

-----  
SECTION 01: CHEMICAL PRODUCT & COMPANY ID  
-----

PRODUCT PRIMARY NAME: X2656-0, SHRADER CHOKE CLEANER  
ALL SYNONYMS : CARBERATOR AND CHOKE CLEANER  
CARBUREATOR AND CHOKE CLEANER  
CHOKE CLEANER X2656-0  
SHRADER CHOKE CLEANER X2656-0  
X2656-0, SHRADER CHOKE CLEANER  
10-123  
12378393  
12378395

MSDS SIGNED BY NAME: RUTH WEINER, B.SC.

SAFE USE CATEGORY AND DESCRIPTION: 03 -SOLVENTS - FLASH POINT: > 100 F

LAST UPDATED DATE: 1998-08-11

MANUFACTURER'S ID (MID): 000539500  
MANUFACTURER'S NAME: SHRADER CANADA LTD.  
MANUFACTURER'S MAILING ADDRESS:  
830 PROGRESS COURT  
OAKVILLE ON L6L6K1  
CA

CHEMICAL FAMILY NAME: SOLVENT BLEND

PRODUCT USE: THIS PRODUCT IS AN EFFECTIVE CLEANER WHICH QUICKLY DISSOLVES AND REMOVES CONTAMINANTS FROM EXTERNAL CARBURATOR AND CHOKE LINKAGES. DRIES QUICKLY AND LEAVES NO RESIDUE.

-----  
SECTION 02: COMPOSITION & INGREDIENT INFO  
-----

CAS#	FORMULATION	W/V	CHEMICAL NAME
000067641	R 22.0000/ 26.0000%	W	ACETONE
000108883	R 26.0000/ 30.0000%	W	TOLUENE
000124389	R 4.0000/ 8.0000%	W	CARBON DIOXIDE
000142825	R 42.0000/ 47.0000%	W	HEPTANE

THRESHOLD LIMIT VALUE: - ACETONE, CAS #: 67-64-1, TWA 750 PPM, STEL, 1000 PPM, OR 833/90. - CARBON DIOXIDE, CAS #: 124-38-9, WA 5000 PPM, STEL, 124-38-9, 30.000, OR 833/90. - HEPTANE, CAS #: 142-82-5, TWA 400 PPM, STEL, 142-82-5, 500 PPM, OR 833/30; LD/50, ROUTE, SPECIES, 24 ML/KG, ORAL, RAT. -- TOLUENE, CAS #: 108-88-3, (OR #833/90), LD/50, ROUTE, SPECIES, 12.1G/KG, DERM RAB.

PERMISSIBLE EXPOSURE LIMIT: - ACETONE, CAS #: 67-64-4; LC50, ROUTE, SPECIES: 16000 PPM, 4 HR, RAT- HEPTANE, CAS #: 142-82-5, LC/50, ROUTE, SPECIES: 75 G/M3, 4 HR, MOUSE. - TOLUENE, CAS #: 108-88-3, LC/50, ROUTE, SPECIES: 5320 PPM, 8 HR. RAT,

-----  
SECTION 03: HAZARDS IDENTIFICATION  
-----

PRIMARY ENTRY ROUTE INDICATORS:

SKIN PRIMARY ENTRY ROUTE INDICATOR = Y

EYE PRIMARY ENTRY ROUTE INDICATOR = N

INHALATION PRIMARY ENTRY ROUTE INDICATOR = Y

1FID: 00343355 C H E M I S T R I DATE: 10/22/02

VER DATE: 1998-08-11 MATERIAL SAFETY DATA SHEET TIME: 19:03:15

PAGE: 0002

INGESTION PRIMARY ENTRY ROUTE INDICATOR = Y

EFFECTS OF OVEREXPOSURE - SKIN ACUTE: NO HAZARD UNDER NORMAL CONDITIONS OF USE. UNDER NORMAL CONDITIONS OF USE, A SINGLE PROLONGED EXPOSURE IS NOT LIKELY TO RESULT IN THE MATERIAL BEING ABSORBED THROUGH THE SKIN IN HARMFUL AMOUNTS. FREQUENT OR PROLONGED CONTACT MAY DRY AND IRRITATE THE SKIN AND CAUSE A RASH.

EFFECTS OF OVEREXPOSURE - EYE ACUTE: DIRECT CONTACT CAUSES EYE IRRITATION.

EFFECTS OF OVEREXPOSURE - INHALATION ACUTE: HIGH CONCENTRATION DEPRESSION WITH RESULTS RANGING FROM DIZZINESS AND HEADACHE TO UNCONSCIOUSNESS.

