CHEMISTRI 1FID: 00348891 DATE: 06/27/02

VER DATE: 2000-03-24 MATERIAL SAFETY DATA SHEET TIME:

19:02:10

PAGE: 0001

SECTION 01: CHEMICAL PRODUCT & COMPANY ID

PRODUCT PRIMARY NAME: CASTROL BOT 190M1

ALL SYNONYMS :BOT 190M1

CASTROL BOT 190M1 VERSATRAK FLUID 12378514

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

LAST UPDATED DATE: 2000-03-24

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 PETROLEUM HYDROCARBON MIXTURE. CHEMICAL FORMULA: NA. MATERIAL USE: AUTOMOTIVE GEAR LUBRICANT -GEROMATIC COUPLING FLUID. WARNING STATEMENTS: CAUTION! MAY CAUSE EYE AND SKIN IRRITATION. MISTS MAY CAUSE RESPIRATORY TRACT IRRITATION. PREPARER: REGULATORY, ENVIRONMENTAL, SAFETY DEPARTMENT.

SECTION 02: COMPOSITION & INGREDIENT INFO

CAS# 064741884	FORMULATION R 5.0000/ 10.0000%	W/V W	CHEMICAL NAME MINERAL OIL, PETROLEUM DISTILLATES , SOLVENT-REFINED (severe) HEAVY P ARAFFINIC
064741895	R 5.0000/ 10.0000%	M	MINERAL OIL, PETROLEUM DISTILLATES, SOLVENT-REFINED (severe) LIGHT PARAFFINIC
068037014	R 50.0000/ 70.0000%	M	1-Decene, homopolymer, hydrogenate d

989925121 R 5.0000/ 10.0000% W ANTIOXIDANT, ANTIWEAR AND DETERGEN T ADDITIVES

989946005 R 10.0000/ 30.0000% W ESTER BLEND

989982671 R 10.0000/ 20.0000% W POLYMETHACRYLATE

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 POLYTICS OF ENTRY ROUTE INDICATOR = Y

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

EFFECTS OF OVEREXPOSURE - SKIN: SIGNS/SYMPTOMS: SKIN IRRITATION, DRYNESS/CRACKING, DERMATITIS. ACUTE - (EVALUATION BASED ON COMPONENTS AND/OR SIMILAR PRODUCTS): MAY CAUSE SKIN IRRITATION, DRYING OR DERMATITIS ON PROLONGED EXPOSURE TO SKIN. CHRONIC: PROLONGED OR REPEATED SKIN CONTACT MAY CAUSE DRYING, CRACKING, IRRITATION, DEFATTING AND DERMATITIS.

EFFECTS OF OVEREXPOSURE - EYE: SIGNS/SYMPTOMS: EYE IRRITATION, REDNESS, TEARING (EXPECTED). ACUTE - (EVALUATION BASED ON COMPONENTS AND/OR SIMILAR PRODUCTS): MAY CAUSE EYE IRRITATION.

EFFECTS OF OVEREXPOSURE - INHALATION: ACUTE - (EVALUATION BASED ON COMPONENTS AND/OR SIMILAR PRODUCTS): HARMFUL CONCENTRATIONS OF MISTS/VAPORS ARE UNLIKELY THROUGH CUSTOMARY HANDLING OR USE OF THIS PRODUCT.

EFFECTS OF OVEREXPOSURE - INGESTION: ACUTE - (EVALUATION BASED ON COMPONENTS AND/OR SIMILAR PRODUCTS): NO AVAILABLE DATA.
MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: PRE-EXISTING SKIN DISORDERS.

ADDITIONAL HEALTH HAZARD DATA: OTHER: NO DATA REGARDING 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: MOVE TO FRESH AIR.

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.

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SECTION 05: FIRE-FIGHTING MEASURES

FLAMMABLE LEL: = 0.60 FLAMMABLE UEL: = 6.00

SPECIAL FIRE FIGHTING PROCEDURES: MATERIAL MUST BE PREHEATED TO BURN. DO NOT ENTER CONFINED 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. WATER CAN BE USED TO COOL AND PROTECT EXPOSED MATERIAL.

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 TEMPS: > 230.00C AUTO-IGNITION TEXT: APPROXIMATELY.

