

PRODUCT NAME: SOLUTION 400 ZINC GALVANIZING SPRAY
PRODUCT CODE: VIA-0013-003

HMIS CODES: H F R P
2 4 0

=====
SECTION I - DISTRIBUTOR IDENTIFICATION
=====

DISTRIBUTOR'S NAME : MRO SOLUTIONS
ADDRESS : 5645 W. HOWARD
NILES, IL 60714

EMERGENCY PHONE : 1-800-424-9300 DATE PREPARED : 04/17/00
INFORMATION PHONE : 1-847-588-2480 NAME OF PREPARER : ESP

=====
SECTION II - HAZARDOUS INGREDIENTS/SARA III INFORMATION
=====

REPORTABLE COMPONENTS	CAS NUMBER	VAPOR PRESSURE mm Hg @ TEMP	WEIGHT PERCENT
* ZINC; ZINC DUST OSHA PEL: 5 MG/M3, ACGIH TLV: 10 MG/M3, : AS DUST	7440-66-6	0 0	39
* 2-BUTANONE, METHYL ETHYL KETONE OSHA PEL: 200 PPM, ACGIH TLV: 200 PPM	78-93-3	70 68	23
* XYLENE (MIXED ISOMERS) OSHA PEL: 100 PPM, ACGIH TLV: 100 PPM	330-20-7	25 77	8
* HEXONE, METHYL ISOBUTYL KETONE OSHA PEL: 50 PPM, ACGIH TLV: 100 PPM	108-10-1	15 68	8
* ETHYLBENZENE (COMPONENT OF COMMERCIAL XYLENE) OSHA PEL/ACGIH TLV: 100 PPM (STEL 125 PPM)	100-41-4	10 79	2
PETROLEUM DISTILLATE, VM&P NAPHTHA OSHA PEL: 300 PPM, ACGIH TLV: 300 PPM	64742-89-8	10 68	1
PROPANE OSHA PEL: 1000 PPM, ACGIH TLV: ASPHYXIANT	74-98-6	6350 68	15

* Indicates toxic chemical(s) subject to the reporting requirements of section 313 of Title III and of 40 CFR 372.

=====
SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS
=====

BOILING RANGE: -44 deg F - 279 deg F SPECIFIC GRAVITY (H2O=1): 1.14
VAPOR DENSITY: HEAVIER THAN AIR EVAPORATION RATE: SLOWER THAN ETHER
SOLUBILITY IN WATER: SLIGHT
APPEARANCE AND ODOR: AEROSOL PRODUCT

=====
SECTION IV - FIRE AND EXPLOSION HAZARD DATA
=====

FLASH POINT: -156 deg F METHOD USED: ESTIMATED
FLAMMABLE LIMITS IN AIR BY VOLUME- LOWER: 1 UPPER: 10

EXTINGUISHING MEDIA: FOAM, CO2, DRY CHEMICAL, WATER FOG

SPECIAL FIREFIGHTING PROCEDURES

WATER SPRAY MAY BE INEFFECTIVE. WATER MAY BE USED TO COOL CONTAINERS TO PREVENT PRESSURE BUILD-UP AND EXPLOSION WHEN EXPOSED TO EXTREME HEAT. IF WATER IS USED, FOG NOZZLES PREFERRED. WEAR GOGGLES AND SELF-CONTAINED BREATHING APPARATUS.

UNUSUAL FIRE AND EXPLOSION HAZARDS

CLOSED CONTAINERS MAY EXPLODE FROM INTERNAL PRESSURE BUILD-UP WHEN EXPOSED TO EXTREME HEAT AND DISCHARGE CONTENTS. VAPOR ACCUMULATION CAN FLASH OR EXPLODE IF IGNITED. OVEREXPOSURE TO DECOMPOSITION PRODUCTS MAY CAUSE A HEALTH HAZARD. SYMPTOMS MAY NOT BE READILY APPARENT. OBTAIN MEDICAL ATTENTION.

