

1FID: 00315003
VER DATE: 2000-08-21
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C H E M I S T R I
MATERIAL SAFETY DATA SHEET

DATE: 06/27/02
TIME:

PAGE: 0001

SECTION 01: CHEMICAL PRODUCT & COMPANY ID

PRODUCT PRIMARY NAME: CASTROL TRANSMAX S AUTOMATIC TRANSMISSION FLUID
ALL SYNONYMS :CASTROL TRANS MAX S TRANSMISSION FLUID (FORMER)
CASTROL TRANSMAX S AUTOMATIC TRANSMISSION FLUID
TRANS MAX S TRANSMISSION FLUID
TRANSMAX S (FORMER)
TRANSMAX-S
TRANSYND (TM) MANUAL TRANSMISSION FLUID
12378515
27101A (MSDS CODE)
901175

SAFE USE CATEGORY AND DESCRIPTION: 04 -METAL WORKING FLUIDS AND
LUBRICANTS

LAST UPDATED DATE: 2000-08-21

MANUFACTURER'S ID (MID): 000550982
MANUFACTURER'S NAME: CASTROL NORTH AMERICA AUTOMOTIVE INC.
MANUFACTURER'S EMERGENCY PHONE NUMBER/TEXT: US 973-633-2200
US 732-980-9100

MANUFACTURER'S MAILING ADDRESS:
1500 VALLEY RD
WAYNE NJ 07470
US

SECTION 1 - OTHER INFORMATION: CHEMICAL NAME: MIXTURE. CHEMICAL
FAMILY/CLASSIFICATION: SYNTHETIC HYDROCARBON MIXTURE. CHEMICAL FORMULA:
NA. MATERIAL USE: TRANSMISSION FLUID. PREPARER: REGULATORY,
ENVIRONMENTAL, SAFETY DEPARTMENT. WARNING STATEMENTS: NONE APPLICABLE.

SECTION 02: COMPOSITION & INGREDIENT INFO

CAS#	FORMULATION	W/V	CHEMICAL NAME
001330865	R 13.0000/ 15.0000%	W	Hexanedioic acid, diisooctyl ester
064741884	< 0.0000/ 2.0000%	W	MINERAL OIL, PETROLEUM DISTILLATES , SOLVENT-REFINED (severe) HEAVY P ARAFFINIC
064741895	< 0.0000/ 2.0000%	W	MINERAL OIL, PETROLEUM DISTILLATES

				, SOLVENT-REFINED (severe) LIGHT P ARAFFINIC
068037014	=	80.0000/	0.0000%	W 1-Decene, homopolymer, hydrogenate d
989915934	<	0.0000/	0.1000%	W DYE
989925121	=	2.0000/	0.0000%	W ANTIOXIDANT, ANTIWEAR AND DETERGEN T ADDITIVES
989986694	=	2.0000/	0.0000%	W POLYMETHACRYLATE POLYMER

SECTION 2 - OTHER INFORMATION: ONE OR MORE OF THE CAS #'S 64741884 AND 64741895 MAY BE INCLUDED IN THE FORMULATION. CAS # 989925121 IS A MIXTURE WITH THE INDIVIDUAL INGREDIENTS AT NO MORE THAN 1% OF THE TOTAL PRODUCT.

SECTION 03: HAZARDS IDENTIFICATION

PRIMARY ENTRY ROUTE INDICATORS:

SKIN PRIMARY ENTRY ROUTE INDICATOR =	Y
EYE PRIMARY ENTRY ROUTE INDICATOR =	Y
INHALATION PRIMARY ENTRY ROUTE INDICATOR =	Y
INGESTION PRIMARY ENTRY ROUTE INDICATOR =	Y

PRIMARY ROUTES OF ENTRY TEXT: EYE CONTACT, SKIN CONTACT.

EFFECTS OF OVEREXPOSURE - SKIN: ACUTE: NOT EXPECTED TO CAUSE PROLONGED OR SIGNIFICANT SKIN IRRITATION. CHRONIC: PROLONGED OR REPEATED SKIN CONTACT MAY CAUSE SKIN DRYING, CRACKING, IRRITATION, DEFATTING AND DERMATITIS.

