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**MATERIAL SAFETY DATA SHEET
THERMA-TRU CORPORATION**

**SECTION 1: CHEMICAL PRODUCT AND COMPANY
INFORMATION**

PRODUCT NAME	Therma-Tru Clad White Touch-Up Topcoat - Spray
PRODUCT CODE	MSCWABP
MANUFACTURER	Therma-Tru Corporation 108 Mutzfeld Road Butler, IN 46721
EMERGENCY PHONE	219-868-5811 x4266 or x4258 (7 a.m. to 5 p.m. EST) 219-868-5811 x4215 (5 p.m. to 7 a.m. EST)

**SECTION 2: COMPOSITION, INFORMATION ON
INGREDIENTS**

This section lists all components in this mixture that are defined as hazardous that are present above 1 wt% or 0.1 wt% if carcinogenic; could be released in concentration in excess of the threshold limit concentrations; act as marine pollutants, or are listed in SARA Title III, Section 313.

<u>CAS</u>	<u>CHEMICAL NAME</u>	<u>WT%</u>	<u>OSHA PEL (PPM)</u>	<u>ACGIH STEL (PPM)</u>	<u>LEL</u>
67-64-1	Acetone	45.0	750	750	12.8
74-98-6	Propane	12.0	1000	1000	2.2
108-88-3	Toluene	8.40	100	50	1.2 Severe Irritant
106-97-8	N-Butane	6.0	800	800	1.8
1330-20-7	Xylene	5.0	100	100	1.0
108-65-6	PM Acetate	5.0	N/E	N/E	1.5
78-93-3	Methyl Ethyl Ketone	2.0	200	200	1.8
763-69-9	Ethyl 3-Ethoxypropionate	2.0	50	N/E	1.0

N/E = Not Established

5.1 Clad White Touch-Up Topcoat - Spray

SECTION 3: HAZARDS IDENTIFICATION

HEALTH HAZARDS

ACUTE EFFECTS OF OVEREXPOSURE

EYE Contact may cause redness, irritation, tearing and blurred vision.

SKIN Contact may dry skin causing cracks and irritation.

INGESTION May be harmful or fatal if swallowed.

INHALATION Irritation of the respiratory tract or acute nervous system depression characterized by headache, dizziness, staggering gait, confusion, unconsciousness or coma.

Medical Conditions Generally Aggravated by Exposure Asthma and other respiratory ailments. Chemical Sensitization.

(CHRONIC) Reports have associated repeated and prolonged occupational overexposure to solvents with liver, kidney, brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal.

WARNING Product contains a chemical(s) known to the State of California to cause cancer, birth defects or other reproductive harm.

SECTION 4: FIRST AID MEASURES

EYE Hold eyelids apart and immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention.

SKIN Remove any contaminated clothing. Wash affected area thoroughly with soap and water. Wash clothes and shoes before reuse.

INGESTION Drink 1 or 2 glasses of water to dilute. Do not induce vomiting. Consult a physician or Poison Control Center immediately.

INHALATION Move patient to fresh air. Administer oxygen if necessary. Call a physician.

SECTION 5: FIRE FIGHTING MEASURES

FLAMMABLE LIMITS Not Applicable

AUTOIGNITION TEMPERATURE Not Applicable

HAZARDOUS COMBUSTION PRODUCTS Not Available

UNUSUAL FIRE AND EXPLOSION HAZARDS Pressure build up due to heat exposure may cause containers to explode. Water may be used to cool ruptured containers.

EXTINGUISHING MEDIA Use (NFPA) Class B extinguisher, CO₂ or foam.

FIRE FIGHTING INSTRUCTIONS Fight fire from safe distance. Wear full protective equipment including self-contained breathing gear.

Level 3 Aerosol (NFPA 30B)

SECTION 6: ACCIDENTAL RELEASE MEASURES

CONTAINMENT TECHNIQUES Eliminate all ignition sources. Provide ventilation. Collect spills with absorbent materials and non-sparking tools. See Section 8 for protective equipment.

CLEAN-UP PROCEDURES Dispose of in accordance with federal, state and local regulations. Do not incinerate containers.

SECTION 7: HANDLING AND STORAGE

Do not store in areas above 100°F or near fire or open flame. When storing large quantities, storage conditions should comply with OSHA 1910.106.

SECTION 8: EXPOSURE CONTROLS, PERSONAL PROTECTION

ENGINEERING CONTROLS Maintain air concentrations in work spaces in accordance with standards in Section 2.

RESPIRATORY PROTECTION In open areas with unrestricted ventilation, an NIOSH/MSHA approved respirator to remove solid airborne particles of overspray may be used if prolonged and repeated exposure is likely. In areas with restricted ventilation the use of an approved chemical/mechanical filter designed to remove both particles and organic vapors is recommended.

SKIN PROTECTION Use protective gloves if contact with product is likely.

EYE PROTECTION Safety glasses to prevent eye contact.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

BOILING POINT	-43°F to 340°F
MELTING POINT	Not Available
VAPOR PRESSURE (mm Hg)	Not Available
VAPOR DENSITY	Heavier than air
SOLUBILITY IN WATER	Negligible
SPECIFIC GRAVITY (Water = 1)	Not Available
pH	Not Available
ODOR	Solvent Oder
APPEARANCE	Opaque Spray

SECTION 10: STABILITY AND REACTIVITY

CHEMICAL STABILITY Stable.

CONDITIONS TO AVOID High temperatures and open flames.

INCOMPATIBILITY Unknown

HAZARDOUS DECOMPOSITION PRODUCTS Carbon dioxide, carbon monoxide.

HAZARDOUS POLYMERIZATION Will not occur.

5.1 Clad White Touch-Up Topcoat - Spray

SECTION 11: TOXICOLOGICAL INFORMATION

EYE	Not Available
SKIN	Not Available
INGESTION	Not Available
INHALATION	Not Available
SUBCHRONIC	Not Available
CHRONIC/CARCINOGENICITY	See Section 3
TERATOLOGY	Not Available
REPRODUCTION	Not Available
MUTAGENICITY	Not Available

SECTION 12: ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL INFORMATION	No Data
CHEMICAL FATE INFORMATION	No Data

SECTION 13: DISPOSAL CONSIDERATIONS

For small quantities, let air dry completely, then dispose of as solid waste in accordance with local, state, and federal regulations. Do not incinerate containers.

SECTION 14: TRANSPORT INFORMATION

DOT PROPER SHIPPING NAME Consumer Commodity
ID NUMBER UN1950
HAZARD CLASS ORM-D-AIR

SECTION 15: REGULATORY INFORMATION

No additional information.

SECTION 16: OTHER INFORMATION

MSDS #	018
REVISION DATE	April 1, 2000 (Revision 0)
SUPERSEDED DATE	None

The MSDS information is believed accurate to the best of our knowledge. Therma-Tru does not assume any legal responsibility for reliance on the same.

**MATERIAL SAFETY DATA SHEET
THERMA-TRU CORPORATION**

**SECTION 1: CHEMICAL PRODUCT AND COMPANY
INFORMATION**

PRODUCT NAME	Therma-Tru Clad White Touch-Up Topcoat - Brush
PRODUCT CODE	MSCWBR
MANUFACTURER	Therma-Tru Corporation 108 Mutzfeld Road Butler, IN 46721
EMERGENCY PHONE	219-868-5811 x4266 or x4258 (7 a.m. to 5 p.m. EST) 219-868-5811 x4215 (5 p.m. to 7 a.m. EST)

**SECTION 2: COMPOSITION, INFORMATION ON
INGREDIENTS**

This section lists all components in this mixture that are defined as hazardous that are present above 1 wt% or 0.1 wt% if carcinogenic; could be released in concentration in excess of the threshold limit concentrations; act as marine pollutants, or are listed in SARA Title III, Section 313.

<u>CAS</u>	<u>CHEMICAL NAME</u>	<u>WT%</u>	<u>OSHA PEL</u> <u>(PPM)</u>	<u>ACGIH STEL</u> <u>(PPM)</u>	<u>LEL</u>
108-88-3	Toluene	23.98	100	50	1.2 Severe Irritant
1330-20-7	Xylene	14.0	100	100	1.0
108-65-6	PM Acetate	14.0	N/E	N/E	1.5
78-93-3	Methyl Ethyl Ketone	6.0	200	200	1.8
100-41-4	Ethylbenzene	2.0	100	100	1.0

N/E = Not Established

5.2 Clad White Touch-Up Topcoat - Brush

SECTION 3: HAZARDS IDENTIFICATION

HEALTH HAZARDS

ACUTE EFFECTS OF OVEREXPOSURE

EYE Contact may cause redness, irritation, tearing and blurred vision.

SKIN Contact may dry skin causing cracks and irritation.

INGESTION May be harmful or fatal if swallowed.

INHALATION Irritation of the respiratory tract or acute nervous system depression characterized by headache, dizziness, staggering gait, confusion, unconsciousness or coma.

Medical Conditions Generally Aggravated by Exposure Asthma and other respiratory ailments. Chemical Sensitization.

