MATERIAL SAFETY DATA SHEET
AND SAFE HANDLING AND DISPOSAL INFORMATION

CLEAN ACROSS AMERICA AND THROUGHOUT THE WORLD™
ZEP MANUFACTURING COMPANY
P.O. BOX 2015
ATLANTA, GEORGIA 30301

2/15/94
ISSUE DATE: 09/11/92
SUPERSEDES: 04/23/90
ZEP INTERNATIONAL PRODUCT
PRODUCT NO.: 0540 Aerosol Deodorizer

SECTION I - EMERGENCY CONTACTS

TELEPHONE:
(404) 352-1680 *BETWEEN 8:00 AM - 5:00 PM (EST)*

MEDICAL EMERGENCY:
(404) 435-2973
(404) 432-2873
(404) 424-4789
(404) 319-6151
(404) 242-3561
NON-OFFICE HOURS, WEEKENDS AND HOLIDAYS, PLEASE CALL YOUR **LOCAL POISON CONTROL**

TRANSPORTATION EMERGENCY:
(404) 922-0923

CHEMTREC:
1-800-424-9300 TOLL-FREE - ALL CALLS RECORDED

DISTRICT OF COLUMBIA:
(202) 483-7616 ALL CALLS RECORDED

SECTION II - HAZARDOUS INGREDIENTS

DESIGNATIONS	TLV (PPM)	EFFECTS (SEE REVERSE)	% IN PROD.
* ETHANOL ** ethyl alcohol; grain alcohol; CAS# 64-17-5; RTECS# KQ6300000; OSHA PEL- 1000 ppm	1000	IRR FBL	20-30
** BLEND OF [PROPANE; CAS# 74-98-6; RTECS# TX2775000] & [n-BUTANE; CAS# 106-97-8; RTECS# EJ4200000]	800	FBL	50-60
* OSHA PEL - 800 PPM			

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:
Direct contact with the spray mist can cause eye irritation such as stinging and burning. This product may cause slight skin irritation. No medical conditions are known to be aggravated by overexposure to this product or ingredients in this product.

Chronic Effects of Overexposure:
Chronic effects from alcohol vapors are rare and would only result from prolonged and repeated contact, which is unlikely due to the packaging of this product. 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. 3;REACT. 1;PERS. PROTECT. A ;CHRONIC HAZ. NO

FIRST AID PROCEDURES:
Skin: Wash contaminated skin thoroughly with soap or a mild detergent. Apply a skin cream with lanolin. Get medical attention if irritation persists.
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: Move exposed person to fresh air. If irritation persists, get medical attention promptly.
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: No special measures are required.
Eye Protection: No special measures are required.
Respiratory Protection: Avoid direct inhalation of concentrated spray mist and do not direct spray toward people.
Ventilation: No special measures are required.

SECTION V - PHYSICAL DATA

Boiling Point (°F): 165
Percent Volatile by Volume (%): > 95
Solubility in Water: NEGLIGIBLE
Specific Gravity: 0.921
Vapor Density (air = 1): > 1
pH (concentrate): N/A
Vapor Pressure (mmHg): 74
Evaporation Rate (BUTYL ACETATE = 1): > 1
pH (use dilution of): N/A
Appearance and Odor: VERY DRY SPRAY WITH A PLEASANT ORANGE SCENT

SECTION VI - FIRE AND EXPLOSION DATA

Flash Point (°F) (method used): 70F (on conc.) (TCC)
Flammable Limits: LEL 1.9 UEL 9.5
Extinguishing Media: Water
Special Fire Fighting: Wear self-contained positive pres. breathing apparatus.
Unusual Fire Hazards: Direct water onto intact containers to prevent bursting.

SECTION VII - REACTIVITY DATA

tability: Stable
ıcompatibility (avoid): Heat, open flame, spark, and oxidizing agents.
olymerization: Will not occur
azardous Decomposition: Carbon dioxide, carbon monoxide, and other unidentified organic compounds.

