

ZEP MANUFACTURING COMPANY P.O. BOX 2015 ATLANTA, GEORGIA 30301

WILKES COMMUNITY COLLEGE DRAWER 120 COLLEGTIVE DRIVE WILKSBORO, NC 28697

OSHA Dust Limit-2mg/m3 (for powders only).

MATERIAL SAFETY DATAS

AND SAFE HANDLING AND DISPOSAL INFORMATION

11/13/91

ISSUE DATE: 09/11/91

SUPERSEDES: 04/21/89

NOV 2 0 1991

ZEPRIDE PRODUCT NUMBER: 0567

SECTION I - EMERGENCY CONTACTS

TELEPHONE:

(404) 352-1680

BETWEEN 8:00 AM - 5:00 PM (EST)

MEDICAL EMERGENCY:

(404) 435-2973 (404) 351-2952 (404) 432-2873

NON-OFFICE HOURS, WEEKENDS AND HOLIDAYS, PLEASE CALL YOUR LOCAL POISON CONTROL

TRANSPORTATION EMERGENCY:

(404) 922-0923

CHEMTREC:

1-800-424-9300 DISTRICT OF COLUMBIA:

TOLL-FREE - ALL CALLS RECORDED

(202) 483-7616

ALL CALLS RECORDED

SECTION II - HAZARDOUS INGREDIENTS

DESIGNATIONS

** ETHYLENE GLYCOL MONOBUTYL ETHER ** 2-butoxyethanol; butyl cellosolve; CAS# 111-76-2; RTECS# KJ8575000; OSHA PEL (SKIN)- 25 ppm ° SODIUM METASILICATE ** silicic acid (H2-Si-O3) disodium salt; water glass; CAS # 6834-92-0; RTECS # VV9275000;

25

TLV

(PPM)

EFFECTS % IN (SEE REVERSE) PROD.

N/D

TOX IRR CBL 15-25

COR < 5

@ Identifies chemicals listed under SARA-Section 313 for release reporting

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:

PRODUCT IN CONCENTRATED FORM IS A SEVERE EYE IRRITANT. OVER-EXPOSURE MAY LEAD TO EYE TISSUE DAMAGE WHICH CAN BE PERMANENT. SKIN CONTACT MAY PRODUCE IRRITATION. OVER-EXPOSURE BY INHALATION MAY CAUSE RESPIRATORY IRRITATION.

Chronic Effects of Overexposure:

REPEATED OR PROLONGED SKIN CONTACT MAY PRODUCE CHRONIC INFLAMMATION OR DERMATITIS, CHARACTERIZED BY REDNESS, SCALING, OR ITCHING, REPEATED EYE EXPOSURE MAY PRODUCE CHRONIC INFLAMMATION OF THE EYE OR CORNEAL DAMAGE. ANIMAL STUDIES INDICATE A POTENTIAL FOR LIVER, KIDNEY, OR RED BLOOD CELL DAMAGE. RELEVANCE OF THESE STUDIES OR EXPOSURE LEVELS WHICH MIGHT PRODUCE THESE EFFECTS IN HUMANS HAS NOT BEEN ESTABLISHED

Est'd PEL/TLV: NOT ESTABLISHED

Primary Routes of Entry: INH, SKIN.

HMIS Codes: HEALTH 2;FLAM. 0;REACT. 0;PERS. PROTECT. B ;CHRONIC HAZ. YES

FIRST AID PROCEDURES: Skin:

IMMEDIATELY FLUSH CONTAMINATED SKIN WITH PLENTY OF WATER FOR AT LEAST 15 MINUTES. GET MEDICAL ATTENTION IMMEDIATELY IMMEDIATELY FLUSH EYES WITH PLENTY OF WATER FOR AT LEAST 15 MINUTES, OCCASIONALLY LIFTING UPPER AND LOWER LIDS. GET MEDICAL

Eyes: ATTENTION AT ONCE

MOVE EXPOSED PERSON TO FRESH AIR AT ONCE. IF BREATHING HAS STOPPED, PERFORM ARTIFICIAL RESPIRATION. GET MEDICAL ATTENTION

Inhale:

Ingest:

IF SWALLOWED, DO NOT INDUCE VOMITING. IF VOMITING OCCURS, KEEP HEAD BELOW HIP LEVEL. GET EMERGENCY MEDICAL ATTENTION IMMEDIATELY.

SECTION IV - SPECIAL PROTECTION INFORMATION

Protective Clothing: Eye Protection:

Boiling Point (°F):

WEAR NEOPRENE, NITRILE, OR NATURAL RUBBER GLOVES OR GLOVES WITH PROVEN RESISTANCE TO THE INGREDIENTS LISTED.

WEAR SPLASH-PROOF SAFETY GOGGLES ESPECIALLY IF CONTACT LENSES ARE WORN. KEEP FACE AWAY FROM SPRAY MIST AND DO NOT BREATHE VAPORS.

Respiratory Protection: Ventilation:

VENTILATION SHOULD BE EQUIVALENT TO OUTDOORS. USE EXHAUST FANS AND OPEN WINDOWS IN ENCLOSED SPACES.

SECTION V - PHYSICAL DATA

1.02

Specific Gravity: Vapor Density (air = 1):

N/A 12.7 Vapor Pressure (mmHg): N/ Evaporation Rate (WATER = 1): ~1.0 N/A pH (use dilution of 1 OZ./GAL.): 11.1

Solubility in Water: COMPLETE pH (concentrate):
Appearance and Odor: A CLEAR, DARK BLUE LIQUID WITH A "BUTYLATED" ODOR COMPLETE

SECTION VI - FIRE AND EXPLOSION DATA

Flash Point (°F) (method used): NONE (TCC) Flammable Limits:

Percent Volatile by Volume (%): 91.8

LEL N/A UEL N/A NON-COMBUSTIBLE.