(CHRONIC) Reports have associated repeated and prolonged occupational overexposure to solvents with liver, kidney, brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal.

WARNING Product contains a chemical(s) known to the State of California to cause cancer, birth defects or other reproductive harm.

SECTION 4: FIRST AID MEASURES

EYE Hold eyelids apart and immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention.

SKIN Remove any contaminated clothing. Wash affected area thoroughly with soap and water. Wash clothes and shoes before reuse.

INGESTION Drink 1 or 2 glasses of water to dilute. Do not induce vomiting. Consult a physician or Poison Control Center immediately.

INHALATION Move patient to fresh air. Administer oxygen if necessary. Call a physician.

SECTION 5: FIRE FIGHTING MEASURES

FLAMMABLE LIMITS Not Applicable

AUTOIGNITION TEMPERATURE Not Applicable

HAZARDOUS COMBUSTION PRODUCTS Not Available

UNUSUAL FIRE AND EXPLOSION HAZARDS Pressure build up due to heat exposure may cause containers to explode. Water may be used to cool ruptured containers.

EXTINGUISHING MEDIA Use (NFPA) Class B extinguisher, CO₂ or foam.

FIRE FIGHTING INSTRUCTIONS Fight fire from safe distance. Wear full protective equipment including self-contained breathing gear.

SECTION 6: ACCIDENTAL RELEASE MEASURES

CONTAINMENT TECHNIQUES Eliminate all ignition sources. Provide ventilation. Collect spill with absorbent materials and non-sparking tools. See Section 8 for protective equipment.

CLEAN-UP PROCEDURES Dispose of in accordance with Federal, State and local regulations. Do not incinerate containers.

SECTION 7: HANDLING AND STORAGE

Do not store in areas above 100°F or near fire or open flame. When storing large quantities, storage conditions should comply with OSHA 1910.106.

SECTION 8: EXPOSURE CONTROLS, PERSONAL PROTECTION

ENGINEERING CONTROLS Maintain air concentrations in work spaces in accordance with standards in Section 2.

RESPIRATORY PROTECTION In open areas with unrestricted ventilation, an NIOSH/MSHA approved respirator to remove solid airborne particles of overspray may be used if prolonged and repeated exposure is likely. In areas with restricted ventilation the use of an approved chemical/mechanical filter designed to remove both particles and organic vapors is recommended.

SKIN PROTECTION Use protective gloves if contact with product is likely.

EYE PROTECTION Safety glasses to prevent eye contact.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

BOILING POINT	175°F to 340°F
MELTING POINT	Not Available
VAPOR PRESSURE (mm Hg)	Not Available
VAPOR DENSITY	Heavier than air
SOLUBILITY IN WATER	Negligible
SPECIFIC GRAVITY (Water = 1)	Not Available
pH	Not Available
ODOR	Solvent Oder
APPEARANCE	Opaque Liquid

SECTION 10: STABILITY AND REACTIVITY

CHEMICAL STABILITY Stable.

CONDITIONS TO AVOID High temperatures and open flames.

INCOMPATIBILITY Unknown

HAZARDOUS DECOMPOSITION PRODUCTS Carbon dioxide, carbon monoxide.

HAZARDOUS POLYMERIZATION Will not occur.

5.2 Clad White Touch-Up Topcoat - Brush

SECTION 11: TOXICOLOGICAL INFORMATION

EYE	Not Available
SKIN	Not Available
INGESTION	Not Available
INHALATION	Not Available
SUBCHRONIC	Not Available
CHRONIC/CARCINOGENICITY	See Section 3
TERATOLOGY	Not Available
REPRODUCTION	Not Available
MUTAGENICITY	Not Available

SECTION 12: ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL INFORMATION	No Data
CHEMICAL FATE INFORMATION	No Data

SECTION 13: DISPOSAL CONSIDERATIONS

For small quantities, let air dry completely, then dispose of as solid waste in accordance with local, state, and federal regulations. Do not incinerate containers.

SECTION 14: TRANSPORT INFORMATION

DOT PROPER SHIPPING NAME Consumer Commodity
ID NUMBER UN1263
HAZARD CLASS ORM-D-AIR

SECTION 15: REGULATORY INFORMATION

No additional information.

SECTION 16: OTHER INFORMATION

MSDS #	018
REVISION DATE	April 1, 2000 (Revision 0)
SUPERSEDED DATE	None

The MSDS information is believed accurate to the best of our knowledge. Therma-Tru does not assume any legal responsibility for reliance on the same.

**MATERIAL SAFETY DATA SHEET
THERMA-TRU CORPORATION**

**SECTION 1: CHEMICAL PRODUCT AND COMPANY
INFORMATION**

PRODUCT NAME	Spray Classic-Craft and Fiber-Classic Buff Primer
PRODUCT CODE	MSCCAB
MANUFACTURER	Therma-Tru Corporation 108 Mutzfeld Road Butler, IN 46721
EMERGENCY PHONE	219-868-5811 x4266 or x4258 (7 a.m. To 5 p.m. EST) 219-868-5811 x4215 (5 p.m. to 7 a.m. EST)

**SECTION 2: COMPOSITION, INFORMATION ON
INGREDIENTS**

This section lists all components in this mixture that are defined as hazardous that are present above 1 wt% or 0.1 wt% if carcinogenic; could be released in concentration in excess of the threshold limit concentrations; act as marine pollutants, or are listed in SARA Title III, Section 313.

<u>CHEMICAL NAME</u>	<u>CAS</u>	<u>WT%</u>	<u>ACGIH TLV (TWA)</u>	<u>OSHA PEL</u>	<u>LEL</u>
			<u>(PPM)</u>	<u>mg/m³</u>	
Titanium Dioxide	13463-67-7	5.00	ND	10	ND
Xylene	1330-20-7	8.49	100	434	1.00
Ethyl Benzene	100-41-4	2.12	100	434	1.20
Toluene	108-88-3	6.26	100	377	1.27
Acetone	67-64-1	29.66	750	1780	2.60
Mineral spirits	64742-47-8	0.11	100	ND	0.70
Varnish Makers & Painter Naphtha	8032-32-4	0.19	300	1370	1.10
Ethylene Glycol	ND	1.21	ND	ND	1.26
Monopropyl Ether	2807-30-9	ND	ND	ND	ND
SC-100 Solvent	64742-95-6	1.86	50	245	1.00
Propane	74-98-6	18.3	ND	ND	2.30
Isobutane	75-28-5	12.2	ND	ND	1.90

SECTION 3: HAZARDS IDENTIFICATION

HEALTH HAZARDS

EYE CONTACT May cause eye irritation especially upon direct contact with the spray.

SKIN CONTACT Prolonged or repeated liquid contact may cause defatting of the skin, leading to irritation and dermatitis.

INGESTION Accidental ingestion is unlikely from an aerosol can. If ingested, call a physician immediately.

INHALATION Exposure to solvent vapors concentration exceeding the established threshold limit values can cause respiratory system irritation. Symptoms of overexposure are irritation, headache, dizziness, nausea, possible unconsciousness and asphyxiation.

CHRONIC OVEREXPOSURE

TITANIUM DIOXIDE overexposure - none known. Note: Inhalation tests in rats: dust from dried products produced an inert or nuisance dust response in the lungs.

XYLENE (1) overexposure - health studies have shown that many petroleum hydrocarbons pose potential human health risk which may vary from person to person. As a precaution, exposure to liquids, vapors, mists, or fumes should be minimized. Reports of animal test studies have shown embryo/fetotoxic effects. The relevance of these effects to man is unknown. High vapor concentrations (greater than approximately 1000 ppm) are irritating to the eyes and the respiratory tract, may cause headaches and dizziness, are anesthetic, and may have other nervous system effects.

ETHYL BENZENE (1) overexposure - may cause severe eye irritation, redness, tearing, and blurred vision, prolonged or repeated exposure can cause irritation, defatting and dermatitis. Excessive inhalation of vapors can cause nasal and respiratory irritation. Central nervous system effects include dizziness, weakness, fatigue, nausea, headache, possible unconsciousness, and even death. Can cause gastrointestinal irritation, vomiting and diarrhea. Aspiration of material into the lungs can cause chemical pneumonitis which can be fatal.

TOLUENE (1)(2) overexposure - while there is no evidence that industrial acceptable levels of toluene (e.g. the TLV) have produced cardiac effects in humans, animal studies have shown that inhalation of high levels of toluene produced cardiac sensitization. Such sensitization may cause fatal changes in heart rhythms. This latter effect was shown to be enhanced by hypoxia or the injection of adrenaline-like agents. Rats exposed to 1400 ppm or 1200 ppm of toluene for 14h/day for 4 or 5 weeks (respectively) exhibited high frequency hearing deficits. The significance of this information to man is unknown.

