ZEP MANUFACTURING COMPANY
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NSI Chemicals Group 1-877-I-BUY-ZEP

MATERIAL SAFETY DATA SHEET
AND SAFE HANDLING DISPOSAL INFORMATION

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SUPERSEDES: DATE PRINTED: 07/13/01

ZEP AQUAPEL APPLICATORS

Product Number: F120 **Water Repellent Glass Treatment**

SECTION I - EMERGENCY CONTACTS

For Additional Information call
NSI Chemicals Group 1-877-I-BUY-ZEP

For a Medical Emergency:
(877) 541-2016 Toll Free - All Calls Recorded

For a Transportation Emergency:
CHEMTREC
(770) 922-0923
In the District of Columbia: **(202) 483-7616**

SECTION II - HAZARDOUS INGREDIENTS

DESIGNATIONS	TLV (PPM)	EFFECTS (SEE NOTICE)	%IN PROD.
** ISOPARAFFINIC SOLVENT (BOILING RANGE 176-210C) ** hydrotreated heavy naphtha (petroleum); CAS# 6474248-9; RTECS# NONE	300	IRR CBL	> 90

SECTION III - HEALTH HAZARD DATA

SPECIAL NOTE: MSDS data pertains to the product as dispensed from the container. Adverse health effects would not be expected under recommended conditions of use (diluted) so long as prescribed safety precautions are practiced.

ACUTE EFFECTS OF OVEREXPOSURE:
Exposure by inhalation may produce eye, nose, and throat irritation. Inhalation of harmful amounts of vapor may produce mild central nervous system depression, characterized by headache, nausea, vertigo and stupor. If vomiting occurs, aspiration of the solvent into the lungs can cause chemical pneumonia. Existing respiratory disorders or skin diseases may be aggravated by exposure.

CHRONIC EFFECTS OF OVEREXPOSURE:
Skin which is repeatedly defatted by contact with this product may be more susceptible to irritation, infection, or dermatitis.

None of the ingredients are listed as carcinogens by IARC, NTP, or OSHA.

EST'D PEL/TLV: Not established PRIMARY ROUTES OF ENTRY: Inh.

HMIS CODES: HEALTH 1; FLAM. 2; REACT. 0; PERS. PROTECT. - ; CHRONIC HAZ. No

FIRST AID PROCEDURES:
SKIN: Wash contaminated skin with soap or a mild detergent. Get medical attention if irritation develops.
EYES: Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting upper and lower lids. Get medical attention at once.
INHALE: If symptoms occur, move affected person to fresh air. If symptoms persist, get medical attention promptly.
INGEST: If this product is swallowed, do not induce vomiting. If individual is alert, give plenty of water to drink. Get medical attention at once.

SECTION IV - SPECIAL PROTECTION INFORMATION

PROTECTIVE CLOTHING: No irritation expected. However, for unusually sensitive indivduals, the use of rubber gloves may be required.
EYE PROTECTION: No special measures are required.
RESPIRATORY PROTECTION: No extra measures are needed if ventilation is adequate.
VENTILATION: Open air or good room ventilation is normally adequate for safe use of this product.

SECTION V - PHYSICAL DATA

BOILING POINT (F): 376 INITIAL SPECIFIC GRAVITY: 0.82
VAPOR PRESSURE(mmHg): <1.0 EVAPORATION RATE (=1): N/D
VAPOR DENSITY(AIR=1): N/D pH(CONCENTRATE): N/A
SOLUBILITY IN WATER: Negligible pH(USE DILUTION OF N/A): N/A
VOC CONTENT (CONCENTRATE): 99.0%
APPEARANCE AND ODOR: A CLEAR, COLORLESS LIQUID WITH AN ACRID ODOR.

SECTION VI - FIRE AND EXPLOSION DATA

FLASH POINT(F) (METHOD USED): 147 (TCC)
FLAMMABLE LIMITS: LEL: N/A UEL: N/A
EXTINGUISHING MEDIA: Carbon dioxide, dry chemical, and alcohol type foam.
SPECIAL FIRE FIGHTING: Wear self-contained positive pres. breathing apparatus.
UNUSUAL FIRE HAZARDS: May release chlorine gas when exposed to heat or flame.

