

SAFETY DATA SHEET

PRODUCT: SPARKLE CONCENTRATE

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SECTION 01: PRODUCT AND COMPANY INFORMATION

MANUFACTURER/SUPPLIER B.S.C. INC.
 MANUFACTURER'S/SUPPLIERS ADDRESS..... 109 IBER RD., UNIT #3, OTTAWA, ON K2S 0X5 613-744-8896
 PRODUCT NAME SPARKLE CONCENTRATE
 PRODUCT USE CONCENTRATED GLASS CLEANER
 EMERGENCY PHONE NUMBER..... CANUTEC 1-613-996-6666

SECTION 02: HAZARDS IDENTIFICATION



ROUTE OF ENTRY:
 SKIN CONTACT MAY CAUSE MILD SKIN IRRITATION. PROLONGED OR REPEATED SKIN CONTACT MAY CAUSE DRYING, CRACKING OR IRRITATION.
 SKIN ABSORPTION N.AV.
 EYE CONTACT..... CAUSES EYE IRRITATION. SYMPTOMS OF EXPOSURE MAY INCLUDE: A BURNING SENSATION, REDNESS, SWELLING AND BLURRED VISION.
 INHALATION..... HEADACHE, NAUSEA, VOMITING, DIZZINESS, DROWSINESS AND LOSS OF CONSCIOUSNESS MAY OCCUR.
 INGESTION ALTHOUGH INGESTION IS UNLIKELY, LIQUID WOULD IRRITATE UPPER DIGESTIVE TRACT IF SWALLOWED. INGESTION OF THIS PRODUCT WOULD CAUSE HEADACHE, DIZZINESS, FATIGUE AND CENTRAL NERVOUS SYSTEM DEPRESSION.
 EFFECTS/SYMPTOMS OF ACUTE EXPOSURE SEE ABOVE.
 EFFECTS/SYMPTOMS OF CHRONIC EXPOSURE SEE ABOVE.
 MEDICAL CONDITIONS GENERALLY N.AV.
 AGGRAVATED BY EXPOSURE.....

SECTION 03: COMPOSITION / INFORMATION ON INGREDIENTS HAZARDS IDENTIFICATION

HAZARDOUS INGREDIENTS	C.A.S. #	%	TLV	LD50	LC50
ISOPROPYL ALCOHOL	67-63-0	50-60	ACGIH: 400 PPM STEL; 200 PPM TWA. OSHA: 400 PPM TWA; 980 MG/M3 TWA; 1225 MG/M3 STEL; 500 PPM STEL. IDLH: 2000 PPM.	12800 MG/KG (DERMAL, RABBIT) 3600 MG/KG (ORAL, MOUSE)	12000 PPM/8H (IHL, RAT)
ETHYLENE GLYCOL MONOBUTYL ETHER	111-76-2	10 - 30	SEE SECTION 11	SEE SECTION 11	SEE SECTION 11
ANHYDROUS AMMONIA	7664-41-7	5 - 10	ACGIH: 35 PPM STEL; 25 PPM TLV-TWA; OSHA: 27 MG/M3 STEL; 335 PPM STEL;	350MG/KG (ORAL, RAT)	2000 PPM/4HR (INHALATION, RAT)

SECTION 04: FIRST AID MEASURES

SKIN CONTACT IN CASE OF CONTACT, IMMEDIATELY FLUSH SKIN WITH PLENTY OF WATER FOR AT LEAST 15 MINUTES. GET MEDICAL ATTENTION. REMOVE CONTAMINATED CLOTHING AND LAUNDRER BEFORE REUSE.
 EYE CONTACT..... IN CASE OF CONTACT, OR SUSPECTED CONTACT, IMMEDIATELY FLUSH EYES WITH PLENTY OF WATER FOR AT LEAST 15 MINUTES AND GET MEDICAL ATTENTION IMMEDIATELY AFTER FLUSHING.