ACETONE (1) overexposure - high vapor concentrations may irritate the eyes and mucous membranes of the nose and throat. Severe overexposure (i.e. > 12,000 ppm) can cause CNS depression including nausea, vomiting, headaches, incoordination and dizziness, repeated or prolonged contact of the liquid with the skin can cause redness and a dry, scaly and fissured dermatitis. Eye contact resulting from splashes or high vapor concentration exposure is irritating. When acetone was absorbed systemically, it caused cataracts in laboratory animals. When ingested the effects are intoxicating. These acute symptoms might include early emotional instability, impaired motor coordination, nausea, vomiting, drowsiness, stupor and finally coma. 10 to 20 ml has been taken orally without ill effects.

MINERAL SPIRITS overexposure - narcosis in high concentration. May cause skin irritation upon prolonged or repeated contact.

VARNISH MAKERS & PAINTER NAPHTHA overexposure - may cause skin irritation upon prolonged or repeated contact. Central nervous system depression in high concentrations.

ETHYLENE GLYCOL MONOPROPYL ETHER (1) overexposure - exposure of experimental animals via inhalation, skin contact, or ingestion produces a toxic effect on the red blood cell. In studies of the related chemical, 2-butoxyethanol, rats were at least three (3) times more sensitive than humans to this toxic effect.

SC-100 SOLVENT overexposure - health studies have shown that many petroleum hydrocarbons pose potential human health risks which may vary from person to person, as a precaution, exposure to liquids, vapors, mist or fumes should be minimized. High vapor concentrations (greater than approximately 1,000 ppm) are irritating to the eyes and the respiratory tract, may cause headaches and dizziness, are anesthetic, and may have other central nervous system effects including death. This product can be defined as: light aromatic solvent naphtha (petroleum), it consists predominately of C8-C10 aromatic hydrocarbons, primarily C9.

- (1) This chemical is subject to the reporting requirements of Section 313 of SARA Title III.
- (2) This chemical is on the list of "Chemicals Known to the State of California to cause Cancer of reproductive toxicity" Proposition 65.

SECTION 4: FIRST AID MEASURES

EYE Immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention.

SKIN Wash skin with soap and water. Remove contaminated clothing. Consult a physician if irritation persists.

INGESTION Call a physician or poison control center immediately.

INHALATION Rescuers should put on appropriate protective gear. Remove patient to fresh air. If breathing stops, begin artificial respiration. Treat symptomatically. Seek immediate medical attention.

SECTION 5: FIRE FIGHTING MEASURES

FLASH POINT below 73°F

LOWER EXPLOSIVE LIMIT 1.0%

UPPER EXPLOSIVE LIMIT 12.8%

FLAMMABILITY CLASSIFICATION OSHA Class 1A.

DOT Consumer Commodity ORMD

FLAMMABLE LIMITS Flash point below 73°F and a boiling point below 100°F.

AUTOIGNITION TEMPERATURE Not applicable.

HAZARDOUS COMBUSTION PRODUCTS Not available.

EXTINGUISHING MEDIA Dry chemical, carbon dioxide, or foam

FIRE FIGHTING INSTRUCTIONS Water spray may be ineffective. Water may be used to cool containers to prevent bursting. If water is used, fog nozzles are preferable. Wear goggles and self contained breathing apparatus.

FIRE AND EXPLOSION HAZARDS Exposure to heat may cause bursting of aerosol can.

5.3 Spray Classic-Craft and Fiber-Classic Buff Primer

SECTION 6: ACCIDENTAL RELEASE MEASURES

CLEAN-UP PROCEDURES Remove any sources of ignition, avoid breathing vapors, ventilate area, wipe up with inert materials and place in appropriate container.

SECTION 7: HANDLING AND STORAGE

HANDLING Avoid breathing sanding dust.

STORAGE Avoid storage at temperatures greater than 90°F or near heat, sparks, electrical equipment or open flames.

SECTION 8: EXPOSURE CONTROLS, PERSONAL PROTECTION

ENGINEERING CONTROLS Maintain air concentrations in work spaces in accordance with standards in Section 2.

RESPIRATORY PROTECTION Wear a self contained breathing apparatus for concentrations above TLV limits.

SKIN PROTECTION Use neoprene rubber gloves to prevent skin contact.

EYE PROTECTION Use safety eye wear with splash guards or side shields under conditions where spray mist might get into eyes.

OTHER PROTECTIVE EQUIPMENT Remove and wash contaminated clothing before reuse.

HYGIENIC PRACTICES Wash hands before eating, smoking, or using the washroom.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

EVAPORATION RATE	Faster than ether
% VOLATILE	80.7%/WT
BOILING POINT	Not available
MELTING POINT	Not available
VAPOR PRESSURE (MMHG)	Not available
VAPOR DENSITY	Heavier than air
SOLUBILITY IN WATER	Not available
SPECIFIC GRAVITY (WATER=1)	Not available
PH	Not available
ODOR	Solvent
APPEARANCE	Aerosol
FLASH POINT	Aerosol - 10°F (T.O.C.) LEL - See Section 2

SECTION 10: STABILITY AND REACTIVITY

CHEMICAL STABILITY Stable.

CONDITIONS TO AVOID Do not store above 120 degrees (F). Keep from sparks, pilot lights and/or open flame.

INCOMPATIBILITY (Materials to avoid): none known

HAZARDOUS DECOMPOSITION PRODUCTS May produce hazardous fumes when heated to decomposition. Fumes may contain carbon dioxide and/or carbon monoxide.

HAZARDOUS POLYMERIZATION Will not occur.

SECTION 11: TOXICOLOGICAL INFORMATION

See Section 3

SECTION 12: ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL INFORMATION No information

CHEMICAL FATE INFORMATION No information

SECTION 13: DISPOSAL CONSIDERATIONS

DISPOSAL METHOD Do not incinerate aerosol, dispose of in accordance with local, state and federal regulations. Do not place aerosol cans in home compactor. Do not puncture.

SECTION 14: TRANSPORT INFORMATION

DOT CLASSIFICATION Consumer commodity ORMD

SECTION 15: REGULATORY INFORMATION

No additional information

5.3 *Spray Classic-Craft and Fiber-Classic Buff Primer*

SECTION 16: OTHER INFORMATION

MSDS #	010
REVISION DATE	September 12, 1994 (Revision 0)
SUPERSEDED DATE	Not applicable

The MSDS information is believed accurate to the best of our knowledge. Therma-Tru does not assume any legal responsibility for reliance on the same.

**MATERIAL SAFETY DATA SHEET
THERMA-TRU CORPORATION**

**SECTION 1: CHEMICAL PRODUCT AND COMPANY
INFORMATION**

PRODUCT NAME	Gray Spray Paint
PRODUCT CODE	MSOOABP
MANUFACTURER	Therma-Tru Corporation 108 Mutzfeld Road Butler, IN 46721
EMERGENCY PHONE	219-868-5811 x4266 or x4258 (7 a.m. to 5 p.m. EST) 219-868-5811 x4215 (5 p.m. to 7 a.m. EST)

**SECTION 2: COMPOSITION, INFORMATION ON
INGREDIENTS**

This section lists all components in this mixture that are defined as hazardous that are present above 1 wt% or 0.1 wt% if carcinogenic; could be released in concentration in excess of the threshold limit concentrations; act as marine pollutants, or are listed in SARA Title III, Section 313.

<u>CHEMICAL</u> <u>NAME</u>	<u>CAS</u>	<u>WT%</u>	<u>ACGIH TLV (TWA)</u> <u>(PPM)</u>	<u>OSHA PEL</u> <u>(PPM)</u>
Acetone	00067-64-1	32.60	750	750
Propane	00074-98-6	15.70	1000	1000
Toluol	00108-88-3	10.90	50	100
N-butane	00106-97-8	9.20	800	800
Xylene	01330-20-7	8.60	100	100
Titanium Dioxide	13463-67-7	3.70	5 mg/m ³	5 mg/m ³
Ethyl Alcohol	00064-17-5	2.30	1000	1000
Ethyl Benzene	00100-41-4	1.90	100	100

SECTION 3: HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW Contents under pressure! Avoid temperatures over 120°F.

EFFECTS OF OVEREXPOSURE

EYE CONTACT Liquid, aerosols and vapors of this product are irritating and can cause pain, tearing, reddening and swelling accompanied by a stinging sensation and/or a feeling like that of fine dust in the eyes.

5.4 Construction Series Steel Spray Gray Primer

SKIN CONTACT Causes skin irritation. Allergic reactions are possible. Prolonged or repeated contact can result in defatting and drying of the skin which may result in skin irritation and dermatitis (rash).

INGESTION This material may be harmful or fatal if swallowed. Irritating to mouth, throat and stomach.

INHALATION Headaches, dizziness, nausea, decreased blood pressure, changes in heart rate and cyanosis may result from over-exposure to vapor or skin exposure. Prolonged inhalation may be harmful.

EFFECTS OF OVEREXPOSURE - CHRONIC HAZARDS Possible reproductive hazard.

SECTION 4: FIRST AID MEASURES

EYE Immediately flush eyes with plenty of water. Get medical attention, if irritation persists.

SKIN Remove contaminated clothing. Wash skin with soap and water. Get medical attention if irritation develops or persists.