EFFECTS OF OVEREXPOSURE - EYE: SIGNS/SYMPTOMS: TRANSIENT EYE IRRITATION, REDNESS, TEARING. ACUTE: NOT EXPECTED TO CAUSE PROLONGED OR SIGNIFICANT EYE IRRITATION.

EFFECTS OF OVEREXPOSURE - INHALATION: ACUTE: RESPIRATORY SYSTEM: HARMFUL CONCENTRATIONS OF MISTS/VAPORS ARE UNLIKELY THROUGH CUSTOMARY HANDLING OR USE OF THIS PRODUCT. (PRODUCT) OTHER: NO DATA REGARDING PRESENCE OF RESPIRATORY TOXICITY.

EFFECTS OF OVEREXPOSURE - INGESTION: ACUTE: LOW ORDER OF TOXICITY, BUT MAY CAUSE GASTROINTESTINAL DISTURBANCES, DIARRHEA, INGESTION OF LARGE AMOUNTS MAY CAUSE HEADACHE, DROWSINESS, NAUSEA, VOMITING OR DIARRHEA. MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: PRE-EXISTING SKIN DISORDERS.

ADDITIONAL HEALTH HAZARD DATA: ACUTE - EVALUATION BASED ON COMPONENTS AND/OR SIMILAR PRODUCTS. (PRODUCT) OTHER: NO DATA REGARDING PRESENCE OF RESPIRATORY TOXICITY OR SENSITIZING ABILITY.

SECTION 04: FIRST AID MEASURES

EMERGENCY FIRST AID PROCEDURES - SKIN: REMOVE CONTAMINATED CLOTHING AND WASH BEFORE REUSE. WIPE EXCESS MATERIAL FROM SKIN. WASH EXPOSED AREA WITH SOAP AND WATER.

EMERGENCY FIRST AID PROCEDURES - EYES: FLUSH WITH CLEAR WATER FOR AT LEAST 15 MINUTES OR UNTIL ANY IRRITATION SUBSIDES. IF IRRITATION PERSISTS, SEEK MEDICAL ATTENTION.

EMERGENCY FIRST AID PROCEDURES - INHALATION: IF IRRITATION OR DROWSINESS OCCUR, MOVE THE PERSON TO FRESH AIR. ADMINISTER RESPIRATORY ASSISTANCE IF BREATHING IS DIFFICULT OR STOPS; CONSULT A PHYSICIAN.

EMERGENCY FIRST AID PROCEDURES - INGESTION: GIVE PLENTY OF WATER OR OTHER MILD DRINKABLE FLUIDS AND CALL A PHYSICIAN IMMEDIATELY. DO NOT INDUCE VOMITING WITHOUT EXPRESS CONSENT OF MEDICAL PERSONNEL.

SECTION 05: FIRE-FIGHTING MEASURES

SPECIAL FIRE FIGHTING PROCEDURES: MATERIAL MUST BE PREHEATED TO BURN. DO NOT ENTER AREAS WITHOUT FULL PROTECTIVE EQUIPMENT, INCLUDING A POSITIVE PRESSURE NIOSH APPROVED SELF-CONTAINED BREATHING APPARATUS. COOL FIRE EXPOSED CONTAINERS WITH WATER. EXTINGUISHING MEDIA: CO2, DRY CHEMICAL, FOAM AND WATER FOG. DO NOT USES WATER JETS.

UNUSUAL FIRE AND EXPLOSION HAZARDS: CUTTING OR WELDING OF EMPTY CONTAINERS MAY CAUSE FIRE, EXPLOSION OR TOXIC FUMES FROM RESIDUES. DO NOT PRESSURIZE OR EXPOSE TO OPEN FLAME OR HEAT. KEEP CONTAINER CLOSED AND DRUM BUNGS IN PLACE. REFER TO APPLICABLE GOVERNMENTAL REGULATIONS.