SECTION VIII - SPILL AND DISPOSAL PROCEDURES

teps to be Taken in Case Material is Released or Spilled:
bserve safety precautions in sections 4 & 9 during spill clean-up. Large spills are unlikely due to packaging. Spill may be absorbed on an inert absorbent material (eg ep-O-Zorb), and placed in a suitable container for disposal. Wash area thoroughly with a detergent solution and rinse well with water.
/aste Disposal Method:
roduct is consumed in use. Do not crush, puncture or incinerate spent containers. Large numbers of aerosol containers may require handling as a hazardous waste, but ı most states total hazardous waste quantities less than 220 lbs per month may allow disposal in a chemical or industrial waste landfill. Consult local, state and federal gencies for the proper disposal method in your area.

ICRA Hazardous Waste Numbers: N/A

SECTION IX - SPECIAL PRECAUTIONS

recautions to be Taken When Handling and Storing:
)o not store at temperatures above 120F. or in direct sunlight. Do not puncture or incinerate container. Keep product out of eyes. Keep out of the reach of children.

SECTION X - TRANSPORTATION DATA

)OT Proper Shipping Name: CONSUMER COMMODITY,
)OT Hazard Class: ORM-D
)OT I.D. Number: N/A
DOT Label/Placard: ORM-D
EPA TSCA Chemical Inventory: ALL INGREDIENTS ARE LISTED
EPA CWA 40CFR Part 117 substance (RQ in a single container) . NONE

NOTICE

ıank you for your interest in, and use of, Zep products. ep Manufacturing Co. is pleased to be of service to you by ıpplying this Material Safety Data Sheet for your files. Zep ənufacturing is concerned for your health and safety. Zep roducts can be used safely with proper protective equip- ent and proper handling practices consistent with label structions and the MSDS. Before using any Zep product, e sure to read the complete label and the Material Safety ata Sheet.

e a further word of caution. Zep wishes to advise that erious accidents have resulted from the misuse of mptied" containers. "Empty" containers retain residue iquid and/or vapor) and can be dangerous. DO NOT pres- urize, cut, weld, braze, solder, drill, grind or expose such ontainers to heat, flame, or other sources of ignition; they ay explode or develop harmful vapors and possibly cause jury or death. Clean empty containers by triple rinsing ith water or an appropriate solvent. Empty containers ust be sent to a drum reconditioner before reuse.

TERMS AND ABBREVIATIONS USED IN THE MSDS: BY SECTION ALPHABETICALLY:

ECTION II: HAZARDOUS INGREDIENTS

AR; Carcinogen - A chemical listed by the National Toxicol- gy Program (NTP), the International Agency for Research n Cancer (IARC) or OSHA as a definite or possible human ancer causing agent.
AS #; Chemical Abstract Service Registry Number - A niversally accepted numbering system for chemical sub- tances.
CBL; Combustible - At temperatures between 100°F and 00°F chemical gives off enough vapor to ignite if a source f ignition is present as tested with a closed cup tester.
CNS; Central Nervous System depressant reduces the activ- ty of the brain and spinal cord.
COR; Corrosive - Causes irreversible alterations in living issue (e.g. burns).
DESIGNATIONS; Chemical and common names of hazardous ngredients.
EIR; Eye Irritant Only - Causes reversible reddening and/or nflammation 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 in- lude ACGIH TLV's, and OSHA PEL's (TWA, STEL and ceiling imits).
ACGIH; American Conferance 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 aver- age 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 deter- mined 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 (e.g. inflammation) - primarily skin and eyes.
N/A; Not Applicable - Category is not appropriate for this product.
NID; 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 exposure.
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 imme- diately 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, ex- posure limit, developed by using a formula provided by the ACGIH, pertains to airborne concentrations from the prod- uct as a whole. This value should serve as guide for provid- ing 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 chemi- cal 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 Pro- tection 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 general- ized-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 expect- ed 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 ex- cess 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 guaran- teed. 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 Safety Data Sheet.

(Notice Revised 9/91)

MATERIAL SAFETY DATA SHEET
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ZEP MANUFACTURING COMPANY
P.O. BOX 2015
ATLANTA, GEORGIA 30301

12/30/93
ISSUE DATE: 09/11/92
SUPERSEDES: 08/08/91
METER MIST AIR FRESHENER ORANGE
PRODUCT NO.: 0342 Aerosol Deodorizer

SECTION I - EMERGENCY CONTACTS

TELEPHONE:
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(404) 424-4789
(404) 319-6151
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TRANSPORTATION EMERGENCY:
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CHEMTREC:
1-800-424-9300 **TOLL-FREE - ALL CALLS RECORDED**

