



MATERIAL SAFETY DATA SHEET

SECTION 1 IDENTITY

NAME OF PRODUCT:

MBB-90437, MBC-90411 & MBC-90412 SPRAY PAINT

MANUFACTURER'S NAME AND ADDRESS:

SUNNEN PRODUCTS COMPANY
7910 MANCHESTER
ST. LOUIS, MO 63143

CONTACT:

CHUCK KORN

DATE:

March 13, 2003

EMERGENCY TELEPHONE NUMBER:

314-781-2105

SECTION 2 INGREDIENTS/IDENTITY (PER 29 CFR 1910.1200(g))

CHEMICAL NAME OF COMPONENTS	CAS NO.	Wt.%	OSHA Z1A 8 HR TWA	OSHA Z1A STEL	OSHA Z1A SKIN mg./cu.m.	ACGIH TWA	CARCINOGENIC
Lt. Aliphatic Hydrocarbon (as petroleum distillate-naphtha)	64742-89-8	10	1600	NONE	NONE	1350	N
2-Butanone (MEK)	78-93-3	10	590	885	NONE	590	N
2-Butoxy Ethanol (butyl cellosolve)	111-76-2	5	120	NONE	YES	120	N
Ethanol (ethyl alcohol)	64-17-5	10	1900	NONE	NONE	1900	N
Isobutyl Acetate	110-19-0	20	700	NONE	NONE	700	N
1-Methoxy-2-Propanol Acetate	108-65-6	5	NONE	NONE	NONE	NONE	N
2-Methyl-1-Propanol (isobutyl alcohol)	78-83-1	10	150	NONE	NONE	150	N
Mineral Spirits (as petroleum distillate-naptha)	64742-47-8	5	1600	NONE	NONE	1350	N
2-Propanol (Isopropyl alcohol)	67-63-0	5	980	1225	NONE	980	N
Titanium Dioxide as dust	13463-67-7	15	10	NONE	NONE	10	N
Toluene (toluol)	108-88-3	15	375	560	NONE	375	N
V.M.&P. Naphtha (as petroleum distillate-naphtha)	64742-48-9	10	1600	NONE	NONE	1350	N
Xylene (xylol)	1330-20-7	5	435	655	NONE	435	N

FOR FURTHER SAFETY AND HEALTH INFORMATION REGARDING THE COMPOSITION OF THIS MATERIAL CONTACT SUNNEN PRODUCTS. THIS MIXTURE CONTAINS TOXIC CHEMICALS SUBJECT TO THE REPORTING REQUIREMENTS OF SECTION 313 OF TITLE III OF THE SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT OF 1986 AND 40 CFR PART 372.

These mixture ingredients are cited on the following lists:

Name	CAS	Citations
Lt. Aliphatic Hydrocarbon	64742-89-8	2,4,6,7,10,11,13,14,15,17,18,19,20,21,23
2-butanone (MEK)	78-93-3	4,8,10,13,15,16,17,18,19,20,21,22
2-butoxy ethanol	111-76-2	2,4,10,13,15,16,17,18,19,20,22
Ethanol	64-17-5	2,4,5,6,7,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23
Isobutyl Acetate	110-19-0	2,4,5,6,7,9,10,11,13,14,15,16,17,18,19,20,22,23
1-Methoxy-2-Propanol Acetate	108-65-6	9
2-Methyl-1-Propanol	78-83-1	2,4,6,9,10,11,13,14,15,17,18,22,23
Mineral Spirits	64742-47-8	2,4,6,7,10,11,13,14,15,17,18,21
2-Propanol	67-63-0	2,4,7,8,10,13,14,15,16,17,18,21
titanium dioxide	13463-67-7	2,4,9,10,11,14,15,16,17,18,19,20,21,22,23
toluene	108-88-3	2,4,7,8,10,12,13,14,15,16,17,18,19,20,22,23
V.M.& P. Naphtha	64742-48-9	2,4,6,7,10,11,12,13,14,15,16,17,18,19,20,21,22,23
xylene	1330-20-7	2,4,7,8,10,13,14,15,16,17,18,19,20,22

1=IARC 2=OSHA 3=NTP 4=ACGIH 5=NFPA49 6=NFPA325M 7=DOT HMT 49CFR172.101 8=EPA SARA III 9=RTECS 10=MA RTK 11=AK RTK 12=CA RTK 13=FL RTK 14=IL RTK 15=ME RTK 16=MN RTK 17=NH RTK 18=NJ RTK 19=Cincinnati, OH RTK 20=Norwood, OH RTK 21=PA RTK 22=RI RTK 23=WV RTK

SECTION 3 PHYSICAL & CHEMICAL CHARACTERISTICS

SPECIFIC GRAVITY (WATER=1).....	.95
APPEARANCE AND ODOR.....	Color varies- odor of solvent.
PERCENT VOLATILE BY VOLUME.....	75%
REACTIVITY IN WATER.....	No hazardous reactions.
BOILING POINT.....	172-395°F (78-202°C)
VAPOR DENSITY (Air=1).....	Heavier than air.
VAPOR PRESSURE (mm Hg).....	Unknown
EVAPORATION RATE.....	Relative to either- slower
SOLUBILITY IN WATER.....	Unknown

SECTION 4 SPECIAL PRECAUTIONS

HANDLING AND STORAGE: Do not store near fire or flame or where temperature exceeds 120°F (50°C). OTHER: Do not smoke when in use or when fumes are present. Use with positive ventilation.