SECTION VII - REACTIVITY DATA

STABILITY: Stable
INCOMPATIBLILITY(AVOID): Strong oxidizing agents.
POLYMERIZATION: Will not occur.
HAZARDOUS DECOMPOSITION: Carbon dioxide,carbon monoxide, hydrogen chloride, and small amounts of phosgene & chlorine gas.

SECTION VIII - SPILL AND DISPOSAL PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:
Product is consumed in use. Product is not considered a hazardous waste by RCRA. Small quantities of unusable material should be placed in the trash.
WASTE DISPOSAL METHOD:
Product is consumed in use. Large numbers of small containers may require handling as a hazardous waste, but in most states, total hazardous waste quantities less than 220 lbs. per month may be disposed of in a chemical or industrial waste landfill. Consult local, state and federal agencies for the proper disposal method in your area.
RCRA HAZ. WASTE NOS.: N/A

SECTION IX - SPECIAL PRECAUTIONS

PR

NOTICE

Thank you for your interest in, and use of, NSI products. NSI Chemicals Group, is pleased to be of service to you by supplying this Material Safety Data Sheet for your files. NSI Chemicals Group is concerned for your health and safety. NSI products can be used safely with proper protective equipment and proper handling practices consistent with label instructions and the MSDS. Before using any NSI product, be sure to read the complete label and the Material Safety Data Sheet.

As a further word of caution, NSI wishes to advise that serious accidents have resulted from the misuse of "emptied" containers. "Empty" containers retain residue (liquid and/or vapor) and can be dangerous. DO NOT pressurize, cut, weld, braze, solder, drill, grind or expose such containers to heat, flame, or other sources of ignition; they may explode or develop harmful vapors and possibly cause injury or death. Clean empty containers by triple rinsing with water or an appropriate solvent. Empty containers must be sent to a drum reconditioner before reuse.

TERMS AND ABBREVIATIONS LISTED ALPHABETICALLY BY SECTION

SECTION II: HAZARDOUS INGREDIENTS

CAR: Carcinogen - A chemical listed by the National Toxicology Program (NTP), the International Agency for Research on Cancer (IARC) or OSHA as a definite or possible human cancer causing agent.
CAS #: Chemical Abstract Services Registry Number - A universally accepted numbering system for chemical substances.
CBL: Combustible - At temperatures between 100F and 200F chemical gives off enough vapor to ignite if a source of ignition is present as tested with a closed cup tester.
CNS: Central Nervous System depressant which reduces the activity of the brain and spinal cord.
COR: Corrosive - Causes irreversible injury to living tissue (e.g. burns).
DESIGNATIONS: Chemical and common names of hazardous ingredients.
EIR: Eye Irritant Only - Causes reversible reddening and/or inflammation of eye tissues.
EXPOSURE LIMITS: The time weighted average (TWA) airborne concentration at which most workers can be exposed without any expected adverse effects. Primary sources include ACGIH TLVs, and OSHA PELs (TWA, STEL and ceiling limits).
- ACGIH: American Conference of Governmental Industrial Hygienists.
- CEILING: The concentration that should not be exceeded in the workplace during any part of the working exposure.
- OSHA: Occupational Safety and Health Administration
- PEL: Permissible Exposure Limit - A set of time weighted average exposure values, established by OSHA, for a normal 8-hour day and a 40-hour work week.
- PPM: Parts per million - unit of measure for exposure limits.
- (S) SKIN: Skin contact with substance can contribute to overall exposure.
- STEL: Short Term Exposure Limit - Maximum concentration for a continuous 15-minute exposure period.
- TLV: Threshold Limit Value - A set of time weighted average exposure limits, established by the ACGIH, for a normal 8-hour day and a 40-hour work week.

FBL: Flammable - At temperatures under 100F, chemical gives off enough vapor to ignite if a source of ignition is present as tested with a closed cup tester.
HAZARDOUS INGREDIENTS: Chemical substances determined to be potential health or physical hazards based on the criteria established in the OSHA Hazard Communication Standard - 29 CFR 1910.1200
HTX: Highly toxic - the probable lethal dose for a 70kg (150 lb.) man and may be approximated as less than 6 teaspoons (2 tablespoons).
IRR: Irritant - Causes reversible effects in living tissues (e.g. inflammation) - primarily skin and eyes.
N/A: Not Applicable - Category is not appropriate for this product.
N/D: Not Determined - Insufficient information to make a determination for this item.
RTECS#: Registry of Toxic Effects of Chemical Substances - an unreviewed listing of published toxicology data on chemical substances.
SARA: Superfund Amendment and Reauthorization Act - Section 313 designates chemicals for possible reporting for the Toxics Release Inventory.
SEN: Sensitizer - Causes allergic reaction after repeated exposure.
TOX: Toxic - The probable lethal dose for a 70 kg (150 lb.) man is one ounce (2 tablespoons) or more.