INGESTION If swallowed, do not induce vomiting. Give victim a glass of water or milk. Call a physician or poison control center immediately. Never give anything by mouth to an unconscious person.

INHALATION Rescuers should put on appropriate protective gear. Remove from area of exposure. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

SECTION 5: FIRE FIGHTING MEASURES

FLASH POINT -4°F

FLAMMABILITY CLASSIFICATION Flammable

FLAMMABLE LIMITS Not available.

AUTOIGNITION TEMPERATURE Not available.

HAZARDOUS COMBUSTION PRODUCTS Not available.

EXTINGUISHING MEDIA Water fog, dry chemical, CO₂, Alcohol Foam, Foam

FIRE FIGHTING INSTRUCTIONS Containers can build up pressure if exposed to heat (fire). As in any fire, wear self-contained breathing apparatus pressure-demand (MSHA/NIOSH approved or equivalent) and full protective gear.

FIRE AND EXPLOSION HAZARDS Vapors may form explosive mixture with air.

SECTION 6: ACCIDENTAL RELEASE MEASURES

CLEAN-UP PROCEDURES Absorb spill with inert material (e.g. dry sand or earth), then place in a chemical waste container.

SECTION 7: HANDLING AND STORAGE

HANDLING Wash thoroughly after handling. Use with adequate ventilation. Avoid breathing vapors or mist. Avoid contact with eyes, skin, and clothing.

STORAGE Keep away from heat, sparks and flame. Contents under pressure. Do not store above 120°F.

SECTION 8: EXPOSURE CONTROLS, PERSONAL PROTECTION

ENGINEERING CONTROLS Local exhaust ventilation may be necessary to control any air contaminants to within their TLVs during the use of this product.

RESPIRATORY PROTECTION A NIOSH/MSHA approved air purifying respirator with an organic vapor cartridge or canister may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits. Protection provided by air purifying respirators is limited. Use a positive pressure air supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air purifying respirators may not provide adequate protection.

SKIN PROTECTION Skin contact should be minimized. Rubber or neoprene gloves should be worn for prolonged or repeated contact.

EYE PROTECTION Wear safety glasses with side shields (or goggles) and a face shield.

OTHER PROTECTIVE EQUIPMENT Where splashing is possible, full chemically resistant protective clothing (e.g. acid suit) and boots are required.

HYGIENIC PRACTICES No information.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

EVAPORATION RATE	Faster than ether
% VOLATILE	Not available
BOILING POINT	-44°F to 284°F
MELTING POINT	Not available
VAPOR PRESSURE (MMHG)	40 psi
VAPOR DENSITY	Heavier than air
SOLUBILITY IN WATER	Slight
SPECIFIC GRAVITY (WATER=1)	0.7889
PH	Not applicable
ODOR	Aromatic
APPEARANCE	Liquid
FLASH POINT	-4°F

5.4 Construction Series Steel Spray Gray Primer

SECTION 10: STABILITY AND REACTIVITY

CHEMICAL STABILITY Stable under normal storage conditions.

CONDITIONS TO AVOID Do not store above 120 degrees (F). Keep from sparks, pilot lights and/or open flame.

INCOMPATIBILITY (Materials to avoid): no information

HAZARDOUS DECOMPOSITION PRODUCTS May produce hazardous fumes when heated to decomposition. Fumes may contain carbon dioxide and/or carbon monoxide.

HAZARDOUS POLYMERIZATION Will not occur.

SECTION 11: TOXICOLOGICAL INFORMATION

See Section 3

SECTION 12: ECOLOGICAL INFORMATION

This product does not contain chlorinated solvents or lead. No specific ecological data is available for this product. Please refer to section 6 for information regarding accidental releases and section 15 for regulatory reporting.

SECTION 13: DISPOSAL CONSIDERATIONS

Dispose of in accordance with local, state, and federal regulations. Do not puncture, incinerate, or compact. Empty containers must be handled with care due to product residue. Do not heat or cut empty containers with electric or gas torches.

SECTION 14: TRANSPORT INFORMATION

Not available.

SECTION 15: REGULATORY INFORMATION

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, PRESSURIZED GAS 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/%
Toluol	00108-88-3	10.90
Xylene	01330-20-7	8.60
Ethyl Benzene	00100-41-4	1.90
Methanol	00067-56-1	0.10
Methyl Iso-butyl Ketone	00108-10-1	0.00

INTERNATIONAL REGULATIONS

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

MSDS # 012
REVISION DATE April 1, 2000 (Revision 1)
SUPERSEDED DATE September 12, 1994 (Revision 0)

The MSDS information is believed accurate to the best of our knowledge. Therma-Tru does not assume any legal responsibility for reliance on the same.

5.4 Construction Series Steel Spray Gray Primer

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**MATERIAL SAFETY DATA SHEET
THERMA-TRU CORPORATION**

**SECTION 1: CHEMICAL PRODUCT AND COMPANY
INFORMATION**

PRODUCT NAME	Special White Spray Paint
PRODUCT CODE	MSWHABP
MANUFACTURER	Therma-Tru Corporation 108 Mutzfeld Road Butler, IN 46721
EMERGENCY PHONE	219-868-5811 x4266 or x4258 (7 a.m. to 5 p.m. EST) 219-868-5811 x4215 (5 p.m. to 7 a.m. EST)

**SECTION 2: COMPOSITION, INFORMATION ON
INGREDIENTS**

This section lists all components in this mixture that are defined as hazardous that are present above 1 wt% or 0.1 wt% if carcinogenic; could be released in concentration is excess of the threshold limit concentrations; act as marine pollutants, or are listed in SARA Title III, Section 313.

<u>CHEMICAL NAME AND NUMBER</u>	<u>WT%</u>	<u>ACGIH TLV(TWA) (PPM)</u>	<u>OSHA PEL (PPM)</u>	<u>LEL</u>
Titanium Dioxide 13463-67-7 (as Dust)	4.73	No Data	10.00	No Data
Xylene (1) 1330-20-7	10.39	100.00	434.00	1.00
Ethyl Benzene (1) 100-41-4	2.60	100.00	434.00	1.20
Toluene (1)(2) 108-88-3	6.10	100.00	377.00	1.27
Acetone (1) 67-64-1	28.91	750.00	1780.00	2.60
Varnish Makers & Painter Naphtha 8032-32-4	20.00	300.00	1370.00	1.10
Ethylene Glycol (1) Monopropyl Ether 2807-30-9	1.18	No Data	No Data	1.26
Propane 74-98-6	17.9	No Data	No Data	2.30
Isobutane 75-28-5	11.9	No Data	No Data	1.90

PEL-See Bottom Of Section 2.

5.5 Special White Spray Paint

Material	8-hour Time Weighted Average	Acceptable Ceiling Concentration	Acceptable Maximum Peak Above The Acceptance Ceiling Concentration For An 8-hour Shift	Maximum Duration
Toluene	200 PPM	300 PPM	500 Ppm	10 Minutes

(1) This Chemical Is Subject To The Reporting Requirements Of Section 313 Of Sara Title III.

(2) This Chemical Is On The List Of "Chemicals Known To The State Of California To Cause Cancer Of Reproductive Toxicity" Proposition 65.

SECTION 3: HAZARDS IDENTIFICATION

THRESHOLD LIMIT VALUE See Section 2

HEALTH HAZARDS

ACUTE EFFECTS OF OVEREXPOSURE

EYE CONTACT May cause eye irritation especially upon direct contact with the spray.

SKIN CONTACT Prolonged or repeated liquid contact may cause defatting of the skin, leading to irritation and dermatitis.

INGESTION Accidental ingestion is unlikely from an aerosol can. If ingested, call a physician immediately.

INHALATION Exposure to solvent vapors concentration exceeding the established threshold limit values can cause respiratory system irritation. Symptoms of overexposure are irritation, headache, dizziness, nausea, possible unconsciousness and asphyxiation.

CHRONIC OVEREXPOSURE

TITANIUM DIOXIDE overexposure - none known Note: inhalation tests in rats: dust from dried products produced an inert or nuisance dust response in the lungs.

XYLENE (1) overexposure - health studies have shown that many petroleum hydrocarbons pose potential human health risk which may vary from person to person. As a precaution, exposure to liquids, vapors, mists, or fumes should be minimized. Reports of animal test studies have shown embryo/fetotoxic effects. The relevance of these effects to man is unknown. High vapor concentrations (greater than approximately 1000 PPM) are irritating to the eyes and the respiratory tract, may cause headaches and dizziness, are anesthetic, and may have other nervous system effects.

ETHYL BENZENE (1) Overexposure - May cause severe eye irritation, redness, tearing, and blurred vision, prolonged or repeated exposure can cause irritation, defatting and dermatitis. Excessive inhalation of vapors can cause nasal and respiratory irritation. Central nervous system effects include dizziness, weakness, fatigue, nausea, headache, possible unconsciousness, and even death. Can cause gastrointestinal irritation, vomiting and diarrhea. Aspiration of material into the lungs can cause chemical pneumonitis which can be fatal.

