in 10 days) OECD Guideline 301 E. 2-Butoxyethanol is readily biodegradable 90.4% in 28 days (OECD Guideline 301B). | |
| Bioaccumulative potential | Propylene glycol monomethyl ether acetate is not expected to bioaccumulate based on a low partition coefficient (Log Kow 0.36). 2-Butoxyethanol is not expected to bioaccumulate based on a low partition coefficient (Log Kow <2). | |
| Mobility in soil | Propylene glycol monomethyl ether acetate is soluble in water and will be distributed to air (10.22%), water (89.73%), soil (0.03%), and sediment (0.02%). The estimated Koc value of 0.83 suggests that 2-Butoxyethanol is expected to have high mobility in soil (TOXNET). | |
| Other adverse effects | This chemical does not deplete the ozone layer. | |

13. Disposal considerations

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|  | <p>Container</p> <p>Important! Prevent waste generation. Use in full. DO NOT dispose of residue in sewers, streams or drinking water supply. Paint residues, including lacquers, stains, shellac, varnish, solvents and paint thinners, can be reprocessed (recycle) anywhere there is a recovery program. Dispose via a licensed waste disposal contractor. Observe all federal, state/provincial and municipal regulations. If necessary consult the Department of Environment or the relevant authorities.</p> |
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14. Transport information

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| UN Number | UN 3082 |
| UN Proper Shipping Name | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. |
| Environmental hazards | Contains an ingredient which is a marine pollutant. |
| Special precautions for user | No information available. |
| TDG - Transportation of Dangerous Goods (Canada) | |
| Transport hazard class(es) |  Class 9 |
| Packing group | III |

IMO/IMDG - International Maritime Transport

Classification Regulated UN 3082. Environmentally Hazardous Substance, Liquid, N.O.S. Class 9, PG III. Emergency schedules (EmS-No) F-A, S-F

IATA - International Air Transport Association

Classification Not available

These transportation classifications are provided as a customer service. As the shipper YOU remain responsible for complying with all applicable laws and regulations, including proper transportation classification and packaging. In addition, if a domestic exemption exists, it is the responsibility of the shipper to define the application of it.

15. Regulatory information

CANADA

| Common name | CAS | CEPA | DSL | NDSL | NPRI |
|---|-----------|------|-----|------|------|
| Propylene glycol monomethyl ether acetate | 108-65-6 | X | X | | X |
| Stoddard solvent (Mineral Spirits) | 8052-41-3 | X | X | | X |
| 2-Butoxyethanol | 111-76-2 | X | X | | X |

- CEPA: List of Toxic Substances Managed Under Canadian Environmental Protection Act
- DSL: Domestic Substances List Inventory
- NDSL: Non-Domestic Substances List Inventory
- NPRI: National Pollutant Release Inventory Substances

UNITED STATE OF AMERICA

| Common name | CAS | TSCA | CERCLA | EPCRA 313 | EPCRA 302/304 | CAA 112(b) HON | CAA 112(b) HAP | CAA 112(r) | CWA 311 | CWA Priority |
|---|-----------|------|--------|-----------|---------------|----------------|----------------|------------|---------|--------------|
| Propylene glycol monomethyl ether acetate | 108-65-6 | X | | | | | | | | |
| Stoddard solvent (Mineral Spirits) | 8052-41-3 | X | | | | | | | | |
| 2-Butoxyethanol | 111-76-2 | X | | | | | | | | |

Other regulations

WHMIS 1988



D1A D2B

Class D1A : Very toxic material causing immediate and serious toxic effects
 Class D2B : Toxic material causing other toxic effects

HMIS

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| 1 | Health |
| 1 | Flamability |
| 0 | Reactivity |
| ○ | Protective Equipment |

NFPA



16. Other information

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| Date (YYYY-MM-DD) | GEMINI INDUSTRIES, INC. 2016-01-21 |
| Version | 01 |
| Other information | <p>REFERENCES:</p> <ul style="list-style-type: none">- TOXNET Databases, Toxicology Data Network, NIH U.S. National Library of Medicine, http://toxnet.nlm.nih.gov/- Haz-Map, Information on Hazardous Chemicals and Occupational Diseases, http://hazmap.nlm.nih.gov/index.php- Service du répertoire toxicologique de la Commission des normes, de l'équité, de la santé et de la sécurité du travail (CNESST), http://www.reptox.csst.qc.ca- NIOSH Pocket Guide to Chemical Hazards, Centers for Disease Control and Prevention, NIOSH Publications, 2007, http://www.cdc.gov/niosh/npg/npg.html- IPCS INCHEM, Chemical Safety Information from Intergovernmental Organizations, Canadian Centre for Occupational Health and Safety (CCOHS), Copyright International Programme on Chemical Safety (IPCS), http://www.inchem.org <p>ACGIH: American Conference of Governmental Industrial Hygienists AIHA: American Industrial Hygiene Association HMIS: Hazardous Materials Identification System NFPA: National Fire Protection Association OSHA: Occupational Safety and Health Administration (USA) NIOSH: National Institute for Occupational Safety and Health NTP: National Toxicology Program RSST: Règlement sur la santé et la sécurité du travail (Québec) GHS: Globally Harmonized System IARC: International Agency for Research on Cancer IDLH: Immediately Dangerous to Life or Health STEL: Short Term Exposure Limit (15 min) TWA: Time Weighted Averages WHMIS: Workplace Hazardous Materials Information System</p> <p>To the best of our knowledge, the information contained herein is accurate. However, neither Préventis System 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.</p> |