

MATERIAL SAFETY DATA SHEET

Page: 1

Tipping Fluid

PRODUCT NAME:
 PRODUCT CLASS:
 PRODUCT CODE:

HMS CODES: H F R P

SECTION I - MANUFACTURER IDENTIFICATION

MANUFACTURER'S NAME:
 ADDRESS:

07

EMERGENCY PHONE DAY:

NIGHT: FOR HEALTH - POISON CONTROL CENTER:
 FOR SPILLS - CHEMTTEL:

DATE OF PREPARATION: 10/22/2004
 TIME OF PREPARATION: 11:36:55

REVISION DATE: 07/11/03

SECTION II - HAZARDOUS INGREDIENTS/SARA III INFORMATION

REPORTABLE COMPONENTS	CAS NUMBER	VAPOR PRESSURE mm Hg @ TEMP	RANGE PERCENT
WATER (NON-HAZARDOUS) OSHA & ACGIH: NOT APPLICABLE	7732-18-5	1.0	68
+ TITANIUM DIOXIDE ACGIH TLV: 10.0 MG/M3 OSHA PEL: 15.0 MG/M3	13463-67-7		
+ TALC ACGIH TLV: 2.0 MG/M3 OSHA PEL: 6.0 MG/M3	14807-96-6		
* 2 PROPYLETHANOL EASTMAN KODAK RECOMMENDATION: 25 PPM ACGIH & OSHA: NOT ESTABLISHED	2807-30-9	1.3	68 5-10%
* BUTYL CELLOSOLVE ACGIH TLV: 20 PPM OSHA PEL: 50 PPM	111-76-2	0.6	68 8-10%
* GLYCOL ETHER ACGIH & OSHA: NOT ESTABLISHED	112-34-5	0.01	68 1-5%

SARA 313 INFORMATION:

* Indicates toxic chemical(s) subject to the reporting requirements of section 313 of Title III and of 40 CFR 372.
 Indicates component(s) considered nuisance dust(s) in their dry form.

FOOTNOTE:

*N/A

SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS

BOILING RANGE OF SEC. II: 212°F - 447.0°F
 VAPOR DENSITY: HEAVIER THAN AIR
 EVAPORATION RATE: SLOWER THAN ETHER
 V.O.C.: 0.0 lb/gal
 WEIGHT per GALLON: 10.29 lb/gal
 % SOLIDS BY VOLUME: 35.46

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

DOT CATEGORY:
 COMBUSTIBLE LIQUID.

Tipping Fluid

FLASH POINT : 161°F

METHOD USED: SETA FLASH

FLAMMABLE LIMITS IN AIR BY VOLUME-LOWER: 0.9

EXTINGUISHING MEDIA:

NOT APPLICABLE. MATERIAL AS IS WILL NOT SUPPORT COMBUSTION UNLESS THE WATER HAS EVAPORATED. FOR DRIED SOLIDS, USE FOAM, DRY CHEMICAL, OR CARBON DIOXIDE EXTINGUISHERS.

UNUSUAL FIRE AND EXPLOSION HAZARDS:

CLOSED CONTAINERS MAY RUPTURE OR EXPLODE, DUE TO BUILDUP OF STEAM PRESSURE WHEN EXPOSED TO EXTREME HEAT. AFTER THE WATER HAS EVAPORATED, THE REMAINING SOLIDS WILL BURN. AVOID BREATHING GASES, VAPORS, FUMES OR DECOMPOSITION PRODUCTS DURING A FIRE. OVEREXPOSURE TO DECOMPOSITION PRODUCTS MAY CAUSE A HEALTH HAZARD. SYMPTOMS MAY NOT BE IMMEDIATELY APPARENT. OBTAIN MEDICAL ATTENTION.