TOLUENE (1)(2) Overexposure - while there is no evidence that industrial acceptable levels of Toluene (e.g. The TLV) have produced cardiac effects in humans, animal studies have shown that inhalation of high levels of toluene produced cardiac sensitization. Such sensitization may cause fatal changes in heart rhythms. This latter effect was shown to be enhanced by hypoxia or the injection of adrenaline-like agents. Rats exposed to 1400 PPM or 1200 PPM of toluene for 14h/day for 4 or 5 weeks (respectively) exhibited high frequency hearing deficits. The significance of this information to man is unknown.

ACETONE (1) Overexposure - High vapor concentrations may irritate the eyes and mucous membranes of the nose and throat. Severe overexposure (i.e. > 12,000 PPM) can cause CNS depression including nausea, vomiting, headaches, incoordination and dizziness, repeated or prolonged contact of the liquid with the skin can cause redness and a dry, scaly and fissured dermatitis. Eye contact resulting from splashes or high vapor concentration exposure is irritating. When acetone was absorbed systemically, it caused cataracts in laboratory animals. When ingested the effects are intoxicating. These acute symptoms might include early emotional instability, impaired motor coordination, nausea, vomiting, drowsiness, stupor and finally coma. 10 to 20 ml has been taken orally without ill effects.

VARNISH MAKERS & PAINTER NAPHTHA Overexposure - May cause skin irritation upon prolonged or repeated contact. Central nervous system depression in high concentrations.

ETHYLENE GLYCOL MONOPROPYL ETHER (1) Overexposure - Exposure of experimental animals via inhalation, skin contact, or ingestion produces a toxic effect on the red blood cell. In studies of the related chemical, 2-butoxyethanol, rats were at least three (3) times more sensitive than humans to this toxic effect.

SECTION 4: FIRST AID MEASURES

EYE Immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention.

SKIN Wash affected areas with soap and water. Remove contaminated clothing. Consult a physician if irritation persists.

INGESTION Consult physician or poison control center immediately.

INHALATION Remove patient to fresh air. If breathing stops, begin artificial respiration. Treat symptomatically. Seek immediate medical attention.

SECTION 5: FIRE FIGHTING MEASURES

FLAMMABILITY CLASSIFICATION OSHA: Class 1A

DOT Consumer Commodity ORMD

FLAMMABLE LIMITS Flash point below 73°F and a boiling point below 100°F.

AUTOIGNITION TEMPERATURE Not applicable.

HAZARDOUS COMBUSTION PRODUCTS Not available.

EXTINGUISHING MEDIA Use carbon dioxide, dry chemical, or foam.

FIRE FIGHTING INSTRUCTIONS Water spray may be ineffective. Water may be used to cool containers to prevent bursting. If water is used, fog nozzles are preferable. Wear goggles and self contained breathing apparatus.

FIRE AND EXPLOSION HAZARDS Exposure to heat may cause bursting of aerosol can.

5.5 Special White Spray Paint

SECTION 6: ACCIDENTAL RELEASE MEASURES

CLEAN-UP PROCEDURES Remove any sources of ignition, avoid breathing vapors, ventilate area, wipe up with inert materials and place in appropriate container.

SECTION 7: HANDLING AND STORAGE

Precautions to be taken in handling and storing: Avoid breathing sanding dust. Avoid storage at temperatures greater than 90°F or near heat, sparks, electrical equipment or open flames.

SECTION 8: EXPOSURE CONTROLS, PERSONAL PROTECTION

ENGINEERING CONTROLS Maintain air concentrations in work spaces in accordance with standards in section 2.

RESPIRATORY PROTECTION Wear a self contained breathing apparatus for concentrations above TLV limits.

SKIN PROTECTION Use neoprene rubber gloves to prevent skin contact.

EYE PROTECTION Use safety eye wear with splash guards or side shields under conditions where spray mist might get into eyes.

VENTILATION Mechanical exhaust ventilation sufficient to maintain exposure levels below the applicable exposure limit.

OTHER PROTECTIVE EQUIPMENT Remove and wash contaminated clothing before reuse.

HYGIENIC PRACTICES Wash hands before eating, smoking, or using the washroom.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

EVAPORATION RATE	faster than ether
% VOLATILE	79.5%/wt
BOILING POINT	below 100°F
MELTING POINT	not available
VAPOR PRESSURE (mmHg)	not available
VAPOR DENSITY	heavier than air
SOLUBILITY IN WATER	not available
SPECIFIC GRAVITY (WATER=1)	not available
PH	not available
ODOR	Spray paint
APPEARANCE	Aerosol
VAPOR PRESSURE AEROSOL CANS	0 p.s.i.a @ 70°F

SECTION 10: STABILITY AND REACTIVITY

CHEMICAL STABILITY Stable.

CONDITIONS TO AVOID Do not store above 120 degrees (F). Keep from sparks, pilot lights or open flame.

INCOMPATIBILITY (Materials to avoid): none known.

HAZARDOUS DECOMPOSITION PRODUCTS May produce hazardous fumes when heated to decomposition. Fumes may contain carbon dioxide and/or carbon monoxide.

HAZARDOUS POLYMERIZATION Will not occur.

SECTION 11: TOXICOLOGICAL INFORMATION

See Section 3

SECTION 12: ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL INFORMATION No information.

CHEMICAL FATE INFORMATION No information

SECTION 13: DISPOSAL CONSIDERATIONS

Do not incinerate aerosol, dispose of in accordance with local, state, and federal regulations. Do not place aerosol cans in home compactor. Do not puncture.

SECTION 14: TRANSPORT INFORMATION

DOT CLASSIFICATION Consumer Commodity ORMD

SECTION 15: REGULATORY INFORMATION

No additional information.

SECTION 16: OTHER INFORMATION

MSDS #	011
REVISION DATE	September 12, 1994 (Revision 0)
SUPERSEDED DATE	Not applicable

The MSDS information is believed accurate to the best of our knowledge. Therma-Tru does not assume any legal responsibility for reliance on the same.

5.5 Special White Spray Paint

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**MATERIAL SAFETY DATA SHEET
THERMA-TRU CORPORATION**

**SECTION 1: CHEMICAL PRODUCT AND COMPANY
INFORMATION**

PRODUCT NAME	Smooth-Star Spray Primer
PRODUCT CODE	MSWHSABP
MANUFACTURER	Therma-Tru Corporation 108 Mutzfeld Road Butler, IN 46721
EMERGENCY PHONE	219-868-5811 x4266 or x4258 (7 a.m. To 5 p.m. EST) 219-868-5811 x4215 (5 p.m. To 7 a.m. EST)

**SECTION 2: COMPOSITION, INFORMATION ON
INGREDIENTS**

This section lists all components in this mixture that are defined as hazardous that are present above 1 wt% or 0.1 wt% if carcinogenic; could be released in concentration is excess of the threshold limit concentrations; act as marine pollutants, or are listed in SARA Title III, Section 313.

<u>CHEMICAL NAME AND NUMBER</u>	<u>WT%</u>	<u>ACGIH TLV (PPM)</u>	<u>OSHA PEL (PPM)</u>	<u>LEL</u>
Aliphatic Hydrocarbon 64742-89-8	20	300	300	No Data
Clay 12174-11-7	5.0%	10mg/m ³	15mg/m ³	No Data
Titanium dioxide 113463-67-7	5	10mg/m ³	15mg/m ³	No Data
Calcium Carbonate 471-34-1	10	10mg/m ³	15mg/m ³	No Data
Talc 14807-6-6	10	0.1mg/m ³	2mg/m ³	No Data
Silicate 1332-58-7	<5.0%	10mg/m ³	15mg/m ³	No Data
Petroleum Distillates 64742-95-6	<5.0%	50	50	No Data
Acetone 67-64-1	11	750	No Data	No Data
Propane 74-98-6	15	1000	No Data	No Data
Butane 106-97-8	15	800	No Data	No Data

5.6 Smooth-Star Spray Primer

SECTION 3: HAZARDS IDENTIFICATION

THRESHOLD LIMIT VALUE See Section 2

HEALTH HAZARDS

ACUTE EFFECTS OF OVEREXPOSURE

EYE CONTACT Liquid or vapor may cause irritation.

SKIN CONTACT May cause defatting of skin on prolonged contact.

INGESTION Can cause depression of central nervous system, nausea, vomiting and diarrhea. Harmful or fatal if swallowed.

INHALATION High concentrations of vapor may cause headache, drowsiness, dizziness, nausea and respiratory irritation.

HEALTH HAZARD Intentional misuse by deliberately concentrating or inhaling the contents may be harmful or fatal.

SECTION 4: FIRST AID MEASURES

EYE Flush immediately with plenty of cool water for at least 15 minutes.

SKIN Remove any contaminated clothing, wash before reuse. Wash with cool water for at least 15 minutes.

INGESTION Give person water to dilute. Call a physician or poison control center. If conditions of exposure persist or victim is unconscious, call a physician or seek medical attention immediately.

INHALATION Move person to fresh air immediately. If person has stopped breathing give artificial respiration.