INHALATION.....	REMOVE PERSON TO FRESH AIR. IF NOT BREATHING, GIVE ARTIFICIAL RESPIRATION. IF BREATHING IS DIFFICULT, GET IMMEDIATE MEDICAL ATTENTION.
INGESTION	DO NOT INDUCE VOMITING. NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS OR CONVULSING PERSON. SEEK IMMEDIATE MEDICAL ATTENTION. IF VOMITING OCCURS SPONTANEOUSLY, KEEP HEAD BELOW HIPS TO PREVENT ASPIRATION OF LIQUID INTO THE LUNGS.
NOTES TO PHYSICIAN.....	TREATMENT BASED ON SOUND JUDGMENT OF PHYSICIAN AND INDIVIDUAL REACTIONS OF PATIENT.

SECTION 05: FIRE FIGHTING MEASURES

CONDITIONS OF FLAMMABILITY	FLAMMABLE.
MEANS OF EXTINCTION/EXTINGUISHING MEDIA: ..	ALCOHOL FOAM. CARBON DIOXIDE. DRY CHEMICAL.
FLASH POINT.....	52.1 (C)
UPPER FLAMMABLE LIMIT (% BY VOLUME).....	N.AV.
LOWER FLAMMABLE LIMIT (% BY VOLUME).....	N.AV.
AUTO-IGNITION TEMPERATURE	>425 °C / 797 °F
SPECIAL FIRE FIGHTING PROCEDURES.....	FIRE FIGHTERS SHOULD WEAR FULL PROTECTIVE CLOTHING, INCLUDING SELF-CONTAINED BREATHING EQUIPMENT.
UNUSUAL FIRE AND EXPLOSION HAZARDS.....	CARBON MONOXIDE MAY BE EVOLVED IF INCOMPLETE COMBUSTION OCCURS. VAPORS ARE HEAVIER THAN AIR AND MAY ACCUMULATE IN LOW AREAS. VAPORS MAY TRAVEL ALONG THE GROUND TO BE IGNITED AT DISTANT LOCATIONS. USE WATER SPRAY TO COOL FIRE-EXPOSED CONTAINERS AND STRUCTURES. CLOSED CONTAINERS MAY EXPLODE IN FIRE. ALWAYS STAY AWAY FROM ENDS OF CONTAINERS DUE TO EXPLOSIVE POTENTIAL. DO NOT ALLOW RUNOFF TO ENTER WATERWAYS.
EXPLOSION DATA.....	N.AV.
SENSITIVITY TO MECHANICAL IMPACT	N.AV.
SENSITIVITY TO STATIC DISCHARGE	N.AV.
HAZARDOUS COMBUSTION PRODUCTS	OXIDES OF CARBON.

SECTION 06: ACCIDENTAL RELEASE MEASURES

ACCIDENTAL RELEASE MEASURES	AVOID CONTACT WITH SPILLED OR RELEASED MATERIAL. IMMEDIATELY REMOVE ALL CONTAMINATED CLOTHING. WEAR APPROPRIATE PROTECTIVE EQUIPMENT. PREVENT FROM ENTERING SEWERS, WATERWAYS OR LOW AREAS. CONSULT LOCAL AUTHORITIES. SPILLS OR RELEASES SHOULD BE REPORTED, IF REQUIRED TO THE APPROPRIATE LOCAL, STATE AND FEDERAL AGENCIES. SHUT OFF LEAKS, IF POSSIBLE WITHOUT PERSONAL RISKS. REMOVE ALL POSSIBLE SOURCES OF IGNITION IN THE SURROUNDING AREA. DIKE AREA TO PREVENT SPILL FROM SPREADING. FOR LARGE LIQUID SPILLS (> 1 DRUM), TRANSFER BY MECHANICAL MEANS SUCH AS VACUUM TRUCK TO A SALVAGE TANK FOR RECOVERY OR SAFE DISPOSAL. DO NOT FLUSH AWAY RESIDUES WITH WATER. RETAIN AS CONTAMINATED WASTE. ALLOW RESIDUES TO EVAPORATE OR SOAK UP WITH AN APPROPRIATE ABSORBENT MATERIAL AND DISPOSE OF SAFELY. REMOVE CONTAMINATED SOIL AND DISPOSE OF SAFELY. FOR SMALL LIQUID SPILLS (< 1 DRUM), TRANSFER BY MECHANICAL MEANS TO A LABELLED, SEALABLE CONTAINER FOR PRODUCT RECOVERY OR SAFE DISPOSAL. ALLOW RESIDUES TO EVAPORATE OR SOAK UP WITH AN APPROPRIATE ABSORBENT MATERIAL AND DISPOSE OF SAFELY. REMOVE CONTAMINATED SOIL AND DISPOSE OF SAFELY.
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SECTION 07: HANDLING AND STORAGE