SPECIAL FIREFIGHTING PROCEDURES:

KEEP CONTAINERS TIGHTLY CLOSED. ISOLATE FROM HEAT, SPARKS, ELECTRICAL EQUIPMENT AND OPEN FLAME. AVOID BREATHING GASES, VAPORS, FUMES OR DECOMPOSITION PRODUCTS DURING A FIRE. PERSONNEL INVOLVED IN A FIRE SHOULD WEAR FULL PROTECTIVE EQUIPMENT, INCLUDING SELF-CONTAINED RESPIRATORY EQUIPMENT. WATER SPRAY MAY BE USED TO COOL UNRUPTURED CLOSED CONTAINERS TO PREVENT PRESSURE BUILDUP AND POSSIBLE AUTOIGNITION OR EXPLOSION WHEN EXPOSED TO EXTREME HEAT. IF WATER IS USED, FOG NOZZLES ARE PREFERABLE.

SECTION V - HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE: SEE SECTION II

INHALATION HEALTH RISKS AND SYMPTOMS OF ACUTE EXPOSURE:

THIS PRODUCT CONTAINS SMALL PERCENTAGES OF ORGANIC SOLVENTS. OVEREXPOSURE TO HIGH CONCENTRATIONS OF VAPORS OR MISTS MAY CAUSE IRRITATION OF THE RESPIRATORY TRACT, OR ACUTE NERVOUS SYSTEM DEPRESSION, RESULTING IN HEADACHE, DIZZINESS, STAGGERING GAIT, CONFUSION, UNCONSCIOUSNESS OR COMA. MAY CAUSE SKIN AND EYE IRRITATION.

EYE CONTACT HEALTH RISKS AND SYMPTOMS OF EXPOSURE:

EYE CONTACT WITH LIQUID MAY BE SEVERELY IRRITATING AND MAY CAUSE CORNEAL DAMAGE IF THE EYE IS NOT FLUSHED OUT IMMEDIATELY WITH WATER.

SKIN CONTACT HEALTH RISKS AND SYMPTOMS OF EXPOSURE:

BRIEF CONTACT WITH SKIN MAY CAUSE SLIGHT TO MODERATE IRRITATION AND POSSIBLY DRYING OF THE SKIN. REPEATED OR PROLONGED SKIN CONTACT MAY CAUSE DRYING AND DEFATTING OF THE SKIN, WHICH MAY LEAD TO DERMATITIS. SKIN ABSORPTION: FREQUENT OR PROLONGED SKIN CONTACT WITH LIQUID MAY RESULT IN ABSORPTION OF HARMFUL AMOUNTS.

INGESTION HEALTH RISKS AND SYMPTOMS OF EXPOSURE:

MAY BE HARMFUL IF SWALLOWED. SWALLOWING MAY CAUSE GASTROINTESTINAL IRRITATION, NAUSEA, DIARRHEA, VOMITING AND POSSIBLY NARCOSIS. THIS PRODUCT CONTAINS BUTYL CELLOSOLVE (2-BUTOXYETHANOL) WHICH, WHEN UNDILUTED, IS MODERATELY TOXIC WHEN SWALLOWED AND MAY CAUSE HEADACHES, DIZZINESS, INCOORDINATION, NAUSEA, VOMITING, DIARRHEA, AND GENERAL WEAKNESS. INGESTION OF SIGNIFICANT QUANTITIES MAY RESULT IN RED BLOOD CELL HEMOLYSIS. BUTYL CELLOSOLVE PENETRATES THE SKIN READILY. FREQUENT OR WIDESPREAD CONTACT MAY RESULT IN THE ABSORPTION OF POTENTIALLY HARMFUL AMOUNTS OF MATERIAL. SIGNS AND SYMPTOMS AND TOXICITY ARE SIMILAR TO THOSE OF SWALLOWING. INHALATION OF HIGH VAPOR CONCENTRATIONS ARE IRRITATING TO THE EYES AND RESPIRATORY TRACT AND MAY CAUSE HEADACHE, DIZZINESS, NAUSEA, VOMITING AND MALAISE. BRIEF SKIN CONTACT WITH UNDILUTED MATERIAL MAY CAUSE SLIGHT REDDENING. MORE PROLONGED AND WIDESPREAD CONTACT, AS FROM WET CLOTHING, MAY CAUSE MODERATE REDDENING, SWELLING, AND POSSIBLE NECROSIS. EYE CONTACT WITH LIQUID CAUSES IRRITATION AND PAIN, SEEN AS EXCESSIVE TEARING AND BLINKING WITH MARKED EXCESS REDNESS AND SWELLING OF THE CONJUCTIVA.

