

M A T E R I A L   S A F E T Y   D A T A   S H E E T

SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME : Playworld Systems, BAD 6012 Rust Resistant Gray Primer  
 RAABE PART # : 54863 DATE PRINTED: 12/12/95  
 PRODUCT USE/CLASS : Aerosol Product

SUPPLIER: Raabe Corporation P.O. Box 1090 Menomonee Falls, WI 53052-1090  
 MANUFACTURER: Raabe Corporation P.O. Box 1090 Menomonee Falls, WI 53052-1090

CALL CHEMTREC DAY OR NIGHT EMERGENCY TELEPHONE: 800-424-9300  
 CALL CHEMTREC DAY OR NIGHT EMERGENCY TELEPHONE: 800-424-9300

PREPARER: Rick Schmid, PHONE: 800-966-7580, PREPARE DATE: 12/12/95

SECTION 2 - COMPOSITION/INFORMATION ON INGREDIENTS

ITEM	CHEMICAL NAME	CAS NUMBER	WT/WT % LESS THAN
01	TALC	14807-96-6	5.0 %
02	2-BUTOXYETHANOL	111-76-2	5.0 %
03	METHYL ETHYL KETONE	78-93-3	55.0 %
04	TOLUENE	108-88-3	5.0 %
05	ISOPROPYL ALCOHOL	67-63-0	5.0 %
06	METHYL ISOBUTYL KETONE	108-10-1	5.0 %
07	DI(2-ETHYLHEXYL) PHTHALATE	117-81-7	5.0 %
08	ETHYL BENZENE	100-41-4	5.0 %
09	N-BUTANE	106-97-8	10.0 %
10	NITROCELLULOSE	9004-70-0	5.0 %
11	PROPANE	74-98-6	20.0 %
12	SILICA, CRYSTALLINE-CRISTOBALITE	14464-46-1	5.0 %
13	TITANIUM DIOXIDE	13463-67-7	5.0 %
14	XYLENE	1330-20-7	5.0 %

ITEM	EXPOSURE LIMITS				COMPANY TLV-TWA	SKIN
	ACGIH TLV-TWA	ACGIH TLV-STEL	OSHA PEL-TWA	OSHA PEL-STEL		
01	2 MG/M3	NO INFO	2 MG/M3	NO INFO*	N.E.	NO
02	25 ppm	NO INFO	25 ppm	NO INFO*	N.E.	YES
03	200 ppm	300 ppm	200 ppm	NO INFO*	N.E.	NO
04	50 ppm	NO INFO	50 ppm	NO INFO*	N.E.	NO
05	400 ppm	500 ppm	400 ppm	NO INFO*	N.E.	NO
06	50 ppm	75 ppm	50 ppm	NO INFO*	N.E.	NO
07	NOT EST.	NOT EST.				NO
08	100 ppm	125 ppm				NO

## SECTION 2 - COMPOSITION/INFORMATION ON INGREDIENTS

ITEM	EXPOSURE LIMITS				COMPANY TLV-TWA	SKIN
	ACGIH TLV-TWA	ACGIH TLV-STEL	OSHA PEL-TWA	OSHA PEL-STEL		
09	800 ppm	NO INFO	800 ppm	NO INFO*	N.E.	NO
10	NOT EST.	NOT EST.				NO
11	1000 ppm	NO INFO				NO
12	NO INFO	NO INFO				NO
13	10 mg/m3	NO INFO	10 mg/m3	NO INFO*	N.E.	NO
14	100 ppm	150 ppm	100 ppm	NO INFO*	N.E.	NO

(See Section 16 for abbreviation legend), \* - Ceiling Value

## SECTION 3 - HAZARDS IDENTIFICATION

\*\*\* EMERGENCY OVERVIEW \*\*\*: Harmful if inhaled. Causes eye irritation. Vapors irritating to eyes and respiratory tract. Extremely flammable liquid and vapor. Vapors may cause flash fire or explosion. Extremely flammable aerosol. Contents under pressure.

EFFECTS OF OVEREXPOSURE - EYE CONTACT: May cause severe eye irritation. May cause severe corneal injury if liquid comes in contact with the eyes.