(rev. 1/98)

SECTION III: HEALTH HAZARD DATA

ACUTE EFFECT: An adverse effect on the human body from a single exposure with symptoms developing almost immediately after exposure or within a relatively short time.
CHRONIC EFFECT: Adverse effects that are most likely to occur from repeated exposure over a long period of time.
EST D PEL/TLV: This estimated, time-weighted average, exposure limit, developed by using a formula provided by the ACGIH, pertains to airborne concentrations from the product as a whole. This value should serve as guide for providing safe workplace conditions to nearly all workers.
HMIS CODES: Hazardous Material Identification System - a rating system developed by the National Paint and Coating Association for estimating the hazard potential of a chemical under normal workplace conditions. These risk estimates are indicated by a numerical rating given in each of three hazard areas (Health/Flammability/Reactivity) ranging from a low of zero to a high of 4. The presence of a chronic hazard is indicated with a yes. Consult HMIS training guides for Personal Protection letter codes which indicate necessary protective equipment.
PRIMARY ROUTE OF ENTRY: The way one or more hazardous ingredients may enter the body and cause a generalized-systemic or specific-organ toxic effect.
- ING: Ingestion - A primary route of exposure through swallowing of material
- INH: Inhalation - A primary route of exposure through breathing of vapors.
- SKIN: A primary route of exposure through contact with the skin.

SECTION IV: SPECIAL PROTECTION INFORMATION

Where respiratory protection is recommended, use only MSHA and NIOSH approved respirators and dust masks.
MSHA: Mine Safety and Health Administration
NIOSH: National Institute for Occupational Safety and Health

SECTION V: PHYSICAL DATA

EVAPORATION RATE: Refers to the rate of change from the liquid state to the vapor state at ambient temperature and pressure in comparison to a given substance (e.g. water).
pH: A value representing the acidity or alkalinity of an aqueous solution (Acidic pH = 1; Neutral pH = 7; Alkaline pH = 14)
VOC CONTENT: The percentage or amount in pounds per gallon of the product that is regulated as a Volatile Organic Compound under the Clean Air Act of 1990 and various state jurisdictions.
SOLUBILITY IN WATER: A description of the ability of the product to dissolve in water.

SECTION VII: REACTIVITY DATA

HAZARDOUS DECOMPOSITION: Breakdown products expected to be produced upon product decomposition by extreme heat or fire.
INCOMPATIBILITY: Material contact by extreme heat and the conditions to avoid to prevent hazardous reactions.
POLYMERIZATION: Indicates the tendency of the product's molecules to combine with themselves in a chemical reaction, releasing excess pressure and heat.
STABILITY: Indicates the susceptibility of the product to spontaneously and dangerously decompose.

SECTION VIII: SPILL AND DISPOSAL PROCEDURES

RCRA WASTE NOS: RCRA (Resource Conservation and Recovery Act) waste codes (40 CFR 261) applicable to the disposal of spilled or unusable product from the original container.

SECTION X: TRANSPORTATION DATA

CWA: Clean Water Act- Federal Law which regulates chemical releases to bodies of water.
RQ: Reportable Quantity - The amount of the specific ingredient that, when spilled to the ground and can enter a storm sewer or natural watershed, must be reported to the National Response Center, and other regulatory agencies.
TSCA: Toxic Substances Control Act - a federal law requiring all commercial chemical substances to appear on an inventory maintained by the EPA.

DISCLAIMER

All statements, technical information and recommendations contained herein are based on available scientific tests or data which we believe to be reliable. The accuracy and completeness of such data are not warranted or guaranteed. We cannot anticipate all conditions under which this information and our products, or the products of other manufacturers in combination with out products, may be used. NSI assumes no liability or responsibility for loss or damage resulting from the improper use or handling of our products, from incompatible product combinations, or from the failure to follow instructions, warnings, and advisories in the products label and Material Safety Data Sheet.