BUTYL CELLOSOLVE HAS BEEN KNOWN TO INCREASE THE OSMOTIC FRAGILITY OF THE BLOOD CELLS IN SOME LABORATORY ANIMALS. THE

Tipping Fluid

EFFECT HAS BEEN SHOWN TO VARY AMONG SPECIES. IN HUMAN BEINGS, EVEN AT EXPOSURE LEVELS AS HIGH AS 200 PPM, THESE BLOOD EFFECTS DID NOT OCCUR AT ALL. FURTHERMORE, IN THE SENSITIVE ANIMAL SPECIES WHERE INCREASED FRAGILITY WAS OBSERVED, THE EFFECTS WERE READILY REVERSIBLE, DISAPPEARING OVERNIGHT AFTER A DAY'S EXPOSURE AT 100 PPM OR EVEN HIGHER. THUS, EXPOSURE TO BUTYL CELLOSOLVE AT REASONABLE LEVELS IS NOT CONSIDERED LIKELY TO PRODUCE ADVERSE BLOOD EFFECTS OF ANY SIGNIFICANCE WHATSOEVER.

CHRONIC HEALTH HAZARDS:

REPEATED OR PROLONGED OCCUPATIONAL EXPOSURE TO VAPORS FROM SOLVENT(S) CONTAINED IN THIS PRODUCT MAY AFFECT THE CENTRAL NERVOUS SYSTEM AND CAUSE RESPIRATORY IRRITATION, RESULTING IN POSSIBLE LUNG DAMAGE, AND MAY CAUSE LIVER AND KIDNEY DAMAGE. NOTE: REPORTS HAVE ASSOCIATED REPEATED AND PROLONGED OCCUPATIONAL OVEREXPOSURE TO SOLVENTS WITH PERMANENT BRAIN AND NERVOUS SYSTEM DAMAGE. INTENTIONAL MISUSE BY DELIBERATELY CONCENTRATING AND INHALING THE CONTENTS MAY BE HARMFUL OR FATAL.

CARCINOGENICITY:

THIS PRODUCT DOES NOT CONTAIN REPORTABLE AMOUNTS OF ANY SUBSTANCE WHICH IS LISTED AS A CARCINOGEN BY NTP, IARC OR OSHA.

EMERGENCY FIRST AID PROCEDURES:

IF OVERCOME BY VAPORS, REMOVE FROM EXPOSURE IMMEDIATELY. IF BREATHING IS IRREGULAR OR HAS STOPPED, START RESUSCITATION, ADMINISTER OXYGEN, AND CALL A PHYSICIAN. IN CASE OF EYE CONTACT, FLUSH EYES WITH WATER FOR AT LEAST 15 MINUTES. GET MEDICAL CARE. IN CASE OF SKIN CONTACT, REMOVE CONTAMINATED CLOTHING. FLUSH AFFECTED AREAS AND WASH WITH MILD SOAP AND WATER. IF REDNESS AND IRRITATION DEVELOP AND PERSIST, GET MEDICAL ATTENTION. IF SWALLOWED, DO NOT INDUCE VOMITING. IF CONSCIOUS, GIVE TWO GLASSES OF WATER AND GET MEDICAL HELP IMMEDIATELY. NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS OR CONVULSIVE PERSON.

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE:

EXPOSURE MAY AGGRAVATE PRE-EXISTING SKIN, EYE AND RESPIRATORY DISORDERS.

SECTION VI - REACTIVITY DATA**STABILITY:**

STABLE

CONDITIONS TO AVOID:

EXCESSIVE HEAT, SPARKS AND OPEN FLAME. KEEP FROM FREEZING.