SECTION 5 CORROSIVELY AND REACTIVITY DATA

STABILITY: Material is stable. POLYMERIZATION: Hazardous polymerization will not occur. INCOMPATIBILITY (MATERIALS TO AVOID): Peroxides or strong oxidizing agents such as chlorine, permanganates, and dichromates. CONDITIONS TO BE AVOIDED: Store away from open flame or other sources of ignition. HAZARDOUS DECOMPOSITION PRODUCTS: Combustion of material will produce oxides of carbon, nitrogen and possibility of Hydrogen Cyanide.

SECTION 6 HEALTH, FIRST AID AND MEDICAL DATA

ACUTE AND CHRONIC HEALTH EFFECTS AND EFFECTS OF OVEREXPOSURE. PRIMARY ROUTE(S) OF ENTRY ARE: INHALATION AND SKIN ABSORPTION. Abbreviations used in the following section: SKIN=Skin absorption. EYE=Eye contact. INHAL=Inhalation INGEST=Ingestion. THE INFORMATION PRESENTED AND CONCLUSIONS DRAWN ARE FROM SOURCES OTHER THAN DIRECT TEST DATA.

Primary routes of entry are inhalation, skin and eye contact. Vapors are anesthetic, irritate the respiratory tract and depress the nervous system. Symptoms include: drowsiness, headaches, dizziness, unconsciousness and coma. Repeated overexposure to solvents is reported to cause permanent damage to skin, eyes, nose, mucous membranes, lungs, thorax, liver, kidneys, brain and central nervous system. Individuals with existing respiratory impairment such as emphysema, may display an increased sensitivity to solvent vapors.

LT. ALIPHATIC HYDROCARBON: ACUTE: SKIN: Causes skin irritation. Clothing soaked with fluid may cause skin burns. EYE: Causes eye irritation. INHAL: Irritation of the mucous membranes of the upper respiratory tract. Central nervous system depression. Inebriation, headache and nausea. INGEST: Irritation of stomach. CHRONIC: SKIN: Skin chapping and photosensitivity are reported after repeated exposure. EYE: NAIF. INHAL: Kidneys and Spleen have been affected in animal experiments. INGEST: NAIF.

2-BUTANONE (METHYL ETHYL KETONE): ACUTE: SKIN: Causes skin irritation. EYE: Causes eye irritation. INHAL: Attacks central nervous system and lungs. Irritation of nose and respiratory tract. Symptoms include headache, dizziness and vomiting. INGEST: Expected to be non-toxic based on literature reports that the LD50=2737 mg/kg (rats). Enhances toxicity of n-butyl ketone. CHRONIC: SKIN: NAIF EYE: NAIF INHAL: Development abnormalities and fetotoxicity in animals. INGEST: NAIF

2-BUTOXYETHANOL (BUTYL CELLOSOLVE): ACUTE: SKIN: Penetrates intact skin. Depresses central nervous system. Kidney injury and blood in the urine. Expected to be toxic by skin absorption based on literature reports that the LD50=490 mg/kg (rabbits). EYE: Causes eye irritation. INHAL: Causes behavioral changes, headaches. INGEST: Expected to be non-toxic based on literature reports that the LD50=1480 mg/kg (rats). CHRONIC: SKIN: NAIF. EYE: NAIF. INHAL: Maternal effects (uterus, cervix and vagina) and effects on fertility and specific development abnormalities (musculoskeletal and cardiovascular) in animals. INGEST: Effects liver, kidneys and lymphoid system. Causes destruction of red blood cells and blood in urine.

ETHANOL: ACUTE: SKIN: May cause skin drying and irritation. EYE: May cause eye irritation. INHAL: May produce headache, drowsiness, tremors, and fatigue. INGEST: Denaturants produce strange symptoms beyond intoxication. May act as an adjuvant increasing toxicity of other agents. CHRONIC: SKIN: NAIF EYE: NAIF INHAL: Development abnormalities in animals. INGEST: Reproductive toxicity in humans and animals.