EFFECTS OF OVEREXPOSURE - INGESTION ACUTE: INGESTION OF SMALL AMOUNTS DURING NORMAL HANDLING ARE NOT LIKELY TO CAUSE INJURY. LARGER AMOUNTS MAY CAUSE EFFECTS SIMILAR TO THOSE DESCRIBED UNDER INHALATION.

ADDITIONAL HEALTH HAZARD DATA: THE MAIN HAZARD FOLLOWING INGESTION IS ASPIRATION OF THE LIQUID INTO THE LUNGS DURING SUBSEQUENT VOMITING. ONLY IF MORE THAN 2.0 ML/KG. BODY WEIGHT HAS BEEN INGESTED, VOMITING SHOULD BE INDUCED WITH SUPERVISION. - IF SYMPTOMS SUCH AS CONVULSIONS OR UNCONSCIOUSNESS OCCUR BEFORE VOMITING, GASTRIC LAVAGE SHOULD BE CONSIDERED. -

SECTION 3 - OTHER INFORMATION: EFFECTS OF CHRONIC EXPOSURE: CHRONIC OVEREXPOSURE TO TOLUENE IS ASSOCIATED WITH BRAIN (CNS) DAMAGE, LIVER, KIDNEY AND BLOOD EFFECTS. - CHRONIC OVEREXPOSURE TO CARBON DIOXIDE MAY CAUSE DAMAGE TO THE CENTRAL NERVOUS SYSTEM AND EYES. - ANIMALS EXPOSED TO ACETONE OVER LONG PERIODS OF TIME DEVELOPED EYE AND KIDNEY DAMAGE

-----  
SECTION 04: FIRST AID MEASURES  
-----

EMERGENCY FIRST AID PROCEDURES - SKIN: THOROUGHLY WAS EXPOSED ARE WITH SOAP AND WATER. - REMOVE CONTAMINATED CLOTHING. - LAUNDRY BEFORE REUSE. - SEEK MEDICAL ATTENTION IF IRRITATION DEVELOPS.

EMERGENCY FIRST AID PROCEDURES - EYES: IMMEDIATELY FLUSH WITH LARGE AMOUNTS OF WATER FOR AT LEAST 15 MINUTES, LIFTING UPPER AND LOWER LIDS. - REMOVE CONTACT LENSES IF ANY, AFTER THE INITIAL FLUSHING, AND THEN CONTINUE FLUSHING. - GET MEDICAL ATTENTION IF IRRITATION PERSISTS.

EMERGENCY FIRST AID PROCEDURES - INHALATION: NOT NECESSARY UNDER NORMAL CONDITIONS OF USE. - IF AFFECTED, REMOVE TO FRESH AIR. - IF BREATHING HAS STOPPED GIVE ARTIFICIAL RESPIRATION. - IF BREATHING HAS STOPPED GIVE ARTIFICIAL RESPIRATION. - GET MEDICAL ATTENTION.

EMERGENCY FIRST AID PROCEDURES - INGESTION: DO NOT INDUCE VOMITING. - GIVE WATER IF CONSCIOUS. - CONSULT A PHYSICIAN.

---

## SECTION 05: FIRE-FIGHTING MEASURES

---

FLAMMABLE LEL: N/A

FLAMMABLE UEL: N/A

EXTINGUISHING MEDIA: USE WATER SPRAY TO COOL FIRE EXPOSED CONTAINERS AND PREVENT BURSTING. - DO NOT USE A DIRECT STREAM OF WATER. - ALCOHOL FOAM OR WATER FOG FOR LARGE FIRES. - CARBON DIOXIDE OR DRY CHEMICAL FOR SMALL FIRES.

SPECIAL FIRE FIGHTING PROCEDURES: - CONTENTS UNDER PRESSURE. PROTECT AGAINST PHYSICAL DAMAGE.

UNUSUAL FIRE AND EXPLOSION HAZARDS: - DO NOT USE ON VEHICLE UNLESS COOL. - FLAMMABLE. - SPRAYED PRODUCT WILL PROJECT A FLAME AND MAY FLASH BACK ON CONTACT OF SPRAY WITH AN IGNITION SOURCE. - CONTENTS UNDER PRESSURE. - CONTAINER MAY EXPLODE IF HEATED. - VAPOURS ARE HEAVIER THAN AIR AND MAY TRAVEL OR BE MOVED ALONG THE GROUND TO AN IGNITION SOURCE AT LOCATIONS DISTANT FROM MATERIAL HANDLING - HAZARDOUS COMBUSTION PRODUCTS: CARBON DIOXIDE, CARBON MONOXIDE AND OTHER UNIDENTIFIED ORGANIC COMPOUNDS.