SECTION 5: FIRE FIGHTING MEASURES

FLAMMABILITY CLASSIFICATION OSHA: Class 1A

DOT: Consumer Commodity ORMD

FLAMMABLE LIMITS Flash point below 73°F and a boiling point below 100°F.

AUTOIGNITION TEMPERATURE Not applicable.

HAZARDOUS COMBUSTION PRODUCTS Not available.

EXTINGUISHING MEDIA Use carbon dioxide, dry chemical, or foam.

FIRE FIGHTING INSTRUCTIONS Water spray may be ineffective. Water may be used to cool containers to prevent bursting. If water is used, fog nozzles are preferable. Wear goggles and self contained breathing apparatus.

FIRE AND EXPLOSION HAZARDS Exposure to heat may cause bursting of aerosol can.

SECTION 6: ACCIDENTAL RELEASE MEASURES

CLEAN-UP PROCEDURES Stop leakage if no risk is evident. Absorb small spills with an appropriate absorbent material. Wear appropriate protective equipment and respirators. Report large spill as applicable laws requires.

SECTION 7: HANDLING AND STORAGE

Follow NFPA 30 Flammable and Combustible liquids Code for storage and handling. Consult applicable laws. Store in a cool place. Keep away from open flame, heat and sparks. Do not store above 120°F.

SECTION 8: EXPOSURE CONTROLS, PERSONAL PROTECTION

ENGINEERING CONTROLS Not available.

RESPIRATORY PROTECTION Use a NIOSH/MSHA TC 23 approved respirator or equivalent when vapor/mist levels are above allowable exposure limits or if headache or dizziness is experienced.

SKIN PROTECTION Use appropriate gloves for prolonged exposure..

EYE PROTECTION Use safety eye wear with splash guards or side shields under conditions where spray mist might get into eyes.

VENTILATION Use only explosion proof exhaust equipment. Exhaust only into non-explosive areas. Maintain vapor concentrations below allowable exposure limits.

OTHER PROTECTIVE EQUIPMENT Protect skin with appropriate clothing.

HYGIENIC PRACTICES Wash hands and exposed areas after use.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

EVAPORATION RATE	faster than n-Butyl Acetate
% VOLATILE	not available
BOILING POINT	not available
MELTING POINT	not available
VAPOR PRESSURE (MMHG)	not available
VAPOR DENSITY	heavier than air
SOLUBILITY IN WATER	not available
SPECIFIC GRAVITY (WATER=1)	0.9
PH	not available
ODOR	Spray paint
APPEARANCE	Aerosol
VAPOR PRESSURE AEROSOL CANS	not available

5.6 Smooth-Star Spray Primer

SECTION 10: STABILITY AND REACTIVITY

CHEMICAL STABILITY Stable.

CONDITIONS TO AVOID Do not store above 120°F. Do not puncture container.

Danger, extremely flammable. Do not expose to sun or heat over 120°F.

INCOMPATIBILITY (Materials to avoid): Open flame, pilot lights, cigarettes, etc.

HAZARDOUS DECOMPOSITION PRODUCTS Carbon monoxide on incomplete combustion.

HAZARDOUS POLYMERIZATION Will not occur.

SECTION 11: TOXICOLOGICAL INFORMATION

See section 3.

SECTION 12: ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL INFORMATION No information.

CHEMICAL FATE INFORMATION No information.

SECTION 13: DISPOSAL CONSIDERATIONS

Refer to applicable laws governing waste disposal and/or reclamation of recovered material. Place all recovered material into properly marked containers for disposal and/or transportation. Do not incinerate. Do not discard container in garbage compactor.

SECTION 14: TRANSPORT INFORMATION

DOT CLASSIFICATION Consumer Commodity ORMD

SECTION 15: REGULATORY INFORMATION

No additional information.

SECTION 16: OTHER INFORMATION

MSDS #	021
REVISION DATE	January 01, 2000 (Revision 0)
SUPERSEDED DATE	Not applicable

The MSDS information is believed accurate to the best of our knowledge. Therma-Tru does not assume any legal responsibility for reliance on the same.

<i>Therma-Tru White Caulk</i>	6.1
<i>Dent Repair Kit (Resin Component)</i>	6.2
<i>Dent Repair Kit (Cream Hardener)</i>	6.3
<i>Ruvo Bits</i>	6.4
<i>Moistureshield End Rails</i>	6.5

**MATERIAL SAFETY DATA SHEET
THERMA-TRU CORPORATION**

**SECTION 1: CHEMICAL PRODUCT AND COMPANY
INFORMATION**

PRODUCT NAME	Caulk
PRODUCT CODE	RPFDCAULK
MANUFACTURER	Therma-Tru Corporation 108 Mutzfeld Road Butler, IN 46721
EMERGENCY PHONE	219-868-5811 x4266 or x4258 (7 a.m. to 5 p.m. EST) 219-868-5811 x4215 (5 p.m. to 7 a.m. EST)

**SECTION 2: COMPOSITION, INFORMATION ON
INGREDIENTS**

This section lists all components in this mixture that are defined as hazardous that are present above 1 wt% or 0.1 wt% if carcinogenic; could be released in concentration in excess of the threshold limit concentrations; act as marine pollutants, or are listed in SARA Title III, Section 313.

<u>CHEMICAL NAME AND NUMBER</u>	<u>WT%</u>	<u>OSHA PEL (PPM)</u>	<u>ACGIH STEL (PPM)</u>
Mineral Spirits 8052-41-3	5-10	100 PPM TWA	100 PPM TWA
VM&P Naphtha 64742-89-8	5-10	300 PPM TWA	300 PPM TWA

SECTION 3: HAZARDS IDENTIFICATION

PRIMARY ENTRY ROUTES Inhalation of solvent vapors and skin contact.

HEALTH HAZARDS

ACUTE EFFECTS May irritate eyes, skin, nose, and upper respiratory tract. Harmful if inhaled. Harmful or fatal if swallowed. If ingested, this product may cause vomiting, diarrhea and depressed respiration. Inhalation may affect the brain or nervous system causing dizziness, headaches, or nausea. Aspiration of material into the lungs due to vomiting can cause chemical pneumonitis which can be fatal.

SECTION 4: FIRST AID MEASURES

EYE Flush with large amounts of water for 15 minutes. Contact a physician immediately.

SKIN Wash immediately with soap and water.

INGESTION Do not induce vomiting, contact a physician or regional poison control center immediately.

INHALATION Remove to fresh air, contact a physician immediately.

SECTION 5: FIRE FIGHTING MEASURES

FLAMMABLE LIMITS Not available.

AUTOIGNITION TEMPERATURE Not applicable.

HAZARDOUS COMBUSTION PRODUCTS Oxides of carbon and nitrogen.

EXTINGUISHING MEDIA Use carbon dioxide, dry chemical, or foam.

FIRE FIGHTING INSTRUCTIONS Containers may explode if exposed to extreme heat.
Eliminate source of ignition.

SECTION 6: ACCIDENTAL RELEASE MEASURES

CLEAN-UP PROCEDURES Use absorbent material or scrape up dried material and place into containers.

SECTION 7: HANDLING AND STORAGE

HANDLING No information

STORAGE Do not expose to extreme heat or freezing.

SECTION 8: EXPOSURE CONTROLS, PERSONAL PROTECTION

ENGINEERING CONTROLS Provide sufficient mechanical ventilation (local or general exhaust) to maintain exposure below PEL and TLV. Vapors are heavier than air and will collect in low areas.

RESPIRATORY PROTECTION If 8-hour exposure limit or value is exceeded for any component, use an approved NIOSH/OSHA respirator.

SKIN PROTECTION Solvent impervious gloves.

EYE PROTECTION Goggles or glasses with side shields.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

BOILING POINT	212°F
MELTING POINT	Not available
VAPOR PRESSURE (mmHg)	30 mmHg @ 100°F (VM&P naphtha)
VAPOR DENSITY	Heavier than air
SOLUBILITY IN WATER	Negligible
SPECIFIC GRAVITY (WATER=1)	1.46 (water =1)
PH	Not available
ODOR	Petroleum Distillate Odor.
APPEARANCE	Opaque Paste.

SECTION 10: STABILITY AND REACTIVITY

CHEMICAL STABILITY	Stable.
INCOMPATIBILITY	(Materials to avoid) Strong oxidizers and caustics.
HAZARDOUS DECOMPOSITION PRODUCTS	Normal combustion products, oxides of carbon and nitrogen.
HAZARDOUS POLYMERIZATION	Will not occur.

SECTION 11: TOXICOLOGICAL INFORMATION

This product is not considered a carcinogen by NTP, IARC, and OSHA. Reports have associated permanent brain and nervous system damage with prolonged and repeated occupational overexposure to solvents.

SECTION 12: ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL INFORMATION	No information
CHEMICAL FATE INFORMATION	No information

SECTION 13: DISPOSAL CONSIDERATIONS

Dispose of according to federal, state, and local regulations. Discarded material should be incinerated at a permitted facility. Do not reuse empty container.