ISOBUTYL ACETATE: ACUTE: SKIN: May irritate the skin. EYE: May cause eye irritation. INHAL: May cause irritation of the upper respiratory system. Narcosis at high inhalation concentrations. May cause headaches and drowsiness. INGEST: NAIF. CHRONIC: SKIN: NAIF. EYE: NAIF. INHAL: Experimental animals experience renal and blood changes after repeated exposures. INGEST: NAIF.

1-METHOXY-2-PROPANOL ACETATE: ACUTE: SKIN: NAIF EYE: NAIF INHAL: NAIF INGEST: NAIF CHRONIC: SKIN: NAIF EYE: NAIF INHAL: NAIF INGEST: NAIF

2-METHYL-1-PROPANOL: ACUTE: SKIN: NAIF EYE: Severe irritation. INHAL: NAIF INGEST: NAIF CHRONIC: SKIN: NAIF EYE: NAIF INHAL: NAIF INGEST: NAIF

MINERAL SPIRITS: ACUTE: SKIN: Causes skin irritation. Clothing soaked with fluid may cause skin burns. EYE: Causes eye irritation. INHAL: Irritation of the mucous membranes of the upper respiratory tract. Central nervous system depression. Inebriation, headache and nausea. INGEST:Irritation of stomach. CHRONIC: SKIN: Skin: chapping and photosensitivity are reported after repeated exposure. EYE: NAIF. INHAL: Kidneys and Spleen have been affected in animal experiments. INGEST: NAIF.

2-PROPANOL: ACUTE: SKIN: May cause mild irritation of skin. EYE: May cause eye irritation. INHAL: Drunkenness at very high concentration based on animal studies. INGEST: Drunkenness. CHRONIC: SKIN: NAIF. EYE: NAIF INHAL: Fetotoxicity and musculoskeletal development abnormalities. INGEST: Bizarre symptoms may result from the denaturants present in industrial alcohols. Effects on fertility and fetus in animals.

TITANIUM DIOXIDE: ACUTE: SKIN: NAIF. EYE: May irritate eyes. INHAL: Nuisance Dust. Irritates mucous membranes and lungs. Aggravates existing breathing or respiratory tract impairment. INGEST: NAIF. CHRONIC: SKIN: NAIF EYE: NAIF INHAL: Can causes abnormal tissue growth in the lungs. INGEST: NAIF.

TOLUENE (TOLUOL, LACOLENE): ACUTE: SKIN: May cause irritation of the skin by drying, producing dermatitis. EYE: May cause reversible eye irritation. INHAL: Attacks liver and kidneys. Can cause central nervous system depression. Symptoms include headache, dizziness, fatigue, incoordination, collapse and coma. INGEST: Expected to be non-toxic based on literature reports that the LD50=5000 mg/kg (rats). CHRONIC: SKIN: NAIF EYE: NAIF INHAL: Development abnormalities and fetotoxicity in animals. INGEST: Effects on embryo or fetus and specific development abnormalities in animals.

V.M.& P. NAPHTHA: ACUTE: SKIN: Causes skin irritation. Clothing soaked with fluid may cause skin burns. EYE: Causes eye irritation. INHAL: Irritation of the mucous membranes of the upper respiratory tract. Central nervous system depression. Inebriation, headache and nausea. INGEST: Irritation of stomach, nausea, vomiting, swelling of abdomen and cardiac arrhythmias. CHRONIC: SKIN: Skin "chapping and photosensitivity are reported after repeated exposure. EYE: NAIF INHAL: Kidneys and Spleen have been affected in animal experiments. INGEST: NAIF.

XYLENE (XYLOL): ACUTE: SKIN: Defatting agent. Produces drying, redness and blistering. EYE: Can cause irritation. INHAL: Irritant and narcotic. Symptoms include headache, vomiting, drunkenness, loss of consciousness and death. Affects Lungs, Thorax, Kidney and Liver. INGEST: Expected to be non-toxic based on literature reports that the LD50=4300 mg/kg (rats). CHRONIC: SKIN: NAIF EYE: NAIF INHAL: Causes liver impairment, kidney failure and hemorrhages in the brain. Fetotoxicity and development abnormalities in animals. INGEST: Fetotoxicity and development abnormalities in animals.

EMERGENCY FIRST AID

INHALATION: Remove from further exposure. If unconsciousness occurs, seek immediate medical assistance and call a physician. If breathing has stopped, begin mouth to mouth resuscitation. **EYE CONTACT:** Remove contact lenses (if wearing) and flush eyes with water for 15 minutes. Seek medical attention to check for possible irritation. **SKIN CONTACT:** Wash contact areas with mild non-abrasive soap and water. **INGESTION:** Do not induce vomiting. Call physician or poison control center immediately.

