

# General Motors Corporation Material Safety Data Sheet

September, 1999

## SECTION 01: CHEMICAL PRODUCT & COMPANY ID

TRADENAME: R134A TRACER DYE  
12346287  
12346303  
15-120

MSDS SIGNED BY NAME: T.D. KALLEY  
MSDS SIGNED BY TITLE: PRESIDENT  
SAFE USE CATEGORY AND DESCRIPTION: 04 -METAL WORKING FLUIDS AND LUBRICANTS

MSDS CREATE DATE: 1994-11-04  
LAST UPDATED DATE: 1994-11-04  
MANUFACTURER'S ID (MID): 000552116  
MANUFACTURER'S NAME: BRIGHT SOLUTIONS, INCORPORATED  
MANUFACTURER'S MAILING ADDRESS:  
1738 MAPLELAWN DRIVE  
TROY MI 48084  
US

CHEMICAL FAMILY NAME: HYDROCARBON MIXTURE  
MOLECULAR FORMULA: PROPRIETARY BLEND

## SECTION 02: COMPOSITION & INGREDIENT INFO

CAS#	FORMULATION	W/V	CHEMICAL NAME
009038953	R 40.0000/ 60.0000%	W	ALPHA-BUTOXY-OMEGA-HYDROXY ETHYLEN E OXIDE-PROPYLENE OXIDE COPOLYMER
989955186	R 36.0000/ 54.0000%	W	CYCLIC AMINES
989982320	R 4.0000/6.0000%	W	BRANCHED AMINES
989982321	R 1.0000/ 10.0000%	W	NAPHTHALIMIDE DYE

## SECTION 2 - OTHER INFORMATION:

MANUFACTURER'S SUGGESTED TWA 100 PPM.  
THRESHOLD LIMIT VALUE: 100 PPM.  
PERMISSIBLE EXPOSURE LIMIT: 100 PPM  
CERCLA (SUPERFUND) REPORTABLE QUANTITY (LBS): NOT REPORTABLE

## SECTION 03: HAZARDS IDENTIFICATION

PRIMARY ENTRY ROUTE INDICATORS:  
SKIN PRIMARY ENTRY ROUTE INDICATOR = Y  
EYE PRIMARY ENTRY ROUTE INDICATOR = Y  
EFFECTS OF OVEREXPOSURE - SKIN: NONE EXPECTED, HOWEVER, PROLONGED CONTACT BY CAUSE REDNESS, IRRITATION AND DEFATTING. IF PRODUCT IS ABSORBED THROUGH THE SKIN, NAUSEA, DIZZINESS, GASTRIC DISTRESS AND VOMITING MAY RESULT.  
EFFECTS OF OVEREXPOSURE - EYE: THIS PRODUCT IS CONSIDERED TO BE AND EYE IRRITANT. CONTACT WITH THE EYES WILL CAUSE IRRITATION AND TEMPORARY CLOUDING.  
EFFECTS OF OVEREXPOSURE - INHALATION: NONE EXPECTED, HOWEVER CERTAIN INDIVIDUALS MAY BE SENSITIZED AND EXPERIENCE MINOR NAUSEA OR HEADACHES.  
EFFECTS OF OVEREXPOSURE - INGESTION: MAY CAUSE GASTRIC DISTRESS, VOMITING AND DIARRHEA.

## SECTION 04: FIRST AID MEASURES

EMERGENCY FIRST AID PROCEDURES - SKIN: REMOVE CONTAMINATED CLOTHING; WASH AFFECTED AREA WITH SOAP AND WATER; LAUNDRER CONTAMINATED CLOTHING BEFORE REUSE; IF IRRITATION PERSISTS, SEEK MEDICAL ATTENTION.  
EMERGENCY FIRST AID PROCEDURES - EYES: FLUSH EYES WITH CLEAR RUNNING WATER FOR 15 MINUTES WHILE HOLDING EYELIDS OPEN; SEEK MEDICAL ATTENTION.  
EMERGENCY FIRST AID PROCEDURES - INHALATION: REMOVE VICTIM TO FRESH AIR, IF SYMPTOMS PERSIST, SEEK MEDICAL ATTENTION.  
EMERGENCY FIRST AID PROCEDURES - INGESTION: GIVE TWO GLASSES OF WATER FOR DILUTION; INDUCE VOMITING BY HAVING VICTIM PLACE HIS FINGER DOWN HIS THROAT; SEEK MEDICAL ATTENTION.

## SECTION 05: FIRE-FIGHTING MEASURES

EXTINGUISHING MEDIA: CARBON DIOXIDE, WATER, WATER FOG, DRY CHEMICAL, CHEMICAL FOAM.

SPECIAL FIRE FIGHTING PROCEDURES: SELF-CONTAINED RESPIRATORY EQUIPMENT; COOL CONTAINERS TO PREVENT PRESSURE BUILD UP AND POSSIBLE EXPLOSION WHEN EXPOSED TO EXTREME HEAT. CAUTION - MATERIAL WILL SUPPORT COMBUSTION.

