

CLARITY GLASS DESIGN

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MATERIAL SAFETY DATA SHEET (MSDS)

#101-102 CLARITY STAINED GLASS FINISHING COMPOUND

Section I - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

MSDS PREPARATION DATE: January 1, 2004

PRODUCT TRADE NAME: Stained Glass Finishing Compound

PRODUCT CODE NO.: Items #101 and #102

GENERIC/CHEMICAL NAME: Confidential Proprietary Mixture

PRODUCT TYPE / CHEMICAL FAMILY: Wax Polish Emulsion

SYNONYMS: None

CONTAINS: Petroleum Distillate Solvents (CAS# 64742-48-9), Water (CAS# 7732-18-5), Non-abrasive polishing powders (CAS# 66402-68-4), Silicone Fluids (CAS# 63148-62-9), Carnauba Wax (CAS# 8015-86-9), Emulsifiers (CAS# 68155-20-4), Microcrystalline Wax (CAS# 64742-43-4), Antioxidants (CAS# 123-28-4)

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EMERGENCY PHONE NUMBERS:

Clarity Glass Design: (520)885-3536, (800) 327-5430 Mon – Fri - 8:30am – 4:30pm

CHEMTREC: (800) 424-9300 – Outside the continental US: (703) 527-3887 24 Hours

Section II – COMPOSITION / INFORMATION ON INGREDIENTS

The precise composition of this product mixture in confidential proprietary information. A more detailed disclosure will be provided by us to qualified medical or industrial hygiene personnel as privileged information upon request in case of emergency or need for specific treatment. This Material Safety Data Sheet (MSDS) has been prepared in compliance with the Federal OSHA hazard communication standard 29CFR1910.1200. This product is considered non-hazardous under that standard.

HAZARDOUS INGREDIENTS: Contains 50% - 65% Petroleum distillates (CAS# 64742-48-9).

Section III - HAZARDS IDENTIFICATION

POTENTIAL HEALTH EFFECTS

EYE CONTACT: May cause eye irritation. Direct contact with liquid may cause stinging, tearing, and redness.

SKIN CONTACT: May cause mild skin irritation. Prolonged or repeated contact may cause dermatitis, redness, burning, drying, defatting and cracking of the skin.

INHALATION: This material is expected to have a low degree of toxicity by inhalation. Breathing high concentrations of vapors or mists may cause irritation of the nose and throat and signs of nervous system depression (e.g. headache, nausea, drowsiness, dizziness, fatigue, visual impairment, difficulty breathing and loss of coordination). Intentional misuse by deliberately concentrating and inhaling this product may be harmful or fatal. Repeated and prolonged overexposure to oil mists may result in droplet deposition, oil granuloma formation, inflammation, and increased incidence of infection.

INGESTION: While this product has a low degree of toxicity, ingestion of excessive quantities may cause irritation of the digestive tract and signs of nervous system depression (e.g. headache, nausea, drowsiness, dizziness, fatigue, visual impairment, difficulty breathing, and loss of coordination). **ASPIRATION HAZARD:** This material can enter lungs during swallowing or vomiting and cause lung inflammation and damage.

Section IV - FIRST AID

EYE CONTACT: If irritation or redness due to vapors develops, move victim away from exposure and into fresh air. If splashed into the eyes, flush eyes immediately with clean water for at least 15 minutes. If available, use eye cups or eye wash fountain. If symptoms persist, get medical attention.

SKIN CONTACT: Clean affected areas with mild soap and water. Remove contaminated clothing, including shoes, and launder before reuse or discard.

INHALATION: If respiratory symptoms develop, move victim away from source of exposure and into fresh air. If symptoms persist, get medical attention. If victim is not breathing immediately begin artificial respiration. If breathing difficulties develop, oxygen should be administered by qualified personnel. Get medical attention.

INGESTION: DO NOT induce vomiting or give anything by mouth because this material can enter the lungs and cause severe lung damage. If victim is drowsy or unconscious, place on the left side with head down. If possible, do not leave victim unattended. Get medical attention immediately.

Section V - FIRE FIGHTING MEASURES

FLASH POINT: PMCC 138°F, 59°C

FIRE POINT: ND

FLAMMABLE LIMITS IN AIR, % Volume: LOWER: ND, 0.9 estimated UPPER: ND, 7.0 estimated

AUTOIGNITION TEMPERATURE: ND, > 410°F, 210°C estimated.

HANDLING PRECAUTIONS: This liquid is combustible, volatile, and gives off invisible vapors. Either the liquid or vapor may settle in low areas or travel some distance along the ground or surface to ignition sources where they may ignite or explode. Keep product away from ignition sources such as heat, sparks, pilot lights, static electricity and open flames. Exposure to excessive heat, extreme temperatures and fire can build up pressure in closed containers and may cause bursting or exploding. "Empty" containers retain liquid and/or vapor residue and can be dangerous. DO NOT pressurize, cut, weld, braze, solder, drill, grind or expose such containers to sources of ignition. They may explode causing injury or death.