=====
SECTION V - REACTIVITY DATA
=====

STABILITY: STABLE

CONDITIONS TO AVOID

APPLICATION TO HOT SURFACES. STORAGE ABOVE 120 DEG F. EXPOSURE TO OPEN FLAME.

INCOMPATIBILITY (MATERIALS TO AVOID)

STRONG OXIDIZING AGENTS.

HAZARDOUS DECOMPOSITION OR BYPRODUCTS

MAY PRODUCE FUMES WHEN HEATED TO DECOMPOSITION. FUMES MAY CONTAIN CARBON MONOXIDE.

HAZARDOUS POLYMERIZATION: WILL NOT OCCUR

===== SECTION VI - HEALTH HAZARD DATA =====

INHALATION HEALTH RISKS AND SYMPTOMS OF EXPOSURE
RESPIRATORY IRRITATION, HEADACHE, NAUSEA, FATIGUE, DROWSINESS, IMPAIRED CO-
ORDINATION, CENTRAL NERVOUS SYSTEM DEPRESSION OR HEART ARRHYTHMIA.

SKIN AND EYE CONTACT HEALTH RISKS AND SYMPTOMS OF EXPOSURE
SKIN: CONTACT MAY DRY THE SKIN; PROLONGED CONTACT MAY CAUSE MODERATE IRRITATION.
EYES: LIQUID OR VAPOR CAN CAUSE MODERATE TO SEVERE IRRITATION.

SKIN ABSORPTION HEALTH RISKS AND SYMPTOMS OF EXPOSURE
NOT EASILY ABSORBED. SOLVENT ACTION CAN DRY AND DEFAT THE SKIN CAUSING THE SKIN
TO CRACK, LEADING TO DERMATITIS.

INGESTION HEALTH RISKS AND SYMPTOMS OF EXPOSURE
NOT A LIKELY ROUTE OF EXPOSURE. IF SWALLOWED, DO NOT INDUCE VOMITING. SEEK
IMMEDIATE MEDICAL ADVICE AND/OR ATTENTION.

HEALTH HAZARDS (ACUTE AND CHRONIC)
ACUTE: EYE IRRITANT. SKIN IRRITANT. NARCOTIC IN HIGH CONCENTRATIONS. SEVERE
OVEREXPOSURE MAY CAUSE DAMAGE TO THE BLOOD. CHRONIC: REPORTS HAVE ASSOCIATED
REPEATED AND PROLONGED OCCUPATIONAL EXPOSURE TO SOLVENTS WITH PERMANENT BRAIN
AND NERVOUS SYSTEM AND OTHER INTERNAL ORGAN DAMAGE.

CARCINOGENICITY: NTP CARCINOGEN: No IARC MONOGRAPHS: No OSHA REGULATED: No

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE
ACUTE AND CHRONIC LIVER AND KIDNEY DISEASE, ANEMIA, CORONARY DISEASE OR RHYTHM
DISORDERS OF THE HEART.

EMERGENCY AND FIRST AID PROCEDURES
INHALATION: REMOVE TO FRESH AIR. ADMINISTER OXYGEN IF NEEDED. APPLY ARTIFICIAL
RESPIRATION IF BREATHING HAS STOPPED. GET MEDICAL ATTENTION. SKIN: WIPE OFF WITH
TOWEL. WASH WITH SOAP AND WATER. GET MEDICAL ATTENTION IF IRRITATION PERSISTS.
EYES: WASH IMMEDIATELY WITH LARGE VOLUMES OF FRESH WATER FOR AT LEAST 15
MINUTES. GET MEDICAL ATTENTION.

===== SECTION VII - PRECAUTIONS FOR SAFE HANDLING AND USE =====

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED
AVOID BREATHING VAPORS. VENTILATE AREA. REMOVE ALL SOURCES OF IGNITION. CLEAN UP
AREA WITH ABSORBENT MATERIAL AND PLACE IN CLOSED CONTAINERS FOR DISPOSAL.