UNUSUAL FIRE AND EXPLOSION HAZARDS: CLOSED CONTAINERS CAN EXPLODE DUE TO BUILDUP OF PRESSURE WHEN EXPOSED TO EXTREME HEAT.

FLASH POINT TEMPS: > 200.00F

FLASH POINT METHOD: TCC

## SECTION 06: ACCIDENTAL RELEASE MEASURES

SPILL OR LEAK PROCEDURES: SMALL SPILLS: WASH TO SANITARY SEWER WITH PLENTY OF WATER. LARGE SPILLS: CONFINE SPILL, SOAK UP WITH ABSORBANT, SHOVEL PRODUCT INTO APPROVED CONTAINER FOR DISPOSAL. WASH AREA WITH PLENTY OF WATER.

## SECTION 07: HANDLING AND STORAGE

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE: KEEP CONTAINER CLOSED WHEN NOT IN USE; PROTECT CONTAINERS FROM ABUSE; PROTECT FROM EXTREME TEMPERATURES. KEEP THIS AND OTHER CHEMICALS OUT OF REACH OF CHILDREN; MINIMIZE BODY CONTACT WITH THIS PRODUCT AS WELL AS ALL CHEMICALS IN GENERAL.

## SECTION 7 - OTHER INFORMATION:

PRACTICE SAFE WORKPLACE HABITS. MINIMIZE BODY CONTACT WITH THIS, AS WELL AS ALL CHEMICALS IN GENERAL.

## SECTION 08: EXPOSURE CONTROLS - PROTECTION

EYE PROTECTION: GOGGLES WITH SIDE SHIELDS.  
RESPIRATORY PROTECTION: NONE REQUIRED WHILE THRESHOLD LIMITS (SECTION II) ARE KEPT BELOW MAXIMUM ALLOWABLE CONCENTRATIONS; IF TWA EXCEEDS LIMITS, NIOSH APPROVED RESPIRATOR MUST BE WORN.  
PERSONAL PROTECTIVE EQUIPMENT: SAFETY EYEBATH NEARBY.  
PROTECTIVE GLOVES (SPECIFY TYPE): CHEMICAL RESISTANT GLOVES REQUIRED.

## SECTION 09: PHYSICAL & CHEMICAL PROPERTIES

THEORETICAL VOC WITHOUT WATER: VOLATILE ORGANIC COMPOUND: CONSIDERED NON-VOLATILE UNDER NORMAL CONDITIONS.; THEORETICAL: NOT APPLICABLE; ANALYTICAL: NOT APPLICABLE.  
BOILING POINT TEMPS: = 203.00F  
SPECIFIC GRAVITY VALUES: = 1.0540  
VAPOR DENSITY VALUES: = 3.0400  
VAPOR PRESSURE VALUES/UOM: = 0.2900MMHG  
PERCENT SOLID BY WEIGHT VALUES: = 5.7000  
EVAPORATION RATE VALUES: < 1.00  
APPEARANCE: DEEP AMBER LIQUID  
ODOR: MILD CHARACTERISTIC ODOR.  
PHYSICAL STATE: LIQ

## SECTION 10: STABILITY & REACTIVITY

STABILITY INDICATOR: Y  
STABILITY - CONDITIONS TO AVOID: EXTREME TEMPERATURES, OPEN FLAMES.  
INCOMPATIBLE MATERIALS: STRONG OXIDIZERS, STRONG ACIDS.  
HAZARDOUS DECOMPOSITION PRODUCTS: THERMAL DECOMPOSITION MAY YIELD CARBON MONOXIDE, CARBON DIOXIDE.  
HAZARDOUS POLYMERIZATION INDICATOR: N  
HAZARDOUS POLYMERIZATION - CONDITIONS TO AVOID: NONE

## SECTION 11: TOXICOLOGICAL INFORMATION

CARCINOGENICITY: NOT LISTED AS A CARCINOGEN BY NTP, IARC OR OSHA.

## SECTION 13: DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD: DISPOSE OF IN ACCORDANCE WITH LOCAL, STATE, AND FEDERAL REGULATIONS.

## SECTION 14: TRANSPORT INFORMATION

DOT INFORMATION: HAZARDOUS MATERIAL DESCRIPTION, PROPER SHIPPING NAME, HAZARD CLASS, HAZARD ID NO. (49 CFR 182.101): NOT REGULATED; ADDITIONAL HAZARD CLASSES: NONE

## SECTION 16: OTHER INFORMATION

LOCAL EXHAUST: NOT NECESSARY.  
SPECIAL PROTECTION: NONE  
SPECIAL PROTECTION (MECHANICAL): RECOMMENDED, RATE NOT DETERMINED.