HMIS CODES:

HMIS REACTIVITY CODE = 0

HMIS HEALTH CODE = 1

HMIS FLAMMABILITY CODE = 1

NFPA CODES:

NFPA FLAMMABILITY CODE = 1

NFPA HEALTH CODE = 1

NFPA REACTIVITY CODE = 0

AUTO-IGNITION TEXT: ND

FLASH POINT TEMPS: = 232.00C/ 450.00F

FLASH POINT TEXT: TYP.

FLASH POINT METHOD: COC

FIRE POINT TEMPS: = 274.00C/ 525.00F

FIRE POINT TEXT: TYP. (COC).

SECTION 5 - OTHER INFORMATION: NFPA NOT YET DETERMINED. FLAMMABILITY: YES. NFPA CLASS IIIB MATERIAL - COMBUSTIBLE LIQUID. FLAMMABILITY LIMITS

IN AIR, % VOL.: UPPER AND LOWER: ND. HAZARDOUS COMBUSTION OR DECOMPOSITION PRODUCTS: CARBON MONOXIDE, CARBON DIOXIDE; TRACE OXIDES OF COMBUSTION PRODUCTS OF SULFUR, PHOSPHORUS, NITROGEN, BORON.

SECTION 06: ACCIDENTAL RELEASE MEASURES

SPILL OR LEAK PROCEDURES: PRODUCT MAY BURN BUT IS NOT READILY IGNITABLE. USE BEST ENGINEERING PRACTICES WHEN ATTEMPTING CLEANUP OF A LARGE SPILL. LARGE SPILLS: WEAR RESPIRATOR AND PROTECTIVE CLOTHING AS APPROPRIATE. STOP SOURCE OF LEAK IF POSSIBLE. PREVENT ENTRY INTO WATER SOURCES. DIKE AND CONTAIN SPILL. REMOVE WITH VACUUM TRUCKS OR PUMP TO STORAGE/SALVAGE VESSELS. SOAK UP RESIDUE WITH AN INERT ABSORBENT SUCH AS CLAY, SAND OR OTHER SUITABLE MATERIALS; STORE AND DISPOSE OF PROPERLY. WHERE FEASIBLE AND APPROPRIATE, REMOVE CONTAMINATED SOIL. SMALL SPILLS: SOAK UP SPILL WITH AN INERT ABSORBENT SUCH AS CLAY, SAND OR OTHER SUITABLE MATERIALS; STORE IN A CLOSED CONTAINER AND DISPOSE OF PROPERLY. REGULATORY SPILL REPORTING REQUIREMENTS MAY APPLY; CONTACT GOVERNMENTAL AGENCY OR LEGAL COUNSEL FOR ADVICE. CHEMTREC EMERGENCY PHONE NUMBER: (800)424-9300, 24 HRS. FOR U.S. TRANSPORTATION RELATED SPILLS, LEAKS, FIRE, EXPOSURE OR ACCIDENT. CANUTEC EMERGENCY PHONE NUMBER: (613) 996-6666, 24 HRS. FOR CANADIAN TRANSPORTATION RELATED SPILLS, LEAKS, FIRE, EXPOSURE OR ACCIDENT.

SECTION 07: HANDLING AND STORAGE

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE: KEEP CONTAINERS CLOSED WHEN NOT IN USE. DO NOT STORE NEAR HEAT, SPARKS, FLAME OR STRONG OXIDANTS. AVOID BREATHING MIST. MAINTAIN ADEQUATE VENTILATION. AVOID PROLONGED OR REPEATED CONTACT WITH SKIN.

SECTION 08: EXPOSURE CONTROLS - PROTECTION

EYE PROTECTION: SAFETY GOGGLES OR GLASSES.

SKIN PROTECTION: CLOTHING: NO SPECIAL REQUIREMENT; NORMAL WORK CLOTHING. A COVERALL OR APRON MAY BE USED TO MINIMIZE SKIN CONTACT. FOOTWEAR: NO SPECIAL REQUIREMENT.