HANDLING PROCEDURES AND EQUIPMENT.....	AVOID CONTACT WITH EYES, SKIN AND CLOTHING. AVOID BREATHING VAPOR. USE WITH ADEQUATE VENTILATION. WASH
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THOROUGHLY AFTER HANDLING. ELECTROSTATIC CHARGES MAY BE GENERATED DURING PUMPING. ELECTROSTATIC DISCHARGE MAY CAUSE FIRE. ENSURE ELECTRICAL CONTINUITY BY BONDING AND GROUNDING (EARTHING) ALL EQUIPMENT. RESTRICT LINE VELOCITY DURING PUMPING IN ORDER TO AVOID GENERATION OF ELECTROSTATIC DISCHARGE (≤ 10 M/SEC). AVOID SPLASH FILLING. DO NOT USE COMPRESSED AIR FOR FILLING, DISCHARGING, OR HANDLING OPERATIONS. EXTINGUISH ANY NAKED FLAMES. DO NOT SMOKE. DO NOT HANDLE OR STORE NEAR AN OPEN FLAME, HEAT, OR OTHER SOURCES OF IGNITION. HANDLING TEMPERATURE: AMBIENT.

STORAGE REQUIREMENTS..... STORE IN A COOL, DRY, WELL VENTILATED AREA, AWAY FROM HEAT AND IGNITION SOURCES. USE EXPLOSION-PROOF VENTILATION TO PREVENT VAPOUR ACCUMULATION. CAN ATTACK ALUMINUM AT ELEVATED TEMPERATURE. STORE AT AMBIENT TEMPERATURE. KEEP AWAY FROM AEROSOLS, FLAMMABLES, OXIDIZING AGENTS AND CORROSIVES. PLACE AWAY FROM INCOMPATIBLE MATERIALS.

SECTION 08: EXPOSURE CONTROLS AND PERSONAL PROTECTION

ENGINEERING CONTROL..... FOR PERSONNEL ENTRY INTO CONFINED SPACES (I.E. BULK STORAGE TANKS) A PROPER CONFINED SPACE ENTRY PROCEDURE MUST BE FOLLOWED INCLUDING VENTILATION AND TESTING OF TANK ATMOSPHERE. LOCAL VENTILATION RECOMMENDED WHERE MECHANICAL VENTILATION IS INEFFECTIVE IN CONTROLLING AIRBORNE CONCENTRATIONS BELOW THE RECOMMENDED OCCUPATIONAL EXPOSURE LIMIT. CONCENTRATIONS IN AIR SHOULD BE MAINTAINED BELOW LOWER EXPLOSIVE LIMIT AT ALL TIMES OR BELOW THE RECOMMENDED THRESHOLD LIMIT VALUE IF UNPROTECTED PERSONNEL ARE INVOLVED. MAKE UP AIR SHOULD ALWAYS BE SUPPLIED TO BALANCE AIR EXHAUSTED (EITHER GENERALLY OR LOCALLY). ELECTRICAL AND MECHANICAL EQUIPMENT SHOULD BE EXPLOSION PROOF. MECHANICAL VENTILATION IS RECOMMENDED FOR ALL INDOOR SITUATIONS TO CONTROL FUGITIVE EMISSIONS.

PERSONAL PROTECTIVE EQUIPMENT

SKIN PROTECTION NATURAL RUBBER GLOVES. BUTYL RUBBER GLOVES. NEOPRENE GLOVES. VITON GLOVES. SKIN CONTACT SHOULD BE PREVENTED THROUGH THE USE OF SUITABLE PROTECTIVE CLOTHING, GLOVES AND FOOTWEAR, SELECTED FOR CONDITIONS OF USE AND EXPOSURE POTENTIAL. CONSIDERATION MUST BE GIVEN BOTH TO DURABILITY AS WELL AS PERMEATION RESISTANCE.