SECTION 14: TRANSPORT INFORMATION

DOT CLASSIFICATION Consumer Commodity ORMD

6.1 Therma-Tru White Caulk

SECTION 15: REGULATORY INFORMATION

EPA WASTE CODE IF DISCARDED none

SECTION 16: OTHER INFORMATION

MSDS #	013
REVISION DATE	September 6, 1994 (Revision 0)
SUPERSEDED DATE	Not applicable

The MSDS information is believed accurate to the best of our knowledge. Therma-Tru does not assume any legal responsibility for reliance on the same.

**MATERIAL SAFETY DATA SHEET
THERMA-TRU CORPORATION**

**SECTION 1: CHEMICAL PRODUCT AND COMPANY
INFORMATION**

PRODUCT NAME	Dent Repair Kit (Resin Component)
PRODUCT CODE	MS00DRK
MANUFACTURER	Therma-Tru Corporation 108 Mutzfeld Road Butler, IN 46721
EMERGENCY PHONE	219-868-5811 x4266 or x4258 (7 a.m. to 5 p.m. EST) 219-868-5811 x4215 (5 p.m. to 7 a.m. EST)

**SECTION 2: COMPOSITION, INFORMATION ON
INGREDIENTS**

This section lists all components in this mixture that are defined as hazardous that are present above 1 wt% or 0.1 wt% if carcinogenic; could be released in concentration is excess of the threshold limit concentrations; act as marine pollutants, or are listed in SARA Title III, Section 313.

<u>CHEMICAL NAME AND NUMBER</u>	<u>WT%</u>	<u>OSHA PEL</u>	<u>ACGIH TLV</u>
Unsaturated Polyester Base Resin Mixture	25-27	N/A	N/A
Styrene 100-42-5	13-15	50 PPM	50 PPM
Inert Fillers Mixture	59-61	*	**
Nuisance Dust		OSHA PEL*	ACGIH TLV **
Total Dust		10 mg/m ³	15 mg/m ³
Respirable Dust		5 mg/m ³	5 mg/m ³

6.2 Dent Repair Kit (Resin Component)

SECTION 3: HAZARDS IDENTIFICATION

HEALTH HAZARDS

EYE Can cause eye irritation.

SKIN Can cause skin irritation.

INGESTION Ingestion can cause gastrointestinal irritation, vomiting, diarrhea.

INHALATION Excessive inhalation of vapors can cause nasal and respiratory irritation; central nervous system effects include dizziness, weakness, fatigue, nausea, headache, possible unconsciousness, and even asphyxiation.

ACUTE EFFECTS May irritate eyes, skin, nose, and upper respiratory tract. Harmful if inhaled. Harmful or fatal if swallowed. If ingested, this product may cause vomiting, diarrhea and depressed respiration. Inhalation may affect the brain or nervous system causing dizziness, headaches, or nausea. Aspiration of material into the lungs due to vomiting can cause chemical pneumonitis which can be fatal.

SECTION 4: FIRST AID MEASURES

EYE Flush with large amounts of water, lifting upper and lower lids occasionally. Get medical attention.

SKIN Wash skin and contaminated clothing thoroughly with soap and water.

INGESTION Do not induce vomiting. Aspiration into lungs can cause chemical pneumonitis. See a physician.

INHALATION Remove to fresh air. If breathing is difficult, administer oxygen. If breathing has stopped, give CPR. Keep person warm, quiet and get medical attention.

SECTION 5: FIRE FIGHTING MEASURES

FLAMMABLE LIMITS LEC: 1.1% VEL: 6.1%

FLASHPOINT 89-90 Deg. F closed cup (SETA)

AUTOIGNITION TEMPERATURE Not available.

HAZARDOUS COMBUSTION PRODUCTS Carbon monoxide, carbon dioxide, low molecular weight hydrocarbons, organic acids.

EXTINGUISHING MEDIA Foam, carbon dioxide, or dry chemical.

FIRE FIGHTING INSTRUCTIONS Wear NIOSH/MSHA approved self-contained breathing apparatus to avoid inhalation of smoke.

SECTION 6: ACCIDENTAL RELEASE MEASURES

CLEAN-UP PROCEDURES Not available.

SECTION 7: HANDLING AND STORAGE

HANDLING No information..

STORAGE Avoid exposure to: excessive heat or open flame; storage in open containers; long exposure to intense sunlight; or contamination with oxidizing agents.

SECTION 8: EXPOSURE CONTROLS, PERSONAL PROTECTION

ENGINEERING CONTROLS Provide sufficient ventilation to maintain exposure below TLV for styrene.

RESPIRATORY PROTECTION If concentration levels for styrene are above recommended exposure, organic vapor respirator should be worn. Use appropriate dustmask when sanding, cutting, or grinding cured materials as nuisance dust may be created.

SKIN PROTECTION Normal work clothes covering arms and legs. gloves should also be worn.

EYE PROTECTION Eye protection should be worn when working with material in uncured state, or when cutting, grinding, or sanding cured materials.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

BOILING POINT	Not Available
MELTING POINT	Not Available
VAPOR PRESSURE (mmHg)	Not Available
VAPOR DENSITY	3.6 (for Styrene) Air=1
SOLUBILITY IN WATER	Negligible
SPECIFIC GRAVITY (WATER=1)	1.55 - 1.67 (water =1)
PH	Not Available
ODOR	Styrene Odor
APPEARANCE	Thick Paste

SECTION 10: STABILITY AND REACTIVITY

CHEMICAL STABILITY Stable.

INCOMPATIBILITY Avoid contact with: strong alkalies, strong mineral acids and oxidizing agents.

HAZARDOUS DECOMPOSITION PRODUCTS See section 5.

HAZARDOUS POLYMERIZATION Can occur. Avoid exposure to excessive heat, peroxides and polymerization catalysts.

SECTION 11: TOXICOLOGICAL INFORMATION

The international agency for research on cancer (IARC) has classified styrene in group 2B (possibly carcinogenic to humans). This classification is not based on any significant new evidence that styrene may be carcinogenic, but rather on a revised definition for group 2B and consideration of new data on styrene oxide. A number of lifetime animal studies with styrene including those conducted in the NOI bioassay program have not shown styrene to be carcinogenic. There is currently not sufficient evidence to indicate that styrene is carcinogenic to humans.

Overexposure to styrene has been found to cause the following effects in laboratory animals: Liver abnormalities, kidney damage, and lung damage.

6.2 Dent Repair Kit (Resin Component)

SECTION 12: ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL INFORMATION No information
CHEMICAL FATE INFORMATION No information

SECTION 13: DISPOSAL CONSIDERATIONS

Dispose of according to federal, state, and local regulations.

SECTION 14: TRANSPORT INFORMATION

DOT CLASSIFICATION Resin solution, 3, UN1866, PGIII
May be reclassified an ORM-D, consumer commodity in gallon size or smaller for domestic shipments only. See 49CFR173.150

SECTION 15: REGULATORY INFORMATION

EPA WASTE CODE IF DISCARDED No information available

SECTION 16: OTHER INFORMATION

MSDS # 14A
REVISION DATE August 30, 1994 (Revision 0)
SUPERSEDED DATE Not applicable

The MSDS information is believed accurate to the best of our knowledge. Therma-Tru does not assume any legal responsibility for reliance on the same.

**MATERIAL SAFETY DATA SHEET
THERMA-TRU CORPORATION**

**SECTION 1: CHEMICAL PRODUCT AND COMPANY
INFORMATION**

PRODUCT NAME	Dent Repair Kit (35% BPO Cream Hardener)
PRODUCT CODE	MS00DRK
MANUFACTURER	Therma-Tru Corporation 108 Mutzfeld Road Butler, IN 46721
EMERGENCY PHONE	219-868-5811 x4266 or x4258 (7 a.m. to 5 p.m. EST) 219-868-5811 x4215 (5 p.m. to 7 a.m. EST)

**SECTION 2: COMPOSITION, INFORMATION ON
INGREDIENTS**

This section lists all components in this mixture that are defined as hazardous that are present above 1 wt% or 0.1 wt% if carcinogenic; could be released in concentration is excess of the threshold limit concentrations; act as marine pollutants, or are listed in SARA Title III, Section 313.

<u>CHEMICAL NAME AND NUMBER</u>	<u>WT%</u>	<u>OSHA PEL (PPM)</u>	<u>ACGIH TLV (PPM)</u>
Benzoyl Peroxide 94-36-0	34-35	NOT AVAILABLE	5 mg/m ³

SECTION 3: HAZARDS IDENTIFICATION

HEALTH HAZARDS

EYE Contact with eyes can cause irritation, redness, tearing, blurred vision, and/or swelling.

SKIN Contact with skin can cause irritation, (minor itching, burning and/or redness).

INGESTION Ingestion can cause gastrointestinal irritation, nausea, vomiting, diarrhea. May be toxic.

INHALATION Inhalation of vapors can cause nasal and respiratory irritation.

6.3 Dent Repair Kit (Cream Hardener)

SECTION 4: FIRST AID MEASURES

EYE For eye contact, flush promptly with excess water for at least 15 minutes. Consult a physician.

SKIN For skin contact, wash promptly with soap and excess water.