RESPIRATORY PROTECTION: NONE REQUIRED UNDER NORMAL USE. IF EXPOSURE IS EXPECTED TO EXCEED OCCUPATIONAL EXPOSURE LIMITS, USE A NIOSH APPROVED RESPIRATOR TO PREVENT OVEREXPOSURE. IN ACCORDANCE WITH 29 CFR 1910.134, USE EITHER AN ATMOSPHERE SUPPLYING RESPIRATOR OR AN AIR PURIFYING RESPIRATOR FOR ORGANIC VAPORS AND PARTICULATES.

ENGINEERING CONTROLS: VENTILATION: NO SPECIAL VENTILATION IS USUALLY NECESSARY, HOWEVER, IF OPERATING CONDITIONS MAY CREATE HIGH AIRBORNE CONCENTRATIONS OF THIS MATERIAL, SPECIAL OR LOCAL VENTILATION MAY BE NEEDED.

WORKPLACE/HYGIENIC PRACTICES: WORK/HYGIENIC PRACTICES: AVOID PROLONGED AND REPEATED SKIN CONTACT. DO NOT WEAR CONTAMINATED CLOTHING; LAUNDER BEFORE REUSE OR DISCARD. WASH THOROUGHLY WITH SOAP AND WATER AFTER HANDLING.

PROTECTIVE GLOVES (SPECIFY TYPE): WEAR OIL IMPERVIOUS TYPE, SUCH AS NEOPRENE, NITRILE, POLYVINYLCHLORIDE, TO MINIMIZE SKIN CONTACT.

SECTION 09: PHYSICAL & CHEMICAL PROPERTIES

BOILING POINT TEXT: ND

MELTING/FREEZE POINT TEXT: FREEZING POINT: ND.

SPECIFIC GRAVITY VALUES: = 0.8600
SPECIFIC GRAVITY TEXT: (WATER = 1)

VAPOR DENSITY VALUES: > 1.0000
VAPOR DENSITY TEXT: (AIR = 1)
VAPOR PRESSURE TEXT: ND.

EVAPORATION RATE VALUES: < 0.10
EVAPORATION RATE TEXT: (BUTYL ACETATE = 1)

SOLUBILITY IN WATER TEXT: NEGLIGIBLE.

PH OF PRODUCT AS RECEIVED (NEAT)/TEXT: NA.

APPEARANCE: CLEAR, RED LIQUID.

ODOR: MILD PETROLEUM ODOR. ODOR THRESHOLD: NA.

MOLECULAR WEIGHT TEXT: NA.

VISCOSITY TEXT: AT 100 C, CST.: 7.0 MIN.

PHYSICAL STATE: LIQ

SECTION 9 - OTHER INFORMATION: COEFFICIENT OF WATER/OIL DISTRIBUTION:
ND.

SECTION 10: STABILITY & REACTIVITY

STABILITY INDICATOR: Y

STABILITY - TEXT: STABLE AT AMBIENT TEMPERATURES. CONDITIONS AND MATERIALS TO AVOID (INCOMPATIBILITIES): HEAT, OPEN FLAME AND OXIDIZING MATERIALS.

HAZARDOUS DECOMPOSITION PRODUCTS: HAZARDOUS COMBUSTION OR DECOMPOSITION PRODUCTS: CARBON MONOXIDE, CARBON DIOXIDE; TRACE OXIDES OF COMBUSTION PRODUCTS OF SULFUR, PHOSPHORUS, NITROGEN, BORON.

HAZARDOUS POLYMERIZATION INDICATOR: N

SECTION 10 - OTHER INFORMATION: SENSITIVITY TO MECHANICAL IMPACT, SENSITIVITY TO STATIC DISCHARGE: NA.

SECTION 11: TOXICOLOGICAL INFORMATION

TOXICOLOGICAL DATA UNLIMITED TEXT: (PRODUCT): ACUTE DATA (MEDIAN LETHAL DOSE - SPECIES): ORAL LD50 - RAT: ND, DERMAL LD50 - RABBIT: ND, INHALATION LC50 - RAT: ND. IRRITANCY DATA: EYE IRRITATION - RABBIT: ND, SKIN IRRITATION - RABBIT: ND, SENSITIZATION - GUINEA PIG: ND. OTHER: NO DATA REGARDING PRESENCE OF TERATOGENICITY, MUTAGENICITY, RESPIRATORY TOXICITY OR SYNERGISTIC SUBSTANCES. ADDITIONAL TOXICOLOGY DATA ON INDIVIDUAL INGREDIENTS IS AVAILABLE AT THE MSDS PROCESSING CENTER.