EYE/FACE PROTECTION..... CHEMICAL GOGGLES; ALSO WEAR A FACE SHIELD IF SPLASHING HAZARD EXISTS.

RESPIRATORY PROTECTION NIOSH APPROVED SUPPLIED AIR RESPIRATOR WHEN AIRBORNE CONCENTRATIONS EXCEED EXPOSURE LIMITS. USE A NIOSH-APPROVED CHEMICAL CARTRIDGE RESPIRATOR WITH ORGANIC VAPOUR CARTRIDGES OR USE A NIOSH-APPROVED SUPPLIEDAIR RESPIRATOR. FOR HIGH AIRBOURNE CONCENTRATIONS, USE A NIOSH -APPROVED SUPPLIED-AIR RESPIRATOR, EITHER SELF-CONTAINED OR AIRLINE BREATHING APPARATUS, OPERATED IN POSITIVE PRESSURE MODE.

WORK/HYGIENE PRACTICES ENSURE THAT EYEWASH STATIONS AND SAFETY SHOWERS ARE PROXIMAL TO THE WORK-STATION LOCATION.

SECTION 09: PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE..... LIQUID

APPEARANCE & ODOUR..... BLUE COLOUR – ALCOHOL ODOUR

ODOUR THRESHOLD..... N.AV.

SPECIFIC GRAVITY..... ~ 0.990

VAPOUR PRESSURE (MMHG)..... N.AV.

VAPOUR DENSITY (AIR=1)..... N.AV.

EVAPORATION RATE..... N.AV.

BOILING POINT..... 98°C

FREEZING/MELTING POINT -1°C

PH 10
 SOLUBILITY IN WATER (% W/W)..... SOLUBLE.
 COEFFICIENT OF WATER/OIL DISTRIBUTION N.AV.

SECTION 10: STABILITY AND REACTIVITY

STABILITY STABLE UNDER NORMAL OPERATING CONDITIONS.
 CONDITIONS TO AVOID..... AVOID ANY SOURCE OF IGNITION.
 INCOMPATIBILITY (MATERIALS TO AVOID)..... STRONG ACIDS. MAY BE CORROSIVE TO LEAD AND ALUMINIUM.
 STRONG OXIDIZERS. STRONG BASES.
 HAZARDOUS DECOMPOSITION PRODUCT..... SEE SECTION 5.
 HAZARDOUS POLYMERIZATION WILL NOT OCCUR.