WASTE DISPOSAL METHOD
DISPOSE OF IN ACCORDANCE WITH LOCAL, STATE, AND FEDERAL REGULATIONS. BEFORE
ATTEMPTING CLEAN UP, REFER TO OTHER SECTIONS OF THIS MSDS FOR HAZARD CAUTION
INFORMATION.

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING
STORE AND USE IN COOL, DRY, WELL-VENTILATED AREAS. DO NOT STORE ABOVE 120 DEG F.
DO NOT PUNCTURE OR INCINERATE (BURN) CANS. DO NOT STICK PIN, NAIL OR ANY OTHER
SHARP OBJECT INTO OPENING ON TOP OF CAN. DO NOT SPRAY IN EYES. DO NOT TAKE
INTERNALLY. SEE PRODUCT LABEL FOR ADDITIONAL INFORMATION.

OTHER PRECAUTIONS
SMALL PRESSURIZED CONTAINERS OF FLAMMABLE PRODUCTS MAY BE STORED IN AREAS
SUITABLE FOR ORDINARY COMBUSTIBLES WITH RESPECT TO CONSTRUCTION, DRAINAGE,
CONTROL OF IGNITION SOURCES, AND VENTILATION EXCEPT THAT THEY SHOULD NOT BE
STORED IN BASEMENTS.

===== SECTION VIII - CONTROL MEASURES =====

RESPIRATORY PROTECTION
NONE UNDER NORMAL USE. AVOID BREATHING VAPORS. IN RESTRICTED AREAS, USE APPROVED
CHEMICAL/MECHANICAL FILTERS DESIGNED TO REMOVE A COMBINATION OF PARTICLES AND
VAPOR. IN CONFINED AREAS, USE APPROVED AIR LINE TYPE RESPIRATOR OR HOOD. SELF-
CONTAINED BREATHING APPARATUS IS REQUIRED FOR VAPOR CONCENTRATIONS ABOVE PEL/TLV
LIMITS.

VENTILATION

SUFFICIENT TO PREVENT INHALATION OF SOLVENT VAPORS. GENERAL DILUTION AND/OR LOCAL EXHAUST VENTILATION IN VOLUME OR PATTERN TO KEEP PEL/TLV OF MOST HAZARDOUS INGREDIENT BELOW ACCEPTABLE LIMIT AND LEL BELOW STATED LIMIT.

PROTECTIVE GLOVES

NONE UNDER NORMAL USE. SOLVENT RESISTANT REQUIRED FOR PROLONGED OR REPEATED CONTACT.

EYE PROTECTION

NONE UNDER NORMAL USE; HOWEVER, USE OF SAFETY GLASSES WITH SPLASH GUARDS OR FULL FACE SHIELD IS RECOMMENDED.

OTHER PROTECTIVE CLOTHING OR EQUIPMENT

NONE UNDER NORMAL USE; HOWEVER, USE OF SOLVENT RESISTANT APRONS OR OTHER CLOTHING IS RECOMMENDED.

WORK/HYGIENIC PRACTICES

EYE WASHES AND SAFETY SHOWERS IN THE WORKPLACE ARE RECOMMENDED.

===== SECTION IX - DISCLAIMER =====

THE INFORMATION CONTAINED HEREIN IS BASED ON DATA CONSIDERED ACCURATE. HOWEVER, NO WARRANTY IS EXPRESSED OR IMPLIED REGARDING THE ACCURACY OF THE DATA OR THE RESULTS TO BE OBTAINED FROM THE USE THEREOF. BECAUSE THE INFORMATION CONTAINED HEREIN MAY BE APPLIED UNDER CONDITIONS BEYOND OUR CONTROL, WE ASSUME NO RESPONSIBILITY FOR ITS USE.