EFFECTS OF OVEREXPOSURE - SKIN CONTACT: Repeated and prolonged contact with the skin may cause allergic dermatitis. May cause skin irritation. Prolonged or repeated contact may cause drying, cracking, or irritation of the skin. Product contains a component which can be absorbed through the skin. Excessive exposure may cause hemolysis (red blood cell damage) which can impair the blood's ability to transport oxygen. Material may aggravate an existing dermatitis.

EFFECTS OF OVEREXPOSURE - INHALATION: Exposure to high concentrations of vapors may cause dizziness, breathing difficulty, headaches or respiratory irritation. Extremely high concentrations may cause drowsiness, staggering, confusion, unconsciousness, coma or death. Liquid or vapor may be irritating to skin, eyes, throat or lungs. Prolonged inhalation of dusts containing free silica may result in the development of a disabling pulmonary fibrosis (lung disease) known as silicosis. Intentional misuse by deliberately concentrating and inhaling the contents of this product can be harmful or fatal.

EFFECTS OF OVEREXPOSURE - INGESTION: Moderately toxic. May cause stomach discomfort, nausea, vomiting, diarrhea, and narcosis. Aspiration of material into the lungs if swallowed or if vomiting occurs can cause chemical pneumonitis which can be fatal.

EFFECTS OF OVEREXPOSURE - CHRONIC HAZARDS: Chronic overexposure to a component or components in this material has been found to cause the following effects in laboratory animals: Kidney damage, Eye damage, Blood damage, Lung damage, Liver damage, Spleen damage, Anemia, Brain damage, Reproductive system damage, Chronic overexposure to a component or components in this product has been suggested as a cause of the

(Continued on Page 3)

SECTION 3 - HAZARDS IDENTIFICATION

following effects in humans: Liver damage, Cardiac abnormalities, Kidney damage, Reports have associated repeated and prolonged overexposure to solvents with permanent brain and nervous system damage. Repeated breathing or skin contact of methyl ethyl ketone may increase the potency of neurotoxins such as hexane if exposures occur at the same time. Rats exposed to titanium dioxide dust at 250 mg/m<sup>3</sup> developed lung cancer, however, such exposure levels are not attainable in the workplace with this material. Product contains di(2-ethylhexyl)phthalate which is listed as a potential carcinogen by the National Toxicology Program. Contains crystalline silica which may cause cancer based on animal data. Iarc indicates there is sufficient evidence for carcinogenicity of crystalline silica in experimental animals. Iarc also indicates there is limited evidence for carcinogenicity of crystalline silica in humans. 2-Butoxyethanol causes harm to the fetus in laboratory animal studies. Harm to the fetus occurs only at exposure levels that harm the pregnant animal. The relevance of these findings to humans is uncertain. Product contains toluene which may be harmful to the fetus based on animal studies. Repeated exposure to toluene has been associated with high frequency hearing loss in laboratory animals. The human consequences of this finding is uncertain.

PRIMARY ROUTE(S) OF ENTRY: INHALATION SKIN CONTACT SKIN ABSORPTION  
INGESTION

SECTION 4 - FIRST AID MEASURES

FIRST AID - EYE CONTACT: Immediately flush eyes with plenty of water. Get medical attention, if irritation persists.

FIRST AID - SKIN CONTACT: Skin contact: wash thoroughly with soap and water and seek medical attention. Remove contaminated clothing. Launder contaminated clothing before reuse.

FIRST AID - INHALATION: For inhalation overexposure move person to fresh air. If breathing stops, apply artificial respiration and seek medical attention.

FIRST AID - INGESTION: Ingestion: Do not induce vomiting which can cause chemical pneumonitis and pulmonary edema. Contact a physician immediately. Ingestion: Since this product may contain materials which can cause lung damage if aspirated into the lungs, the decision whether to induce vomiting or not must be made by a physician after careful consideration of all materials ingested.