Extinguishing Media:

NONE

Special Fire Fighting: Unusual Fire Hazards:

NONE

~ 220F

Stability: Incompatibility (avoid): Polymerization:

STABLE NONE

WILL NOT OCCUR.

Hazardous Decomposition:

NONE

SECTION VIII - SPILL AND DISPOSAL PROCEDURES

Steps to be Taken in Case Material is Released or Spilled:

OBSERVE SAFETY PRECAUTIONS IN SECTIONS 4 & 9 DURING CLEAN-UP. ABSORB SPILL ON AN INERT ABSORBENT MATERIAL (60 ZEP-O-ZORB); PICK UP AND PLACE IN A CLEAN D.O.T. SPECIFICATION CONTAINER FOR DISPOSAL. WASH AREA THOROUGHLY WITH A DETERGENT SOLUTION AND THEN RINSE WELL WITH WATER

Waste Disposal Method:

Waste Disposal Metrod:
LIQUIDS CANNOT BE SENT TO LANDFILLS UNLESS SOLIDIFIED. UNUSABLE PRODUCT AND SOME COLLECTED, SPENT USE-DILUTIONS MAY REQUIRE DISPOSAL
AS A HAZARDOUS WASTE AT A PERMITTED TREATMENT/STORAGE/DISPOSAL FACILITY. IN MOST STATES HAZARDOUS WASTES IN TOTAL AMOUNTS OF 220
LBS. OR LESS PER MONTH MAY BE DISPOSED OF IN A CHEMICAL OR INDUSTRIAL WASTE LANDFILL. IF COMPANY EFFLUENT IS ULTIMATELY TREATED BY A
PUBLICLY OWNED TREATMENT WORKS, NEUTRALIZATION OF SPENT TANK-SOLUTIONS WITH SUBSEQUENT DISCHARGE TO THE SEWER MAY BE POSSIBLE. CONSULT LOCAL, STATE AND FEDERAL AGENCIES FOR PROPER DISPOSAL METHOD IN YOUR AREA.

RCRA Hazardous Waste Numbers: D002

SECTION IX - SPECIAL PRECAUTIONS

Precautions to be Taken When Handling and Storing:
STORE TIGHTLY CLOSED CONTAINER IN A DRY AREA AT TEMPS. BETWEEN 40-120 DEGREES F. STORE AWAY FROM STRONG ACIDS AND OXIDIZING COMPOUNDS. DO NOT BREATHE SPRAY MISTS OR VAPORS. KEEP AWAY FROM FOOD AND FOOD PRODUCTS. KEEP OUT OF THE REACH OF CHILDREN.

SECTION X - TRANSPORTATION DATA

DOT Proper Shipping Name: NONE

DOT Hazard Class: N/A DOT I.D. Number: N/A

EPA TSCA Chemical Inventory: ALL INGREDIENTS ARE LISTED

EPA CWA 40CFR Part 117 substance (RQ in a single container): : N/A

NOTICE

DOT Label/Placard: NONE

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

As a further word of caution, Zep 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 pres-surize, 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 USED IN THE MSDS: BY SECTION ALPHABETICALLY:

SECTION II: HAZARDOUS INGREDIENTS

CAR: Carcinogeo - 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 universally accepted numbering system for chemical substances.

CBL: Combustible - At temperatures between 100°F and 200°F 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 reduces the activ-

ity of the brain and spinal cord.

COR: Corrosive - Causes irreversible alterations in 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) air-

borne concentration at which most workers can be exposed without any expected adverse effects. Primary sources include ACGIH TLV's, and OSHA PEL's (TWA, STEL and ceiling

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 Salety 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 100°F, 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 by the criteria established in the OSHA Hazard Communication Standard - 29 CFR 1910.1200

HTX: Highly toxic - the probable lethal dose for 70 kg (150 lb.) man and may be approximated as less than 6

teaspoons (2 tablespoons).

IRR: Irritant - Causes reversible effects in living tissues (a.g. Inflammation) - primarily skin and eyes.

N/A: Not Applicable - Category is not appropriate for this

product.

N/D: Not Determined - Insufficient information for a deter-

mination for this Item.

RTECS#: Registry of Toxic Effects of Chemical Substances
- an unreviewed listing of published toxicology data on

chemical substances. SARA: Superfund Amendments and Reauthorization Act -

Section 313 designates chemicals for possible reporting for the Toxics Release Inventory.

SEN: Sensitizer - Causes allergic reaction after repeated

TOX: Toxic . The probable lethal dose for a 70 kg (150 lb.) man is one ounce (2 tablespoons) or more.

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.

ESTD PELITLY: 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. A chronic hazard is indicted 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 haz-ardous 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: it 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)
PERCENT VOLATILE: The percentage of the product (liquid or solid) that will evaporate at 212°F and ambient pressure.
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 or fire. INCOMPATIBILITY; Material contact and conditions to avoid

to prevent hazardous reactions.

POLYMERIZATION; Indicates the tendency of the product's molecules to combine 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 Re-covery 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

RQ: Reportable Quantity - The amount of the specific ingre dient 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 requir ing 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 our products, may be used. Zep 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 product's label and Material Safaty Date Sheet.

(Notice Revised 8/91)