INCOMPATIBILITY (MATERIALS TO AVOID):

AVOID CONTACT WITH STRONG OXIDIZING MATERIALS, ALKALINE MATERIALS, STRONG ACIDS AND MATERIALS THAT REACT WITH WATER.

HAZARDOUS DECOMPOSITION OR BYPRODUCTS:

DECOMPOSITION MAY PRODUCE SMOKE, ACRID FUMES, CARBON DIOXIDE AND/OR CARBON MONOXIDE, AND POSSIBLY OTHER TOXIC VAPORS. DECOMPOSITION MAY ALSO PRODUCE TOXIC ACRYLIC MONOMER.

HAZARDOUS POLYMERIZATION:

WILL NOT OCCUR.

SECTION VII - PRECAUTIONS FOR SAFE HANDLING AND USE**STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:**

REMOVE ALL SOURCES OF IGNITION. FLOORS MAY BE SLIPPERY. CARE SHOULD BE TAKEN TO AVOID FALLS. WEAR APPROPRIATE PROTECTIVE EQUIPMENT. VENTILATE AREA. ADD INERT ABSORBENT TO SPILL AREA AND TRANSFER WASTE TO APPROPRIATE CONTAINER FOR DISPOSAL USING NON-SPARKING TOOLS. CLEAN UP IMMEDIATELY WITH WATER. KEEP OUT OF SEWERS, STORM DRAINS, SURFACE WATER AND SOIL.

Tipping Fluid

WASTE DISPOSAL METHOD:

DISPOSE IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REGULATIONS. INCINERATE IN APPROVED FACILITY. DO NOT INCINERATE CLOSED CONTAINERS.

SECTION VIII - CONTROL MEASURES**RESPIRATORY PROTECTION:**

IF PRODUCT IS APPLIED BY BRUSH, ROLLER COAT, OR DIP IN OUTDOOR OR OPEN AREAS WITH UNRESTRICTED VENTILATION, AND WHERE THE TLV'S DO NOT EXCEED THOSE SHOWN IN SECTION II, RESPIRATORY EQUIPMENT MAY NOT BE NECESSARY. IF EYE WATERING, HEADACHES OR DIZZINESS ARE EXPERIENCED WEAR RESPIRATORY PROTECTION (NIOSH TC23 RESPIRATOR OR EQUIVALENT) OR LEAVE AREA. IF PRODUCT IS APPLIED BY SPRAY APPLICATION, A NIOSH APPROVED MECHANICAL FILTER RESPIRATOR DESIGNED TO REMOVE AIRBORNE PARTICLES OF OVERSPRAY DURING APPLICATION SHOULD BE WORN. IN RESTRICTED VENTILATION AREAS, WHERE THE TLV'S CAN EXCEED THOSE SHOWN IN SECTION II, A NIOSH APPROVED RESPIRATOR WITH CHEMICAL/MECHANICAL FILTERS DESIGNED TO REMOVE A COMBINATION OF PARTICULATE AND VAPORS SHOULD BE WORN. IN CONFINED AREAS, USE A NIOSH APPROVED AIRLINE RESPIRATOR OR HOOD.

VENTILATION:

SOLVENT VAPORS ARE HEAVIER THAN AIR AND TEND TO ACCUMULATE AT LOWER LEVELS ALONG THE FLOOR. VAPORS MAY SPREAD LONG DISTANCES AND MAY CAUSE A FLASH FIRE. PREVENT BUILD-UP OF VAPORS. ELIMINATE ANY SOURCE OF IGNITION DURING USE AND UNTIL VAPORS ARE GONE. PROVIDE GENERAL DILUTION OR LOCAL EXHAUST VENTILATION IN VOLUME AND PATTERN TO KEEP TLV OF MOST HAZARDOUS INGREDIENT IN SECTION II BELOW ACCEPTABLE LIMIT, LEL IN SECTION IV BELOW STATED LIMIT, AND TO REMOVE DECOMPOSITION PRODUCTS DURING WELDING OR FLAME CUTTING ON SURFACES COATED WITH THIS PRODUCT.