SECTION 5 - FIRE FIGHTING MEASURES

FLASH POINT: <-25 F  
(TAGLIABUE CLOSED CUP)

LOWER EXPLOSIVE LIMIT: 1.0 %  
UPPER EXPLOSIVE LIMIT: 12.7 %

AUTOIGNITION TEMPERATURE: Unknown

(Continued on Page 4)

**SECTION 5 - FIRE FIGHTING MEASURES**

EXTINGUISHING MEDIA: DRY CHEMICAL CO2 FOAM

UNUSUAL FIRE AND EXPLOSION HAZARDS: Contents under pressure. Do not use or store near sources of heat, sparks or open flame. Keep away from any source of heat such as sunlight, heaters or stoves that could cause the container to burst. Do not puncture or incinerate. Do not crush or place in a garbage compactor. Do not store above 120 degrees F. Aerosol containers may explode when exposed to extreme heat. Product vapors are heavier than air and may travel a long distance to a source of ignition and flash back.

SPECIAL FIREFIGHTING PROCEDURES: Full protective equipment including self-contained breathing apparatus to avoid inhalation of vapors should be used. Water spray should not be used except to keep down vapors or cool closed containers to prevent build-up of pressure. If water is used, fog nozzles are preferred.

**SECTION 6 - ACCIDENTAL RELEASE MEASURES**

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Remove all sources of ignition. Avoid heat, sparks, flames and anything which could cause fire. Ventilate area of spill and adjacent low lying areas. Avoid breathing solvent vapors. Remove with inert absorbant materials and non-sparking tools. Use water spray to disperse vapors. Minimize breathing gases, vapor, fumes or decomposition products. Use self-contained breathing apparatus with full face piece operated in positive pressure mode as needed.

**SECTION 7 - HANDLING AND STORAGE**

HANDLING: Wash hands thoroughly after handling. Warning! This product contains a chemical or chemicals known to the State of California to cause birth defects or other reproductive harm.

STORAGE: Store in a cool dry area with ventilation suitable for storing materials shown in section 2. Keep away from heat, sparks and flame. Store in a cool place away from direct sunlight or any source of ignition. Do not store at temperatures above 120 degrees F.

**SECTION 8 - EXPOSURE CONTROLS/PERSONAL PROTECTION**

ENGINEERING CONTROLS: Sufficient ventilation, in volume and pattern; should be provided to keep air contamination below current applicable OSHA permissible exposure limit or ACGIH's TLV limit.

RESPIRATORY PROTECTION: If workplace exposure limits are exceeded for any component(see section 2 for hazardous components and exposure limits), a NIOSH/OSHA approved respirator suitable for components listed is

(Continued on Page 5)

**SECTION 8 - EXPOSURE CONTROLS/PERSONAL PROTECTION**

recommended.

**SKIN PROTECTION:** Chemical resistant plastic or rubber gloves recommended for prolonged or repeated contact.

**EYE PROTECTION:** Chemical goggles with side shields or face shield recommended if contact with the eyes is likely.

**OTHER PROTECTIVE EQUIPMENT:** Appropriate impervious clothing is recommended if prolonged or repeated contact is likely.

**HYGIENIC PRACTICES:** Wash hands before eating or smoking. Smoke in designated areas only.

**SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES**

BOILING RANGE	: -44 - 999 F	VAPOR DENSITY	: Is heavier than air
ODOR	: Solvent Odor	ODOR THRESHOLD	: Unknown
APPEARANCE	: Opaque Liquid	EVAPORATION RATE:	Is faster than Butyl Acetate
SOLUBILITY IN H2O	: Unknown	SPECIFIC GRAVITY:	0.7850
FREEZE POINT	: Unknown	pH @ 0.0 %	:
VAPOR PRESSURE	: Unknown	VISCOSITY	: Unknown
PHYSICAL STATE	: Gas		
COEFFICIENT OF WATER/OIL DISTRIBUTION: Unknown			

(See Section 16 for abbreviation legend)

**SECTION 10 - STABILITY AND REACTIVITY**

**CONDITIONS TO AVOID:** No Information.

**INCOMPATIBILITY:** No Information.

**HAZARDOUS DECOMPOSITION PRODUCTS:** Thermal decomposition may produce carbon dioxide, carbon monoxide, and unidentifiable organic materials.

**HAZARDOUS POLYMERIZATION:** Will not occur under normal conditions.

**STABILITY:** This product is stable under normal storage conditions.

**SECTION 11 - TOXICOLOGICAL PROPERTIES**

No product or component toxicological information is available.