NFPA CODES:

NFPA FLAMMABILITY CODE = 3

NFPA HEALTH CODE = 3

NFPA REACTIVITY CODE = 1

AUTO-IGNITION TEMPS: N/A

FLASH POINT TEMPS: < 5.00C

---

## SECTION 06: ACCIDENTAL RELEASE MEASURES

---

SPILL OR LEAK PROCEDURES: WEAR SUITABLE PROTECTIVE CLOTHING. - FOLLOW APPLICABLE EXPLOSION AND FIRE PRECAUTIONS DURING THE RESPONSE. - STOP THE SPILL AT THE SOURCE WHEN SAFE TO DO SO. - FOR LARGE SPILLS, DIKE THE AREA TO PREVENT SPREADING. - PUMP EXCESS TO A SALVAGE CONTAINER. - ABSORB RESIDUES AND SMALL SPILLS WITH A NONFLAMMABLE ABSORBANT MATERIAL AND COLLECT ADSORBATE FOR DISPOSAL. - FOR LARGE QUANTITIES REFER TO THE ENVIRONMENTAL MINISTRY.

---

## SECTION 07: HANDLING AND STORAGE

---

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE: USE WITH ADQUATE VENTILATION. - AVOID BREATHING VAPOURS. - USE GOOD PERSONAL HYGIENE. - AVOID SMOKING, EATING AND DRINKGIN DURING USE - WASH WITH SOAP AND WATER AFTER HANDLING. - CONTAINER OF THIS MATERIAL MAY CONTAIN HAZARDOUS RESIDUES WHEN EMPTIED. DO NOT CUT, WELD, DRILL OR GRIND ON OR NEAR THIS CONTAINER. - FLAMMABLE. - CONTENTS UNDER PRESSURE. - KEEP AWAY FROM HEAT, SPARK, FLAME AND OTHER SOURCES OF IGNITION. - DO NOT USE ON HOT VEHICLES. - STORE IN A COOL, DRY WELL-VENTILATED AREA. - STORAGE TEMPERATURES SHOULD NOT EXCEED 40 C.- KEEP CONTAINERS TIGHTLY CLOSED WHEN NOT IN USE. - KEEP AWAY FROM CHILDREN.

---

SECTION 08: EXPOSURE CONTROLS - PROTECTION

---

EYE PROTECTION: - SAFETY GLASSES. - CONTACT LENSES SHOULD NOT BE WORN.  
- THEY MAY CONTRIBUTE TO THE SEVERITY OF THE INJURY

SKIN PROTECTION: SUFFICIENT CLOTHING TO PREVENT SKIN CONTACT.

RESPIRATORY PROTECTION: NOT NORMALLY REQUIRED. IF THE TLV IS EXCEED, A  
NIOSH APPROVED RESPIRATOR IS ADVISED.

VENTILATION: UNDER NORMAL CONDITIONS OF USE, GENERAL VENTILATION SHOULD  
BE SATISFACTORY. - LOCAL VENTILATION IS RECOMMENDED IF THE PRODUCT IS  
MISTED, OR USED IN CONFINED SPACES OR IF THE TLV IS EXCEEDED. - MAKE UP  
AIR SHOULD ALWAYS BE SUPPLIED TO BALANCE AIR EXHAUSTED.

PERSONAL PROTECTIVE EQUIPMENT: EMERGENCY SHOWER AND EYE WASH FACILITY  
SHOULD BE NEARBY. THE SELECTION OF PERSONAL PROTECTIVE EQUIPMENT WILL  
VARY DEPENDING ON THE CONDITIONS OF USE.

PROTECTIVE GLOVES (SPECIFY TYPE): IMPERVIOUS. AVOID RUBBER, PVC, AND  
NEOPRE EQUIPMENT. THESE ARE ATTACKED BY TOLUENE.