DISTRICT OF COLUMBIA:
(202) 483-7616 **ALL CALLS RECORDED**

SECTION II - HAZARDOUS INGREDIENTS

DESIGNATIONS	TLV (PPM)	EFFECTS (SEE REVERSE)	% IN PROD.
* ETHANOL * ethyl alcohol; grain alcohol; CAS# 64-17-5; RTECS# KQ6300000; OSHA PEL- 1000 ppm	1000	IRR FBL	20-30
* BLEND OF [PROPANE; CAS# 74-98-6; RTECS# TX2775000] & [n-BUTANE; CAS# 106-97-8; RTECS# EJ4200000]	800	FBL	50-60
* OSHA PEL - 800 PPM			

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:
Direct contact with the spray mist can cause eye irritation such as stinging and burning. This product may cause slight skin irritation. No medical conditions are known to be aggravated by overexposure to this product or ingredients in this product.

Chronic Effects of Overexposure:
Chronic effects from alcohol vapors are rare and would only result from prolonged and repeated contact, which is unlikely due to the packaging of this product. 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. 3;REACT. 1;PERS. PROTECT. A ;CHRONIC HAZ. NO

FIRST AID PROCEDURES:
Skin: Wash contaminated skin thoroughly with soap or a mild detergent. Apply a skin cream with lanolin. Get medical attention if irritation persists.
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: Move exposed person to fresh air. If irritation persists, get medical attention promptly.
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: No special measures are required.
Eye Protection: No special measures are required.
Respiratory Protection: Avoid direct inhalation of concentrated spray mist and do not direct spray toward people.
Ventilation: No special measures are required.

SECTION V - PHYSICAL DATA

Boiling Point (°F): 165
Percent Volatile by Volume (%): >95
Solubility in Water: NEGLIGIBLE
Specific Gravity: 0.921
Vapor Density (air=1): >1
pH (concentrate): N/A
Vapor Pressure (mmHg): 74
Evaporation Rate (BUTYL ACETATE =1): >1
pH (use dilution of): N/A
Appearance and Odor: VERY DRY SPRAY WITH A PLEASANT ORANGE SCENT

SECTION VI - FIRE AND EXPLOSION DATA

Flash Point (°F) (method used): 70F (on conn.) (TCC)
Flammable Limits: LEL 1.9 UEL 9.5
Extinguishing Media: Water
Special Fire Fighting: Wear self-contained positive pres. breathing apparatus.
Unusual Fire Hazards: Direct water onto intact containers to prevent bursting.

SECTION VII - REACTIVITY DATA

tability: Stable
ncompatibility (avoid): Heat, open flame, spark, and oxidizing agents.
olymerization: Will not occur.
azardous Decomposition: Carbon dioxide, carbon monoxide, and other unidentified organic compounds.

SECTION VIII - SPILL AND DISPOSAL PROCEDURES

teps to be Taken in Case Material is Released or Spilled:
lesarve safety precautions in confining & & 9 during spill clean-up. Large spills are unlikely due to packaging. Spill may be absorbed on an inert absorbent material (eg sp-O-Zorb), and placed in a suitable container for disposal. Wash area thoroughly with a detergent solution and rinse well with water.

Vaste Disposal Method:
roduct is consumed in use. Do not crush, puncture or incinerate spent containers. Large numbers of aerosol containers may require handling as a hazardous waste, but most states total hazardous waste quantities less than 220 lbs per month may allow disposal in a chemical or industrial waste landfill. Consult local, state and federal gencies for the proper disposal method in your area.

CRA Hazardous Waste Numbers: N/A

SECTION IX - SPECIAL PRECAUTIONS

Precautions to be Taken When Handling and Storing:
lo not store at temperatures above 120F, or in direct sunlight. Do not puncture or incinerate container. Keep product out of eyes. Keep out of the reach of children.

SECTION X - TRANSPORTATION DATA

OT Proper Shipping Name: CONSUMER COMMODITY,
OT Hazard Class: ORM-D
DOT Label/Placard: ORM-D
OT I.D. Number: N/A
EPA TSCA Chemical Inventory: ALL INGREDIENTS ARE LISTED
EPA CWA 40CFR Part 117 substance (RQ in a single container) : NONE

NOTICE

hank you for your interest in, and use of, Zep products. ep Manufacturing Co. is pleased to be of service to you by pplying this Material Safety Data Sheet for your files. Zep anufacturing is concerned for your health and safety. Zep roducts can be used safely with proper protective equip ent and proper handling practices consistent with label structions and the MSDS. Before using any Zep product, e sure to read the complete label and the Material Safety ata Sheet.