EXTINGUISHING MEDIA AND FIRE FIGHTING PROCEDURES: Foam, water spray, dry chemical, carbon dioxide, and halon extinguishing agents may all be suitable for extinguishing fires involving this type of product, depending on size or potential size of fire and circumstances related to the situation. Stop spill/release and move undamaged containers from fire area if it can be done without risk. Water spray may be useful in minimizing or dispersing vapors and cooling equipment exposed to heat and flame. Avoid spreading burning liquid with water used for cooling.

DECOMPOSITION PRODUCTS UNDER FIRE CONDITIONS: Fumes, smoke, carbon monoxide/dioxide, sulfur oxides, aldehydes, and nitrogen oxides. Wear appropriate protective equipment including self contained breathing apparatus.

Section VI - ACCIDENTIAL RELEASE MEASURES

SPILL ON LAND: Floor may be slippery; use caution to avoid falling. For small spills implement the following cleanup procedures: Eliminate sources of ignition. Prevent additional discharge of material, if possible to do so without risk. Minimize breathing of vapors. Minimize skin contact. Ventilate confined spaces. Prevent liquid from entering sewers, watercourses, or low areas. Contain spilled liquid with sand or earth. Do not use combustible materials such as sawdust. Recover by pumping (use an explosion proof pump or hand pump) or with a suitable absorbent. Observe precautions for volatile, combustible vapors from absorbed material. For large spills implement the preceding cleanup procedures and, if in public area, keep public away and advise authorities. Consult an expert on disposal of recovered material and ensure conformity to local disposal regulations.

SPILL ON WATER: Eliminate sources of ignition. Warn occupants and shipping in surrounding and downwind areas of fire and explosion hazard and request all to stay clear. Remove from surface by skimming or with suitable adsorbents. If spill happens in non-confined waters material may be permitted to dissipate if allowed by local authorities and environmental agencies. Consult an expert on disposal of recovered material and ensure conformity to local disposal regulations.

Section VII - STORAGE AND HANDLING

ELECTROSTATIC ACCUMULATION HAZARD: Possible; use proper grounding procedures.

STORAGE TEMPERATURE: Ambient

STORAGE/TRANSPORT PRESSURE: Atmospheric

LOADING/UNLOADING TEMPERATURE: Ambient

LOADING/UNLOADING VISCOSITY: 11.7 cSt. typical

STORAGE AND HANDLING: Keep container closed. Handle and open containers with care. Store in a cool, well ventilated place away from incompatible materials. DO NOT handle or store near an open flame, heat, or other source of ignition. Protect material from direct sunlight. Material will accumulate static charges which may cause an electrical spark. Use proper grounding procedures. DO NOT pressurize, cut, heat or weld containers. DO NOT reuse containers without commercial cleaning or

reconditioning.

Section VIII - EXPOSURE CONTROLS/PERSONAL PROTECTION

EXPOSURE CONTROLS: The use of local exhaust ventilation is recommended to control process emissions near the source. Laboratory samples should be stored and handled in a lab hood. Provide mechanical ventilation of confined spaces. Use explosion proof equipment.

PERSONAL PROTECTION: For open systems where contact is likely, wear long sleeves, chemical resistant gloves, and chemical goggles. Where contact may occur, wear safety glasses with side shields. Although normally not necessary, where concentrations in air may exceed TLV/PEL exposure limits, use appropriate respiratory protection. It is recommended that a source of clean water, eye wash cups or fountain be available in the work area for flushing eyes and skin.

OSHA/ACGIH EXPOSURE LIMITS: Where fumes or vapors may be generated control exposures to a TLV/PEL of 100 ppm for Petroleum Distillate Solvents (CAS# 64742-48-9).

Section IX - PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Opaque white

STATE: Liquid

ODOR: Hydrocarbon solvent odor

PERCENT VOLATILE: 82.1 by weight typical

SPECIFIC GRAVITY: 0.884 typical @ 77°F, 25°C

DENSITY: 7.35 lbs/gal typical @ 77°F, 25°C

VISCOSITY: 11.7 cSt. typical @ ambient

EVAPORATION RATE, n-Bu Acetate=1: ND, 0.17 estimated

VAPOR PRESSURE: ND, <5mm Hg @ 77°F, 25°C estimated

BOILING POINT: ND, 212°F, 100C min. estimated

VAPOR DENSITY (Air=1): ND, >4.6 estimated

FREEZING / MELTING POINT: ND, < 32°F, 0°C

SOLUBILITY IN WATER: ND, water / solvent emulsion

Section X - REACTIVITY

STABILITY: Stable under normal conditions of storage and handling

CONDITIONS TO AVOID INSTABILITY: Avoid all possible sources of ignition

HAZARDOUS POLYMERIZATION: Will not occur

CONDITIONS TO AVOID HAZARDOUS POLYMERIZATION: None

MATERIALS AND CONDITIONS TO AVOID INCOMPATIBILITY: Incompatible with strong acids or bases, oxidizing agents, nitrites and selected amines.