## SECTION 12 - ECOLOGICAL INFORMATION

ECOLOGICAL INFORMATION: No Information.

## SECTION 13 - DISPOSAL CONSIDERATIONS

DISPOSAL METHOD: Place in closed containers. Dispose of product in accordance with local, county, state, and federal regulations.

## SECTION 14 - TRANSPORTATION INFORMATION

DOT PROPER SHIPPING NAME: Consumer Commodity

DOT TECHNICAL NAME: N.A.

DOT HAZARD CLASS: ORM-D

HAZARD SUBCLASS: N.A.

DOT UN/NA NUMBER: NONE

PACKING GROUP: N.A.

RESP. GUIDE PAGE:

## SECTION 15 - REGULATORY INFORMATION

U.S. FEDERAL REGULATIONS: AS FOLLOWS -

OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200)

CERCLA - SARA HAZARD CATEGORY:

This product has been reviewed according to the EPA 'Hazard Categories' promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:

IMMEDIATE HEALTH HAZARD    CHRONIC HEALTH HAZARD    FIRE HAZARD

SARA SECTION 313:

This product contains the following substances 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:

----- CHEMICAL NAME -----	CAS NUMBER	WT/WT %	IS LESS THAN
METHYL ETHYL KETONE	78-93-3		55.0 %
TOLUENE	108-88-3		5.0 %
METHYL ISOBUTYL KETONE	108-10-1		5.0 %
DI(2-ETHYLHEXYL) PHTHALATE	117-81-7		5.0 %
ETHYL BENZENE	100-41-4		5.0 %
XYLENE	1330-20-7		5.0 %

TOXIC SUBSTANCES CONTROL ACT:

The chemical substances in this product are on the TSCA Section 8 Inventory.

(Continued on Page 7)

SECTION 15 - REGULATORY INFORMATION

TOXIC SUBSTANCES CONTROL ACT:

This product contains the following chemical substances subject to the reporting requirements of TSCA 12(B) if exported from the United States:

----- CHEMICAL NAME -----	CAS NUMBER
2-BUTOXYETHANOL	111-76-2
ISOPROPYL ALCOHOL	67-63-0
METHYL ISOBUTYL KETONE	108-10-1
DI(2-ETHYLHEXYL) PHTHALATE	117-81-7

NEW JERSEY RIGHT-TO-KNOW:

The following materials are non-hazardous, but are among the top five components in this product:

----- CHEMICAL NAME -----	CAS NUMBER
NO CHEMICAL NAME FOUND	

PENNSYLVANIA RIGHT-TO-KNOW:

The following non-hazardous ingredients are present in the product at greater than 3%:

----- CHEMICAL NAME -----	CAS NUMBER
NO CHEMICAL NAME FOUND	

CALIFORNIA PROPOSITION 65:

WARNING: The chemical(s) noted below and contained in this product, are known to the state of California to cause cancer, birth defects or other reproductive harm:

----- CHEMICAL NAME -----	CAS NUMBER
TOLUENE	108-88-3
DI(2-ETHYLHEXYL) PHTHALATE	117-81-7

INTERNATIONAL REGULATIONS: AS FOLLOWS -

CANADIAN WHMIS: This MSDS has been prepared in compliance with Controlled Product Regulations except for use of the 16 headings.

CANADIAN WHMIS CLASS: No information available.

SECTION 16 - OTHER INFORMATION

HMIS RATINGS - HEALTH: 2      FLAMMABILITY: 4      REACTIVITY: 0

PREVIOUS MSDS REVISION DATE: 12/12/95

VOLATILE ORGANIC COMPOUNDS (VOCs): 5.45 lbs/gal,    653 grams/ltr

LEGEND: N.A. - Not Applicable, N.E. - Not Established,  
N.D. - Not Determined

## DISCLAIMER

The information contained on this MSDS is, to the best of our knowledge and belief, accurate. Since the conditions of handling and use are beyond our control, we make no guarantee of results and assume no liability for damages incurred by the use of this material. It is the responsibility of the user to comply with all Federal, State, and Local laws and regulations.

---