SECTION 11: TOXICOLOGICAL INFORMATION

EXPOSURE LIMITS..... ETHYLENE GLYCOL MONOBUTYL ETHER: ACGIH - 20 PPM (97 MG/M3) TLVTWA. OSHA - 50 PPM (240 MG/M3), SKIN, PEL-TWA. IMMEDIATELY DANGEROUS TO LIFE OR HEALTH – IDLH: 700 PPM.
 LD50..... ETHYLENE GLYCOL MONOBUTYL ETHER: ORAL LD50 (MOUSE) 1167 MG/KG; ORAL LD50 (MOUSE) 1230 MG/KG; ORAL LD50 (RAT) 400 ; MG/KG; ORAL LD50 (RAT) 470 MG/KG; ORAL LD50 (RAT) 530 MG/KG; ORAL LD50 (RAT) 917 MG/KG; ORAL LD50 (RABBIT) 320 MG/KG; ORAL LD50 (GUINEA PIG) 1200 MG/KG; DERMAL LD50 (RABBIT) 220 MG/KG; DERMAL LD50 (RABBIT) 99 MG/KG.
 LC50..... ETHYLENE GLYCOL MONOBUTYL ETHER: INHALATION LC50 (RAT) 450 PPM/4H; INHALATION LC50 (MOUSE) 700 PPM/7H; INHALATION LC50 (MOUSE) 3380 MG/M3/7H; INHALATION LC50 (RAT) 2900 MG/M3/7H.
 IRRITANCY OF MATERIAL SEE SECTION 3.
 SENSITIZATION TO PRODUCT N.AV.
 CARCINOGENICITY..... ISOPROPYL ALCOHOL: IARC – GROUP 3; ACGIH – A4, NOT CLASSIFIABLE FOR HUMAN AND ANIMALS.
 ETHYLENE GLYCOL MONOBUTYL ETHER: IARC - GROUP 3 CARCINOGEN. ACGIH: A3 - CONFIRMED ANIMAL CARCINOGEN WITH UNKNOWN RELEVANCE TO HUMANS.
 REPRODUCTIVE TOXICITY ISOPROPYL ALCOHOL: ONE INHALATION RAT STUDY HAS SHOWN THAT 2-PROPANOL IS FETOTOXIC (CAUSED REDUCED FETAL WEIGHT GAIN) IN THE ABSENCE OF MATERNAL TOXICITY. OTHER STUDIES HAVE SHOWN NO EFFECTS OR EFFECTS IN THE PRESENCE OF MATERNAL TOXICITY.
 TERATOGENICITY..... ISOPROPYL ALCOHOL: THERE IS NO HUMAN INFORMATION AVAILABLE FOR ISOPROPANOL. HOWEVER, ISOPROPANOL IS CONSIDERED TERATOGENIC/EMBRYOTOXIC BASED ON ANIMAL INFORMATION.
 MUTAGENICITY ISOPROPYL ALCOHOL: POSITIVE AND NEGATIVE MUTAGENIC RESULTS HAVE BEEN OBTAINED IN MAMMALIAN CELLS IN VITRO AND NEGATIVE RESULTS IN BACTERIA.
 TOXICOLOGICAL SYNERGISTIC PRODUCTS..... N.AV.
 CHRONIC TOXICITY N.AV.

SECTION 12: ECOLOGICAL INFORMATION

ECOLOGICAL INFORMATION ISOPROPYL ALCOHOL:
 ECOTOXICITY - FISH SPECIES DATA: LC50 (PIMEPHALES PROMELAS) 61200 MG/L; LC50 (PIMEPHALES PROMELAS) 94900 MG/L; LC50 (PIMEPHALES PROMELAS) 9640 MG/L.
 ECOTOXICITY – FRESHWATER ALGAE DATA: EC50 (SCENEDESMUS SUBSPICATUS) 1000 MG/L.
 OTHER INFORMATION..... DO NOT ALLOW PRODUCT OR RUNOFF FROM FIRE CONTROL TO ENTER STORM OR SANITARY SEWERS, LAKES, RIVERS, STREAMS OR PUBLIC WATERWAYS. BLOCK OFF DRAINS AND DITCHES. SPILL AREAS MUST BE CLEANED AND RESTORED TO ORIGINAL CONDITION OR TO THE SATISFACTION OF AUTHORITIES. MAY BE HARMFUL TO AQUATIC LIFE.

SECTION 13: DISPOSAL CONSIDERATIONS

WASTE DISPOSAL..... IN ACCORDANCE WITH MUNICIPAL, PROVINCIAL AND FEDERAL REGULATIONS.

SECTION 14: TRANSPORT INFORMATION

PROPER SHIPPING NAME..... FLAMMABLE LIQUIDS, N.O.S. (ISOPROPYL ALCOHOL)
TDG CLASSIFICATION 3
UN NUMBER 1993
PACKING GROUP II

SECTION 15: REGULATORY INFORMATION

WHMIS CLASSIFICATION B2, D2B
CPR COMPLIANCE THIS PRODUCT HAS BEEN CLASSIFIED IN ACCORDANCE WITH THE HAZARD CRITERIA OF THE CANADIAN CONTROLLED PRODUCTS REGULATIONS (CPR) AND THE MSDS CONTAINS ALL THE INFORMATION REQUIRED BY THE CPR.

SECTION 16: OTHER INFORMATION

PREPARATION INFORMATION PREPARED BY: REGULATORY AFFAIRS, TELEPHONE - (613)-744-8896
PREPARATION DATE: JULY 1, 2016

N.AV. = NOT AVAILABLE
N.AP. = NOT APPLICABLE