---

SECTION 09: PHYSICAL & CHEMICAL PROPERTIES

---

PACKAGED VOC VALUE/WEIGHT OR VOLUME CODE: 71.00 BY %

BOILING POINT TEMPS: N/A

MELTING/FREEZE POINT TEMPS: N/A

SPECIFIC GRAVITY VALUES: = 0.7620

VAPOR DENSITY VALUES: > 1.0000

VAPOR PRESSURE VALUES/UOM: N/A

SOLUBILITY IN WATER TEXT: NEGLIGIBLE

PH OF PRODUCT IN SOLUTION WITH WATER/VALUE: N/A

APPEARANCE: CLEAR AEROSOL

ODOR: VANILLA

MOLECULAR WEIGHT VALUES: N/A

PHYSICAL STATE: GAS

---

SECTION 10: STABILITY & REACTIVITY

---

STABILITY INDICATOR: Y

STABILITY - CONDITIONS TO AVOID: AVOID CONTACT WITH INCOMPATILBE  
MATERIALS. - AVOID EXCESSIVE HEAT, SPARKS, AND OPEN FLAME.

STABILITY - TEXT: STABLE AT AMBIENT TEMPERATURES AND PRESSURES.

INCOMPATIBLE MATERIALS: AVOID ALUMINUM, TIN, ZINC, COPPER AND THEIR ALLOYS. MOIST CARBON DIOXIDE IS CORROSIVE TO MOST METALS BY ITS FORMATION OF CARBONIC ACID. - DRY CARBON DIOXIDE CAN BE HANDLED BY MOST MATERIALS. - AVOID STRONG OXIDIZERS SUCH AS H<sub>2</sub>O<sub>2</sub>, HNO<sub>3</sub>, AND OLEUM.

HAZARDOUS POLYMERIZATION TEXT: WILL NOT OCCUR

---

#### SECTION 11: TOXICOLOGICAL INFORMATION

---

EYE EFFECTS: MAY BE MILDLY IRRITATING TO EYES

SKIN EFFECTS: MAY BE MILDLY IRRITATING TO SKIN

CARCINOGENICITY: NO COMPONENTS ARE LISTED AS CARCINOGENS BY ACGIH, IARC, OSHA, OR NTP.

MUTAGENICITY: NOT AVAILABLE

REPRODUCTIVE EFFECTS: WOMEN WORKERS EXPOSED TO TOLUENE AT 60 TO 100 PPM FOR ABOUT 3 YEARS REPORTED ABNORMAL MENSTRUAL CYCLES. ACETONE CAUSED A HIGH INCIDENCE OF DEATH WHEN TESTED ON CHICK EMBRYOS. - TOLUENE IS AN EXPERIMENTAL TERATOGEN. - IT HAS BEEN SHOWN TO CROSS THE PLACENTA IN ANIMAL TESTS.

ALLERGEN OR SENSITIVITY: CONTAIN NO KNOWN SKIN OR RESPIRATORY SENSITIZERS.

SECTION 11 - OTHER INFORMATION: EXPOSURE LIMIT, ACGIH STEL, (HEPTANE): 500 PPM/2050 MG/M<sup>3</sup>

---

#### SECTION 12: ECOLOGICAL INFORMATION

---

ECOLOGICAL INFORMATION: TOXIC TO AQUATIC LIFE. AROMATIC HYDROCARBONS MAY BE BIOACCUMULATIVE BUT THEY HAVE NO FOOD CHAIN CONCENTRATION POTENTIAL. - BIODEGRADABILITY: NOT AVAILABLE FOR PRODUCT.

---

#### SECTION 13: DISPOSAL CONSIDERATIONS

---

WASTE DISPOSAL METHOD: CONTENTS UNDER PRESSURE. - DO NOT PUNCTURE, INCINERATE OR EXPOSE TO HEAT, EVEN WHEN EMPTY. - REUSE OR RECYCLING SHOULD BE GIVEN PRIORITY OVER DISPOSAL UNDER ANY CIRCUMSTANCES. - DESTROY BY INCINERATION OR BIOLOGICAL TREATMENT IN ACCORDANCE WITH APPLICABLE LEGISLATION.

---

#### SECTION 14: TRANSPORT INFORMATION

---

HAZARD CLASS: - ROAD SHIPMENT: AEROSOL, CLASS 2.1, UN1950. - MARINE SHIPMENT: AEROSOLS, CLASS 2, UN1950, PACK, INST. 203. - AIR SHIPMENT: AEROSOLS, FLAMMABLE, N.O.S., CLASS 2.1., UN1950, PACK. INST. 203

---

SECTION 15: REGULATORY INFORMATION

---

SECTION 15 - OTHER INFORMATION: CEPA: ALL COMPONENTS ARE LISTED ON THE DOMESTIC SUBSTANCE LIST, (DSL) . - THIS PRODUCT HAS BEEN CLASIFIED IN ACCORDANCE WITH THE HAZARD CRITERIA OF THE CPR, AND THE MSDS CONTAINS ALL OF THE INFORMATION REQUIRED BY THE CPR.