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TERMS AND ABBREVIATIONS USED IN THE MSDS BY SECTION ALPHABETICALLY:

ECTION II: HAZARDOUS INGREDIENTS

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AS #; Chemical Abstract Services Registry Number - A niversally accepted numbering system for chemical sub tances.
EL; Combustible - At temperatures between 100°F and 00°F chemical gives off enough vapor to ignite if a source f ignition is present as tested with a closed cup tester.
NS; Central Nervous System depressant reduces the activ ty of the brain and spinal cord.
OR; Corrosive - Causes irreversible alterations in living issue (e.g. burns).
ESIGNATIONS: Chemical and common names of hazardous ngredients.
ER; 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 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 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 (e.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 determination 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 exposure
TOX; Toxic - The probable lethal dose for a 70 kg (150 lb.) man is one ounce (2 tablespoons) or more.

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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.

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MSHA: Mine Safety and Health Administration
NIOSH: National Institute for Occupational Safety and Health.

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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.

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STABILITY; Indicates the susceptibility of the product to spontaneously and dangerously decompose.

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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
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

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(Notice Revised 8/91)

MATERIAL SAFETY DATA SHEET
AND SAFE HANDLING AND DISPOSAL INFORMATION

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

12/19/94
ISSUE DATE: 02/18/94
SUPERSEDES: 09/11/92

ZEP METER MIST PEACH
PRODUCT NO.: 0335 Aerosol Deodorant

SECTION I - EMERGENCY CONTACTS

TELEPHONE:
(404) 352-1680 *BETWEEN 8:00 AM - 5:00 PM (EST)*

MEDICAL EMERGENCY:
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(404) 432-2873
(404) 424-4760
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1-800-424-9300 TOLL-FREE - ALL CALLS RECORDED

DISTRICT OF COLUMBIA:
(202) 483-7616 ALL CALLS RECORDED

SECTION II - HAZARDOUS INGREDIENTS

DESIGNATIONS	TLV (PPM)	EFFECTS (SEE REVERSE)	% IN PROD.
* ETHANOL ** ethyl alcohol; grain alcohol; CAS# 64-17-5; RTECS# KQ6300000; OSHA PEL- 1000 ppm	1000	IRR FBL	20-30
** BLEND OF [PROPANE; CAS# 74-98-6; RTECS# TX2775000] & [n-BUTANE; CAS# 106-97-8, RTECS# EJ4200000]	800	FBL	50-60
*** OSHA PEL - 800 PPM			

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:
Direct contact with the spray mist can cause eye irritation such as stinging and burning. This product may cause slight skin irritation. No medical conditions are known to be aggravated by overexposure to this product or ingredients in this product.

Chronic Effects of Overexposure:
Chronic effects from alcohol vapors are rare and would only result from prolonged and repeated contact, which is unlikely due to the packaging of this product. None of the ingredients are listed as carcinogens by IARC, NTP, or OSHA.

Estd PEL/TLV: Not established **Primary Routes of Entry:** Inh

HMIS Codes: HEALTH 1;FLAM. 3;REACT. 1;PERS. PROTECT. A ;CHRONIC HAZ. NO

FIRST AID PROCEDURES:
Skin: Wash contaminated skin thoroughly with soap or a mild detergent. Apply a skin cream with lanolin. Get medical attention if irritation persists.
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: Move exposed person to fresh air. If irritation persists, get medical attention promptly.
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: No special measures are required.
Eye Protection: No special measures are required.
Respiratory Protection: Avoid direct inhalation of concentrated spray mist and do not direct spray toward people.
Ventilation: No special measures are required.

SECTION V - PHYSICAL DATA

Boiling Point (°F): 165
Percent Volatile by Volume (%): > 95
Solubility in Water: NEGLIGIBLE
Specific Gravity: 0.921
Vapor Density (air=1): >1
pH (concentrate): N/A
Vapor Pressure (mmHg): 74
Evaporation Rate (BUTYL ACETATE =1): >1
pH (use dilution of): N/A
Appearance and Odor: A VERY DRY SPRAY WITH A PLEASANT PEACH SCENT.