HAZARDOUS DECOMPOSITION PRODUCTS: Combustion or thermal decomposition may yield irritating or toxic fumes, carbon monoxide/dioxide, aldehydes, nitrogen oxides, and minor amounts of incomplete combustion of various hydrocarbons.

Section XI - TOXICOLOGICAL INFORMATION

No specific toxicological data are available for this product. Please refer to Section III for available information on potential health effects.

Section XII - ECOLOGICAL INFORMATION

No specific ecological data are available for this product. Please refer to Section VI for information regarding accidental releases and Section XV for regulatory reporting information

Section XIII - DISPOSAL CONSIDERATIONS

All recovered material should be packaged, labeled, transported, disposed and reclaimed in conformance with local, county, state and federal regulations. May be disposed of by controlled incineration. Do not contaminate any lakes, streams, ponds, or underground water supplies.

Section XIV - TRANSPORT INFORMATION

U.S. DOT PROPER SHIPPING NAME: 12 fl. oz. bottles and 1 gallon bottles: Consumer Commodity, ORM-D excepted from labeling requirements

IATA AND IMDG PROPER SHIPPING NAME: Flammable Liquid N.O.S. (Petroleum Distillates), UN1993, Packing Group III

Section XV - REGULATORY INFORMATION

TSCA: Components of this product are listed on the TSCA Inventory

CLEAN WATER ACT/ OIL POLLUTION ACT: This product is classified as an oil under Section 311 of the Clean Water Act (40CFR110) and the Oil Pollution Act of 1990. Discharge or spills which produce a visible sheen on either surface water or in waterways/sewers which lead to surface water must be reported to the National Response Center at (800) 424-8802.

SARA TITLE III, Section 311-312: None noted

SARA TITLE III, Section 313: None noted

CALIFORNIA PROPOSITION 65: This product contains < 50ppm Benzene as a solvent impurity. This chemical is listed on the California List of Known Carcinogens and Reproductive Toxins.

Section XVI - OTHER INFORMATION

HAZARD RATING SYSTEMS: This information is for people trained in: National Paint & Coatings Association's (NPCA) Hazardous Materials Identification System (HMIS) and/or National Fire Protection Association (NFPA 704) Identification of the Fire Hazards of Materials.

NPCA / HMIS HAZARD RATINGS:	<u>NFPA</u>	<u>HMIS</u>	<u>NFPA / HMIS HAZARD INDEX</u>
HEALTH	1	1	4=Severe / Extreme
FLAMMABILITY	2	2	3=Serious / High
REACTIVITY	0	0	2=Moderate / Moderate 1=Slight / Slight 0=Minimal / Insignificant

NOTE: The information presented herein for this product or its components has been compiled from different supplier sources considered to be dependable and is accurate to the best of our knowledge as to the proper use and handling of this product under normal conditions. However, no representation, warranty, or guarantee is made as to its accuracy, reliability, or completeness. It is the user's responsibility to satisfy himself as to the suitability and completeness of such information for his own particular use. We do not accept liability for any loss or damage that may occur from the use of this information. Any use of this product which is not in conformance with this Material Safety Data Sheet or which involves using the product in combination with any other product or any process is the responsibility of the user.

EXPLANATION OF ABBREVIATIONS:

ACGIH – American Conference of Governmental Industrial Hygienists

CAS# - Chemical Abstract System No.

COC - Cleveland Open Cup (flash and fire point)

DOT – Department of Transportation

IARC - International Agency for Research on Cancer

IMDG - International Maritime Dangerous Goods code

ND - Not Determined

NIOSH - National Institute for Occupational Safety and Health

NOS - Not Otherwise Specified

NTP - National Toxicology Program

OSHA – Occupational Safety and Health Administration

PEL – Permissible Exposure Limits

PMCC - Pensky-Martin Closed Cup (flash point)

RCRA - EPA Resource Conservation and Recovery Act

SARA - Superfund Amendments and Reauthorization Act Title I, II, III

TCC - Tag Closed Cup (flash point)

TLV - Threshold Limit Value

TSCA - Toxic Substances Control Act

This MSDS has been formatted to be consistent with ANSI Standard Z400.1-1993