PROTECTIVE GLOVES:

SOLVENT RESISTANT GLOVES ARE REQUIRED FOR PROLONGED OR REPEATED CONTACT WITH LIQUID.

EYE PROTECTION:

IF A SPLASHING HAZARD EXISTS OR IF THERE IS POTENTIAL EYE CONTACT, WEAR SAFETY EYEWEAR SUCH AS CHEMICAL GOGGLES OR FACE SHIELDS TO PREVENT CONTACT OF LIQUID WITH EYES. EYE FLUSHING EQUIPMENT SHOULD BE IMMEDIATELY AVAILABLE.

OTHER PROTECTIVE CLOTHING OR EQUIPMENT:

WEAR APPROPRIATE PROTECTIVE OUTERWEAR TO PROTECT AGAINST CLOTHING CONTAMINATION AND PROLONGED SKIN CONTACT. WHEN NECESSARY, WEAR CHEMICAL AND/OR SOLVENT RESISTANT BOOTS TO PROTECT FEET AND SHOES FROM CONTAMINATION. REMOVE AND WASH CONTAMINATED CLOTHING BEFORE REUSE. DISCARD CONTAMINATED SHOES THAT CANNOT BE THOROUGHLY CLEANED BEFORE REUSE. WASH HANDS BEFORE EATING, SMOKING OR USING RESTROOM.

SECTION IX - SPECIAL PRECAUTIONS**PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING:**

STORE BELOW 100 DEG F. PROTECT FROM FREEZING. DO NOT STORE OR USE NEAR HEAT, SPARKS, OR OPEN FLAME. KEEP CONTAINERS TIGHTLY CLOSED AND UPRIGHT TO PREVENT LEAKAGE. STORE LARGE QUANTITIES IN BUILDINGS DESIGNED AND PROTECTED FOR STORAGE OF COMBUSTIBLE LIQUIDS.

OTHER PRECAUTIONS:

CAUTION - COMBUSTIBLE. KEEP AWAY FROM HEAT, SPARKS AND OPEN FLAME. OVEREXPOSURE TO VAPORS MAY BE HARMFUL. VAPORS AND MISTS MAY BE IRRITATING TO EYES, NOSE, THROAT, SKIN AND RESPIRATORY TRACT. PROLONGED OR REPEATED CONTACT OF LIQUID OR BREATHING OF VAPORS OR MISTS MAY CAUSE DELAYED AND SERIOUS INJURY. USE ONLY WITH ADEQUATE VENTILATION. AVOID BREATHING VAPORS OR SPRAY MIST. AVOID CONTACT WITH EYES AND SKIN. DO NOT TAKE INTERNALLY. DO NOT SAND, FLAME CUT, BRAZE OR WELD DRY COATING WITHOUT A NIOSH APPROVED RESPIRATOR OR SUFFICIENT VENTILATION.

NOTICE: REPORTS HAVE ASSOCIATED REPEATED AND PROLONGED OCCUPATIONAL OVEREXPOSURE TO SOLVENTS WITH PERMANENT BRAIN AND NERVOUS SYSTEM DAMAGE. INTENTIONAL MISUSE BY DELIBERATELY CONCENTRATING AND INHALING CONTENTS MAY BE HARMFUL OR FATAL. NONCOMBUSTIBILITY OF WATERBORNE COATINGS: SINCE THEY CONTAIN LARGE AMOUNTS OF WATER, WATERBORNE PAINTS ARE

Tipping Fluid

CLASSIFIED AS NONCOMBUSTIBLE BY MOST STANDARDS. BECAUSE THEY CONTAIN NO SOLVENTS, LATEX PAINTS WILL NEITHER FLASH NOR BURN. HOWEVER, WATER SOLUBLE COATINGS IN WHICH THE ORGANIC SOLVENT MAY BE 20% OF THE SOLVENT MIXTURE WILL HAVE A CLOSED-CUP FLASH POINT SIMILAR TO THAT OF THE ORGANIC SOLVENT, BUT WILL NOT SUPPORT COMBUSTION. MOST SAFETY REGULATIONS CONCERNING THE STORAGE OF FLAMMABLE LIQUIDS ARE BASED LARGELY ON THE FLASH POINT OF THE MATERIAL.