SECTION VI - FIRE AND EXPLOSION DATA

Flash Point (°F) (method used): Nonflammable (CCMA)
Flammable Limits: LEL 1.9 UEL 9.5
Extinguishing Media: Water
Special Fire Fighting: Wear self-contained positive pres. breathing apparatus.
Unusual Fire Hazards: Direct water onto intact containers to prevent bursting.

SECTION VII - REACTIVITY DATA

ability: Stable
compatibility (avoid): Heat, open flame, spark and oxidizing agents.
olymerization: Will not occur
azardous Decomposition: Carbon dioxide, carbon monoxide, and other unidentified organic compounds.

SECTION VIII - SPILL AND DISPOSAL PROCEDURES

eps to b **Case Material is Released or Spilled:**
nserve - tions in sections 4 & 9 during spill clean-up. Large spills are unlikely due to packaging. Spill may be absorbed on an inert absorbent material (eg
ep-O-Zo d in a suitable container for disposal. Wash area thoroughly with a detergent solution and rinse well with water.
aste Dis **od:**
oduct is use. Do not crush, puncture or incinerate spent containers. Large numbers of aerosol containers may require handling as a hazardous waste, but
most sta. azardous waste quantities less than 220 lbs per month may allow disposal in a chemical or industrial waste landfill. Consult local, state and federal
encies for proper disposal method in your area.

CRA Hazardous Waste Numbers: N/A

SECTION IX - SPECIAL PRECAUTIONS

recautions to be Taken When Handling and Storing:
o not store at temperatures above 120F. or in direct sunlight. Do not puncture or incinerate container. Keep product out of eyes. Keep out of the reach of children.

SECTION X - TRANSPORTATION DATA

OT Proper Shipping Name: CONSUMER COMMODITY.
OT Hazard Class: ORM-D
DOT Label/Placard: ORM-D
OT I.D. Number: N/A
PA TSCA Chemical Inventory: ALL INGREDIENTS ARE LISTED
PA CWA 40CFR Part 117 substance (RQ in a single container) NONE

NOTICE

ank you for your interest in, and use of, Zep products. p Manufacturing Co. is pleased to be of service to you by pplying this Material Safety Data Sheet for your files. Zep anufacturing is concerned for your health and safety. Zep oducts can be used safely with proper protective equipent and proper handling practices consistent with label structions and the MSDS. Before using any Zep product, sure to re the complete label and the Material Safety ta Sheet.

a further of caution, Zep wishes to advise that rious acci have resulted from the misuse of mptied" co ers. "Empty" containers retain residue quid and/or vapor) and can be dangerous. DO NOT pressrize, cut, weld, braze, solder, drill, grind or expose such ntainers to heat, flame, or other sources of ignition; they ay explode or develop harmful vapors and possibly cause jury or dea Clean empty containers by triple rinsing ith water / appropriate solvent. Empty containers ust be sent rum reconditioner before reuse.

TERMS AN ABBREVIATIONS SED IN THE MSDS:
BY SECTION ALPHABETICALLY:

ECTION II: HAZARDOUS INGREDIENTS

AR: Carcinogen - A chemical listed by the National Toxicology Program (NTP), the International Agency for Research n Cancer (IARC) or OSHA as a definite or possible human ancer causing agent.

AS #: Chemical Abstract Services Registry Number - A niversally accepted numbering system for chemical substances.

BL: Combustible - At temperatures between 100°F and 00°F chemical gives off enough vapor to ignite if a source f ignition is present as tested with a closed cup tester.

NS: Central Nervous System depressant reduces the activy of the brain and spinal cord.

OR: Corrosive - Causes irreversible alterations in living issue (e.g. burns).

ESIGNATIONS: Chemical and common names of hazardous ngredients.

IR: Eye Irritant Only - Causes reversible reddening and/or nflammation of eye tissues.

EXPOSURE LIMITS: The time weighted average (TWA) airborne concentration at which most workers can be exposed vithout any expected adverse effects. Primary sources include ACGIH TLVs, and OSHA PEL's (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, 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 OCHA 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 (e.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 determination 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 exposure.

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.