CARCINOGENICITY: NOTE: PRODUCT CONTAINS NO MATERIALS CURRENTLY CLASSIFIED AS CARCINOGENIC PER THE ANNUAL REPORT OF THE NATIONAL TOXICOLOGY PROGRAM (NTP). OSHA HAZARD COMMUNICATION STANDARD OR THE INTERNATIONAL AGENCY FOR RESEARCH ON CANCER (IARC, GROUPS 1, 2A OR 2B). (PRODUCT): NO DATA REGARDING PRESENCE OF CARCINOGENICITY.

SECTION 13: DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD: IF DISCARDED AS SUPPLIED, MATERIAL DOES NOT MEET RCRA CHARACTERISTIC DEFINITION OF IGNITABILITY, CORROSIVITY OR REACTIVITY AND IS NOT LISTED IN 40 CFR 261.33. THE TOXICITY CHARACTERISTIC HAS NOT BEEN EVALUATED. UNDER RCRA, THE APPLICABLE HAZARDOUS WASTE CLASSIFICATION MUST BE EVALUATED PRIOR TO DISPOSAL OF THE MATERIAL. USE OF THE PRODUCT, PROCESSING OR CONTAMINATION MAY RENDER THE RESULTING MATERIAL HAZARDOUS. ALL RECOVERED MATERIAL SHOULD BE PACKAGED, LABELED, TRANSPORTED AND DISPOSED OF OR RECLAIMED IN ACCORDANCE WITH GOVERNMENTAL REGULATIONS REGARDING AIR POLLUTION, WATER POLLUTION OR HEALTH. DON'T POLLUTE - CONSERVE RESOURCES. DISPOSE OF

USED OIL PROPERLY. CAUTION: IMPROPER DISPOSAL OR REUSE OF THE EMPTY CONTAINER MAY BE HAZARDOUS AND ILLEGAL. CUTTING OR WELDING OF EMPTY CONTAINERS MAY CAUSE FIRE, EXPLOSION OR TOXIC FUMES FROM RESIDUES. DO NOT PRESSURIZE OR EXPOSE TO OPEN FLAME OR HEAT. KEEP CONTAINER CLOSED AND DRUM BUNGS IN PLACE. REFER TO APPLICABLE GOVERNMENTAL REGULATIONS.

SECTION 14: TRANSPORT INFORMATION

DOT INFORMATION: NOT REGULATED.

SECTION 15: REGULATORY INFORMATION

SECTION 15 - OTHER INFORMATION: CHEMICAL CONTROL REGULATIONS: TSCA STATUS: ALL COMPONENTS OF THIS MATERIAL APPEAR ON THE TOXIC SUBSTANCE CONTROL ACT CHEMICAL SUBSTANCES INVENTORY. CEPA STATUS: THIS PRODUCT MAY CONTAIN COMPONENTS WHICH DO NOT APPEAR ON THE CANADIAN ENVIRONMENTAL PROTECTION ACT DOMESTIC SUBSTANCE LIST. CANADIAN WORKPLACE HAZARDOUS MATERIAL IDENTIFICATION SYSTEM (WHMIS) CLASSIFICATION: MATERIAL IS NOT A CONTROLLED PRODUCT. EPCRA (SARA TITLE III): SECTION 302/304 EXTREMELY HAZARDOUS SUBSTANCES: NA. CERCLA SECTION 102(A) HAZARDOUS SUBSTANCE: NONE. SECTION 311 HAZARD CATEGORY: NOT APPLICABLE. SECTION 313 TOXIC RELEASE INVENTORY CHEMICAL/CATEGORY: NONE. U.S. STATE RIGHT TO KNOW LAWS: NEW JERSEY WORKER AND COMMUNITY RIGHT TO KNOW ACT, N.J.A.C. 8:59 - 5 LABELING INFORMATION: TRANSMISSION FLUID.