FLASH POINT TEMPS: > 220.00C/ 428.00F

FLASH POINT TEXT: APPROXIMATELY.

FLASH POINT METHOD: COC

FIRE POINT TEMPS: > 230.00C/ 440.00F

FIRE POINT TEXT: APPROXIMATELY.

SECTION 5 - OTHER INFORMATION: NFPA NOT YET DETERMINED. HAZARDOUS COMBUSTION OR DECOMPOSITION PRODUCTS: SMOKE, CARBON MONOXIDE, ALDEHYDES AND OTHER PRODUCTS OF INCOMPLETE COMBUSTION. UNDER COMBUSTION CONDITIONS OXIDES OF SULFUR, NITROGEN AND PHOSPHORUS WILL BE FORMED.

SECTION 06: ACCIDENTAL RELEASE MEASURES

SPILL OR LEAK PROCEDURES: SPILL OR LEAK PROCEDURES: PRODUCT MAY BURN

BUT IS NOT READILY IGNITABLE. USE BEST ENGINEERING PRACTICES (SECTION 8) 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.

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. 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. WARNING STATEMENTS: CAUTION! MAY CAUSE EYE AND SKIN IRRITATION. MISTS MAY CAUSE RESPIRATORY TRACT IRRITATION.

SECTION 08: EXPOSURE CONTROLS - PROTECTION

EYE PROTECTION: SAFETY GLASSES SHOULD BE USED.

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

RESPIRATORY PROTECTION: NONE REQUIRED UNDER NORMAL USE.

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 TEMPS: > 203.00C/ 400.00F

BOILING POINT TEXT: ESTIMATED.

MELTING/FREEZE POINT TEXT: ND.

SPECIFIC GRAVITY VALUES: R 0.8700- 0.8800

SPECIFIC GRAVITY TEXT: (WATER = 1)

VAPOR DENSITY TEXT: ND.

VAPOR PRESSURE TEXT: (MM HG AT 25 C): < 0.01

EVAPORATION RATE TEXT: ND.

SOLUBILITY IN WATER TEXT: INSOLUBLE.

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

APPEARANCE: LIGHT COLORED AMBER TO BROWN LIQUID.

ODOR: TYPICAL PETROLEUM ODOR. ODOR THRESHOLD: NA.

MOLECULAR WEIGHT TEXT: NA.

VISCOSITY TEXT: AT 40 C: 60 CENTISTOKES.

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: SMOKE, CARBON MONOXIDE, ALDEHYDES AND OTHER PRODUCTS OF INCOMPLETE COMBUSTION. UNDER COMBUSTION CONDITIONS OXIDES OF SULFUR, NITROGEN AND PHOSPHORUS WILL BE FORMED.

HAZARDOUS POLYMERIZATION INDICATOR: N

SECTION 10 - OTHER INFORMATION: SENSITIVITY TO MECHANICAL IMPACT,

SECTION 11: TOXICOLOGICAL INFORMATION

TOXICOLOGICAL DATA UNLIMITED TEXT: LD50/LC50: ALL INGREDIENTS: ND. ACUTE DATA (MEDIAN LETHAL DOSE - SPECIES): ORAL LD50 - RAT, DERMAL LD50 - RABBIT, INHALATION LC50 - RAT: ND. IRRITANCY DATA: EYE IRRITATION - RABBIT, SKIN IRRITATION - RABBIT, SENSITIZATION - GUINEA PIG: ND. OTHER: NO DATA REGARDING PRESENCE OF TERATOGENICITY, MUTAGENICITY, RESPIRATORY TOXICITY OR SYNERGISTIC SUBSTANCES.

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). THE PRODUCT CONTAINS PETROLEUM BASEOILS WHICH MAY BE REFINED BY VARIOUS PROCESSES INCLUDING SEVERE SOLVENT EXTRACTION, SEVERE HYDROCRACKING, OR SEVERE HYDROTREATING. NONE OF THE OILS REQUIRE A CANCER WARNING UNDER THE OSHA HAZARD COMMUNICATION STANDARD (29 CFR 1910.1200). THESE OILS HAVE NOT BEEN LISTED IN THE NATIONAL TOXICOLOGY PROGRAM (NTP) ANNUAL REPORT NOR HAVE THEY BEEN CLASSIFIED BY THE INTERNATIONAL AGENCY FOR RESEARCH ON CANCER (IARC) AS CARCINOGENIC TO HUMANS (GROUP 1), PROBABLY CARCINOGENIC TO HUMANS (GROUP 2A) OR POSSIBLY CARCINOGENIC TO HUMANS (GROUP 2B). OTHER: NO DATA REGARDING 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 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. 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: DOT PROPER SHIPPING NAME: NOT REGULATED.