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. 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 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: 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 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

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 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 Safety Data Sheet.

(Notice Revised 8/91)

MATERIAL SAFETY DATA SHEET
AND SAFE HANDLING AND DISPOSAL INFORMATION

CLEAN ACROSS AMERICA AND THROUGHOUT THE WORLD™
ZEP MANUFACTURING COMPANY
P.O. BOX 2015
ATLANTA, GEORGIA 30301

2/15/94
ISSUE DATE: 09/11/92
SUPERSEDES: 07/30/91
ZEP METER MIST AIR FRESHENER VANILLA
PRODUCT NO.: 0341 **Aerosol Products**

SECTION I - EMERGENCY CONTACTS

TELEPHONE:
(404) 352-1680 *BETWEEN 8:00 AM - 5:00 PM (EST)*

MEDICAL EMERGENCY:
(404) 435-2973
(404) 432-2873
(404) 424-4789
(404) 319-6151
(404) 242-3561
NON-OFFICE HOURS, WEEKENDS AND HOLIDAYS, PLEASE CALL YOUR **LOCAL POISON CONTROL**

TRANSPORTATION EMERGENCY:
(404) 922-0923

CHEMTREC:
1-800-424-9300 TOLL-FREE - ALL CALLS RECORDED

DISTRICT OF COLUMBIA:
(202) 483-7616 ALL CALLS RECORDED

SECTION II - HAZARDOUS INGREDIENTS

DESIGNATIONS	TLV (PPM)	EFFECTS (SEE REVERSE)	% IN PROD
* ETHANOL ** ethyl alcohol; grain alcohol; CAS# 64-17-5, RTECS# KQ6300000; OSHA PEL- 1000 ppm	1000	IRR FBL	20-30
* BLEND OF [PROPANE; CAS# 74-98-6; RTECS# TX2775000] & [n-BUTANE; CAS# 106-97-8; RTECS# EJ4200000]	800	FBL	50-60
* OSHA PEL - 800 PPM			

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:
Direct contact with the spray mist can cause eye irritation such as stinging and burning. This product may cause slight skin irritation. No medical conditions are known to be aggravated by overexposure to this product or ingredients in this product.

Chronic Effects of Overexposure:
Chronic effects from alcohol vapors are rare and would only result from prolonged and repeated contact, which is unlikely due to the packaging of this product. 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. 3;REACT. 1;PERS. PROTECT. A ;CHRONIC HAZ. NO

FIRST AID PROCEDURES:
Skin: Wash contaminated skin thoroughly with soap or a mild detergent. Apply a skin cream with lanolin. Get medical attention if irritation persists.
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: Move exposed person to fresh air. If irritation persists, get medical attention promptly.
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: No special measures are required.
Eye Protection: No special measures are required.
Respiratory Protection: Avoid direct inhalation of concentrated spray mist and do not direct spray toward people.
Ventilation: No special measures are required.

SECTION V - PHYSICAL DATA

Boiling Point (°F):	166	**Specific Gravity:**	0.921	**Vapor Pressure (mmHg):**	74
Percent Volatile by Volume (%):	>95	**Vapor Density (air=1):**	>1	**Evaporation Rate (BUTYL ACETATE =1):**	>1
Solubility in Water:	NEGLIGIBLE	**pH (concentrate):**	N/A	**pH (use dilution of):**	N/A

Appearance and Odor: VERY DRY SPRAY WITH A PLEASANT ORANGE SCENT

SECTION VI - FIRE AND EXPLOSION DATA

Flash Point (°F) (method used): 70F (on conc.) (TCC)
Flammable Limits: LEL 1.9 UEL 9.5
Extinguishing Media: Water
Special Fire Fighting: Wear self-contained positive pres. breathing apparatus.
Unusual Fire Hazards: Direct water onto intact containers to prevent bursting.

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ability: Stable
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bserve safety precautions in sections 4 & 9 during spill clean-up. Large spills are unlikely due to packaging. Spill may be absorbed on an inert absorbent material (eg p-O-Zorb), and placed in a suitable container for disposal. Wash area thoroughly with a detergent solution and rinse well with water.

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OT Hazard Class: ORM-D
DOT Label/Placard: ORM-D
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PA CWA 40CFR Part 117 substance (RQ in a single container) : NONE

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(Notice Revised 8/91)