SECTION 16: OTHER INFORMATION

SPECIAL PROTECTION: OTHER: NA.

SAFE USE CATEGORY AND DESCRIPTION :

04 METAL WORKING FLUIDS AND LUBRICANTS

REGULATORY IMPACTS (REG) AND ADDITIONAL HEALTH HAZARD STATEMENTS (HHS) :

CAS#: 001330865 Hexanedioic acid, diisooctyl ester
REG:
0012

CAS#: 064741884 MINERAL OIL, PETROLEUM DISTILLATES, SOLVENT-REFINED (se
REG:

0012,0107
REG BY CATEGORY:
0122

CAS#: 064741895 MINERAL OIL, PETROLEUM DISTILLATES, SOLVENT-REFINED (se
REG:
0012,0107

CAS#: 068037014 1-Decene, homopolymer, hydrogenated
REG:
0012

REGULATORY KEY LIST:

0001	OSHA-PEL	0003	ACGIH-TLV	0004	GM-SPEC CHEM
0005	SUSP CARCIN	0006	EPA HW261.33	0007	EPA HW-APP 8
0008	MCMR	0009	FWPC-SEC 311	0010	EPA PRIORPOL
0011	NY SUBS CONC	0012	TSCA INV	0014	MI AIR POLLU
0015	SUP TAX CHEM	0016	MI HW-ACT 64	0017	CA HAZ SUBST
0019	MA SUBST	0020	NJ ENV SUBST	0021	TOX ORGANICS
0022	MD CLASS I	0023	MD CLASS II	0026	EPA-CHEMCONC
0031	ALLGHNY CTY	0032	IL-RTK	0033	OSHA-HHCL
0034	FLT CRIT IND	0035	GM-AHC	0036	PRO EP TOX
0037	MO SPECIES	0038	MO-RTK	0039	ONT 654-86
0041	SARA312EXHAZ	0042	WI TABLE 1	0047	SARA 313
0048	CERCLASEC103	0049	P-65 CARCINO	0050	P-65 REP TOX
0051	MD CLSI .11	0053	MD CLSII .12	0055	CT 29-2
0056	CT 29-3	0058	EPA261.33(F)	0059	CA AIR TOX 1
0060	CA AIR TOX 2	0061	PA RTK	0063	PELS REVISED
0064	NPDES-TOXPOL	0065	NJ W&C RTK	0066	CAA HAZ POL
0067	NV HIGH HAZ.	0068	MI 307-CARC	0069	MI 307-NCARC
0070	MICH AIR	0074	B	0075	C
0076	D	0078	GREAT LAKES	0083	TSCA 8(D))
0084	GM OEG	0087	TSCA 12(B)	0088	NAT. POLL. REL
0089	NY CHEM BULK	0090	GL PERSIST	0091	LAND DISP. - II
0093	TSCA - SPECIAL	0098	DSL - CANADA	0104	CERCLA-HAZWOPER
0105	GLPPP-SPECIFIC	0106	GLPPP-SPECIFIC	0107	PET. DISTILLATE
0109	APPENDIX IX	0112	RCRA PBT -DRAFT	0118	T.W. REPORT
0122	ACDM-REPORTING				

GMBA/PLANT USING THIS FID:

GMBA: 000550678 SPO - DISTRIBUTABLE MATERIALS
CISCO: 17001;
STATUS :ACTIVE
GMBA: 000550957 CHEMICAL RISK MANAGEMENT
CISCO: 89150;
STATUS :ACTIVE

GMBA: 000550966 GM PROVING GROUND - MILFORD
CISCO: 94017;
STATUS :ACTIVE

GMBA: 000556705 ENVIRONMENTAL SYSTEMS HELPDESK
CISCO: 99004;
STATUS :ACTIVE

GMBA: 000557289 GM TECHNICAL CENTER, R & D
CISCO: 99010;
STATUS :ACTIVE

GMBA: 000557375 SPO - CONTRACT HOUSE
CISCO: 99011;
STATUS :ACTIVE