MANY WATERBORNE COATINGS HAVE FLASH POINTS COMPARABLE TO THOSE OF SOLVENT-BORNE COATINGS. THE FLASH POINT OF WATERBORNE PAINT IS USUALLY CLOSE TO THE FLASH POINT OF THE MOST VOLATILE SOLVENT. SINCE THE PREDOMINANT VOLATILE COMPONENT OF WATERBORNE PAINTS IS WATER, THE CLOSED-CUP FLASH POINT DOES NOT GIVE AN ACCURATE INDICATOR OF THE FIRE HAZARD. IGNITION OF A FLAMMABLE LIQUID IS DEPENDENT UPON OBTAINING A CONCENTRATION OF FLAMMABLE VAPOR IN THE AIR OVER THE LIQUID SURFACE THAT EXCEEDS THE LOWER FLAMMABILITY LIMIT (LEL). IN OPEN TANKS, WATERBORNE PAINTS CONTAINING 20% TO 35% ORGANIC SOLVENT DO NOT IGNITE OR BURN.

SPECIAL PRECAUTIONS:

DO NOT APPLY OVER HOT SURFACES IN A POORLY VENTILATED ROOM OR AREA, AS TOXIC FUMES MAY BE EMITTED AT ELEVATED TEMPERATURES.

MISCELLANEOUS PRECAUTIONS:

WARNING - EMPTY CONTAINERS MAY CONTAIN PRODUCT RESIDUE, INCLUDING FLAMMABLE OR EXPLOSIVE VAPORS. DO NOT CUT, PUNCTURE OR WELD ON OR NEAR CONTAINER. ALL LABEL WARNINGS MUST BE OBSERVED UNTIL THE CONTAINER HAS BEEN CLEANED OR RECONDITIONED.

SECTION X - DISCLAIMER

SARA 313 INFORMATION:

*N/A

FOOTNOTE:

USER'S RESPONSIBILITY: THE RESPONSIBILITY TO PROVIDE A SAFE WORKPLACE REMAINS WITH THE USER. THE USER SHOULD CONSIDER THE HEALTH HAZARDS AND SAFETY INFORMATION CONTAINED HEREIN AS A GUIDE AND SHOULD TAKE THOSE PRECAUTIONS REQUIRED IN AN INDIVIDUAL OPERATION TO INSTRUCT EMPLOYEES AND DEVELOP WORK PRACTICE PROCEDURES FOR A SAFE WORK ENVIRONMENT. IT IS THE RESPONSIBILITY OF THE USER TO COMPLY WITH ALL APPLICABLE FEDERAL, STATE AND LOCAL LAWS AND REGULATIONS. TO THE BEST OF OUR KNOWLEDGE, THE INFORMATION CONTAINED HEREIN IS ACCURATE. HOWEVER, STRATHMORE PRODUCTS, INC., ASSUMES NO LIABILITY WHATSOEVER FOR THE ACCURACY, RELIABILITY OR COMPLETENESS OF THE INFORMATION CONTAINED HEREIN. FINAL DETERMINATION OF SUITABILITY OF ANY MATERIAL IS THE SOLE RESPONSIBILITY OF THE USER. SINCE THE CONDITIONS OF HANDLING AND USE ARE BEYOND OUR CONTROL, WE MAKE NO GUARANTEE OF RESULTS, AND ASSUME NO LIABILITY FOR DAMAGES INCURRED BY USE OF THIS MATERIAL. ALL MATERIALS MAY PRESENT UNKNOWN HEALTH AND SAFETY HAZARDS AND SHOULD BE USED WITH CAUTION. ALTHOUGH CERTAIN HAZARDS ARE DESCRIBED HEREIN, WE CANNOT GUARANTEE THAT THESE ARE THE ONLY HAZARDS WHICH EXIST.