SECTION 14 - OTHER INFORMATION: SPECIAL SHIPPING INFORMATION: NOT REGULATED. 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 15: REGULATORY INFORMATION

SARA 311/312 HAZARD INDICATORS: IMMEDIATE HEALTH INDICATOR = DELAYED HEALTH INDICATOR =

Y N

SECTION 15 - OTHER INFORMATION: TSCA STATUS: ALL COMPONENTS OF THIS MATERIAL APPEAR ON THE TOXIC SUBSTANCE CONTROL ACT CHEMICAL SUBSTANCES INVENTORY. CEPA STATUS: THIS PRODUCT CONTAINS A COMPONENT WHICH DOES NOT APPEAR ON THE CANADIAN ENVIRONMENTAL PROTECTION ACT DOMESTIC SUBSTANCE LIST. CANADIAN WORKPLACE HAZARDOUS MATERIAL IDENTIFICATION SYSTEM (WHMIS) CLASSIFICATION: CLASS D-2B - TOXIC MATERIALS. EPCRA - EMERGENCY PLANNING AND COMMUNITY RIGHT TO KNOW ACT (SARA TITLE III): SECTION 302/304 EXTREMELY HAZARDOUS SUBSTANCE: NA. CERCLA SECTION 102(A) HAZARDOUS SUBSTANCE: NA. SECTION 313 TOXIC RELEASE INVENTORY CHEMICAL/CATEGORY: NO CHEMICAL IS PRESENT ABOVE DE MINIMIS QUANTITIES (1%). 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: AUTOMOTIVE MANUAL TRANSMISSION FLUID.

SECTION 16: OTHER INFORMATION

RCRA HAZARDOUS WASTE NUMBER TEXT: 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 BEEN EVALUATED. UNDER RCRA, THE APPLICABLE HAZARDOUS WASTE CLASSIFICATION MUST BE EVALUATED PRIOR TO DISPOSAL OF THE MATERIAL.

SPECIAL PROTECTION: OTHER: NA.

SAFE USE CATEGORY AND DESCRIPTION :

04 METAL WORKING FLUIDS AND LUBRICANTS

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

 $\text{CAS}\#\colon \text{O64741884} \quad \text{MINERAL OIL, PETROLEUM DISTILLATES, SOLVENT-REFINED (se}$

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			
0040	ONT DES SUB	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	В			
0075	C	0076	D	0077	E			
0078	GREAT LAKES	0082	EPA 112(R)	0083	TSCA 8(D))			
0084	GM OEG	0085	TSCA-TEST	0087	TSCA 12(B)			
0088	NAT. POLL. REL	0089	NY CHEM BULK	0090	GL PERSIST			
0091	LAND DISP II	0093	TSCA - SPECIAL	0095	FIFRA REG MAT			
0096	FDA REG MAT	0098	DSL - CANADA	0103	CAA SEC. 112(R)			
0104	CERCLA-HAZWOPER	0105	GLPPP-SPECIFIC	0106	GLPPP-SPECIFIC			
0107	PET. DISTILLATE	0109	APPENDIX IX	0110	GLOBAL WARM CMP			
0112	RCRA PBT -DRAFT	0113	IARC-GROUP 2B	0115	IARC-GROUP 1			
0117	GMW 3059-REPORT	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: 000551133 GM VALIDATION CENTER-MADISON HEIGHTS

CISCO: 22002; STATUS :ACTIVE

GMBA: 000556298 GM TECHNICAL CENTER, TOTAL SITE

STATUS :ACTIVE

GMBA: 000556705 ENVIRONMENTAL SYSTEMS HELPDESK

CISCO: 99004; STATUS :ACTIVE

GMBA: 000557289 GM TECHNICAL CENTER, R & D

CISCO: 99010; STATUS :ACTIVE