SECTION 7 HANDLING, STORAGE AND USE PROCEDURES

NORMAL STORAGE AND HANDLING: FOR INDUSTRIAL USE ONLY. Not suitable for use in or around household or dwelling. Store in well ventilated areas away from sources of ignition as damaged or leaking cans will release propellant which is highly flammable, heavier than air and may travel long distances to a source of ignition and flash back causing the container to burn or explode. Post areas "no smoking or open flames." Do not store at temperatures above 120 F (49 C) or in direct sunlight as can may overheat and burst releasing the highly flammable propellant. Cool overheated cans if possible. Do not store near oxidizing agents. Keep out of the reach of children. **NORMAL USE:** Use only with adequate ventilation, ensuring fresh air entry during use as breathing vapors can cause dizziness, unconsciousness or coma. If eye watering, headache or dizziness is experienced, increase ventilation or seek fresh air. Vapors will accumulate readily and are potentially explosive. Use only around explosion proof equipment. Do not spray near sparks, heat or open flame as propellant may ignite creating a fire hazard. Wear protective goggles if mist is present or if any possibility of eye contact exists. Wear NIOSH approved respirator if vapors approach TLV. Do not drop container as it may dent or use a deformed container. A deformed container has reduced expansion space and may develop dangerous pressure causing it to burst in a violent manner. Do not puncture can. Wash hands after using. Intentional misuse by deliberately concentrating and inhaling the contents of the aerosol can be harmful or fatal. Do not take internally. Do not smoke when spraying or if vapors are present. Read and observe cautions and warnings on container label. **STEPS TO BE TAKEN IN CASE OF LEAKS OR SPILLS:** If a can develops a leak, move it outside or to a well ventilated area immediately to prevent accumulation of the flammable propellant which is potentially explosive. If leaking containers are found in a storage area eliminate all ignition sources. Ventilate to reduce and remove the propellant fire hazards before entering or using equipment in these areas. Absorb liquid with inert material using non-sparking tools. Vapor levels exceeding TLV may be present. **WASTE DISPOSAL METHOD:** Do not incinerate as container may explode. Do not discard in compactor as contents may be released in a dangerous manner resulting in fire or explosion. Dispose of in accordance with applicable federal, state and local laws, regulations, rules, orders and ordinances.

SECTION 8 PERSONAL PROTECTION INFORMATION

RESPIRATORY PROTECTION: Atmospheric levels should be maintained below the exposure guidelines. Use approved air-purifying respirator to remove solid airborne particles of over spray during spray application. For emergency and other conditions where the exposure guideline may be greatly exceeded, use an approved positive pressure self-container breathing apparatus. VENTILATION: Ensure fresh air entry during use. If TLV levels are approached or any discomfort is experienced provide positive mechanical ventilation. EYE PROTECTION: Wear protective goggles to prevent eye contact. PROTECTIVE GLOVES: Use to prevent prolonged or repeated skin contact. MEASURES TO BE TAKEN DURING REPAIR AND MAINTENANCE OF CONTAMINATED EQUIPMENT THAT HAS BEEN IN CONTACT WITH THIS MATERIAL: Remove traces of material if soldering, welding, brazing, cutting or other process involving ignition sources to prevent a fire hazard or create hazardous fumes.

SECTION 9 FIRE AND EXPLOSION HAZARD DATA

FLASH POINT: 21°F (-14°C) ASTM D-92. FLAMMABLE LIMITS IN AIR (% BY VOLUME): LEL (lower)=0.9 EXTINGUISHING MEDIA: Carbon dioxide, foam, dry chemical and water fog. SPECIAL FIRE FIGHTING PROCEDURES: Wear positive pressure, self-contained respiratory equipment. Exposure to temperature above 120 F may cause the container to burst, releasing the highly flammable propellant. Water spray used to cool the containers during fire conditions may help prevent rupture. AUTO-IGNITION TEMPERATURE: Not Established UNUSUAL FIRE AND EXPLOSION HAZARDS: Towels, rags or other insulating absorbent fibrous media contaminated with any oil product should be stored in appropriate fireproof container that is emptied daily, to limit spontaneous combustion hazard. Treat as cylinders of compressed flammable gas. Propellant vapors are heavier than air. In case of rupture ventilate to prevent concentrations from reaching flammable levels. Decomposition and combustion products may be toxic.

SECTION 10 SHIPPING INFORMATION

PROPER SHIPPING NAME: Consumer Commodity HAZARD CLASS: ORM-D-AIR UN NUMBER: None

NOTICE

THIS MATERIAL SAFETY DATA SHEET ("MSDS") IS SUPPLIED PURSUANT TO THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION'S HAZARD COMMUNICATION RULE (THE "RULE"), 29 CFR 1910.1200. THIS MSDS IS BEING FURNISHED TO THE IMMEDIATE PURCHASER OF THE MATERIAL TO WHICH IT REFERS WITHOUT REPRESENTATION OR WARRANTY AS TO THE COMPLETENESS OR ACCURACY OF ANY INFORMATION OR RECOMMENDATIONS CONTAINED HEREIN.

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