INGESTION If ingested, do not induce vomiting. Give victim a glass of water. Call a physician immediately.

INHALATION If inhaled, remove victim from exposure to well ventilated area. Make victim comfortably warm, but not hot. Use oxygen or artificial respiration as required. Consult physician.

SECTION 5: FIRE FIGHTING MEASURES

FLAMMABLE PROPERTIES Combustible when dry. When material is confined during exposure to a fire, an explosive decomposition may occur.

FLAMMABLE LIMITS Not available

FLASHPOINT Not available

AUTOIGNITION TEMPERATURE Not available.

HAZARDOUS COMBUSTION PRODUCTS Carbon dioxide, carbon monoxide, carbon, and possibly flammable gases.

EXTINGUISHING MEDIA Foam, carbon dioxide, or dry chemical.

FIRE FIGHTING INSTRUCTIONS None.

SECTION 6: ACCIDENTAL RELEASE MEASURES

CLEAN-UP PROCEDURES

SMALL SPILL Wash and clean up small spill with water and detergent.

LARGE SPILL Not applicable

SECTION 7: HANDLING AND STORAGE

HANDLING Avoid contact with eyes and skin.

STORAGE Do not store the product above 100°F. Keep the product away from heat, open flame, and other sources of ignition. Avoid contact with strong acids, alkalies, and oxidizers. Do not freeze -separation may occur upon thawing.

SECTION 8: EXPOSURE CONTROLS, PERSONAL PROTECTION

ENGINEERING CONTROLS Use adequate ventilation in volume and pattern to keep TLV/PEL below recommended levels. General mechanical ventilation is acceptable.

RESPIRATORY PROTECTION With general room ventilation, does not require a respirator. If room ventilation is lacking, use NIOSH/MSHA approved respirator to remove vapors. Use an air supplied respirator if necessary.

SKIN PROTECTION To prevent prolonged exposure, use rubber gloves. Wear protective clothing to keep from exposure to skin.

EYE PROTECTION Safety glasses or goggles with splash guard or side shield.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

BOILING POINT	Decomposes
MELTING POINT	Decomposes
VAPOR PRESSURE (mmHg)	Not Available
VAPOR DENSITY	>1 (air=1)
SOLUBILITY IN WATER	Insoluble
SPECIFIC GRAVITY (WATER=1)	1.20 (water =1)
PH	Not Applicable
ODOR	Not Available
APPEARANCE	Red, white, or blue cream

SECTION 10: STABILITY AND REACTIVITY

CHEMICAL STABILITY Unstable

INCOMPATIBILITY Strong alkalis, oxidizers, reducing agents, mineral acids, metal salts.

HAZARDOUS DECOMPOSITION PRODUCTS Carbon dioxide, carbon monoxide, carbon, and possibly flammable gases.

HAZARDOUS POLYMERIZATION Will not occur

SECTION 11: TOXICOLOGICAL INFORMATION

EYE See section 3

SKIN See section 3

INGESTION See section 3

INHALATION See section 3

SUBCHRONIC No data available

CHRONIC/CARCINOGENICITY Benzoyl peroxide has caused tumorigenic effects in laboratory animals.

TERATOLOGY Not determined to be a hazard.

REPRODUCTION No data available

MUTAGENICITY Not determined to be a hazard.

6.3 Dent Repair Kit (Cream Hardener)

SECTION 12: ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL INFORMATION No information
CHEMICAL FATE INFORMATION No information

SECTION 13: DISPOSAL CONSIDERATIONS

Dispose of in accordance with local, state, and federal regulations. Caution! Do not incinerate in closed containers.

SECTION 14: TRANSPORT INFORMATION

DOT CLASSIFICATION Not restricted
CHEMICAL NAME <35% Benzoyl Peroxide Paste
CHEMICAL FAMILY Organic Peroxide

SECTION 15: REGULATORY INFORMATION

HMIS RATING
HEALTH 2
FIRE 2
REACTIVITY 2
PERSONAL PROTECTION See section 8

CALIFORNIA PROPOSITION 65 Trace amounts of some chemicals known to the state of California to cause cancer, birth defects, or other reproductive harm may be present in this product.

SARA 313

SUPPLIER NOTIFICATION This product contains the following toxic chemicals subject to the reporting requirements of Section 313 of the Emergency Planning And Community Right-to-Know Act Of 1986 and 40 CFR 372:

CAS#	Chemical Name	% By Weight
94-36-0	Benzoyl Peroxide	34-35%

SECTION 16: OTHER INFORMATION

MSDS #	014B
REVISION DATE	August 30, 1994 (Revision 0)
SUPERSEDED DATE	Not applicable

The MSDS information is believed accurate to the best of our knowledge. Therma-Tru does not assume any legal responsibility for reliance on the same.

**MATERIAL SAFETY DATA SHEET
THERMA-TRU CORPORATION**

**SECTION 1: CHEMICAL PRODUCT AND COMPANY
INFORMATION**

PRODUCT NAME	RUVO BITS
PRODUCT CODE	MSFCBIT, MS00BIT, RPRUV08REV
MANUFACTURER	Therma-Tru Corporation 108 Mutzfeld Road Butler, IN 46721
EMERGENCY PHONE	219-868-5811 x4266 or x4258 (7 a.m. to 5 p.m. EST) 219-868-5811 x4215 (5 p.m. to 7 a.m. EST)

**SECTION 2: COMPOSITION, INFORMATION ON
INGREDIENTS**

This section lists all components in this mixture that are defined as hazardous that are present above 1 wt% or 0.1 wt% if carcinogenic; could be released in concentration is excess of the threshold limit concentrations; act as marine pollutants, or are listed in SARA Title III, Section 313.

<u>CHEMICAL NAME AND NUMBER</u>	<u>WT%</u>	<u>OSHA PEL (PPM)</u>	<u>ACGIH TLV (PPM)</u>
Chromium 7440-47-3	4.4	0.5	0.5*
Iron 1309-37-1	87.1	10.0	5
Molybdenum 7439-98-7	5.3	10.0 Total Dust 5.0 Resp. Fract.	10
Nickel 7440-02-0	0.4	1.0	1*
Vanadium 1314-62-1	2.1	0.05 (dust) 0.05 (fume)	0.05*
Tungsten 7440-33-7	6.8	5.0	5

*regulated as a toxic chemical under Section 313, Sara Title III And 40 CFR 372.

PEL and TLV are MG/M3

SECTION 3: HAZARDS IDENTIFICATION

HEALTH HAZARDS We do not consider this product in the form it is sold to constitute a physical hazard or a health hazard. Subsequent operations such as abrading, melting, welding, cutting or processing in any other fashion that causes a release of dust or fume may cause some of the ingredients to change to a form which could affect exposed workers.

PRIMARY ROUTES OF ENTRY Inhalation, eye contact, skin contact, ingestion

EFFECTS OF OVEREXPOSURE:

ACUTE Short term overexposure to the dust, fumes and/or oxides of certain components of steel products may cause irritation of the eyes, nose, or throat; or, may result in metal fume fever characterized by a metallic or sweet taste, dryness and irritation of the throat, wheezing, discoloration of the tongue, and flu-like symptoms.

CHRONIC Excessive and prolonged overexposure to the dust fumes and/or oxides of certain components of steel products may result in chronic interstitial pneumonitis, discoloration of the skin and hair; allergic bronchitis, neoplasms, or loss of coordination and balance.

Refer to section 11 for the effects of overexposure to specific elements.

SECTION 4: FIRST AID MEASURES

EYE Flush well with water to remove particulate. Get medical attention.

SKIN Brush off excess dust. Wash area well with soap and water.

INGESTION Seek medical help if large quantities of material have been ingested.

INHALATION Remove to fresh air if condition continues, consult physician.

SECTION 5: FIRE FIGHTING MEASURES

FLAMMABLE PROPERTIES Not a fire hazard

SECTION 6: ACCIDENTAL RELEASE MEASURES

CLEAN-UP PROCEDURES Not applicable

SECTION 7: HANDLING AND STORAGE

HANDLING & STORAGE Not applicable

SECTION 8: EXPOSURE CONTROLS, PERSONAL PROTECTION

ENGINEERING CONTROLS General ventilation is recommended. Local as required.

RESPIRATORY PROTECTION If fumes occur and tlv are indicated in section 2 is exceeded, provide NIOSH approved respirators.

SKIN PROTECTION As required

EYE PROTECTION Recommended

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

BOILING POINT	5000°F
MELTING POINT	2500°F
VAPOR PRESSURE (mmHg)	Not applicable
VAPOR DENSITY	Not applicable
SOLUBILITY IN WATER	Insoluble
SPECIFIC GRAVITY (WATER=1)	7.8-8.2 (water =1)
PH	Not Applicable.
ODOR	None
APPEARANCE	Steel cutting bit

SECTION 10: STABILITY AND REACTIVITY

CHEMICAL STABILITY Stable
INCOMPATIBILITY Reacts with strong acids to form hydrogen gas.
HAZARDOUS DECOMPOSITION PRODUCTS Metal oxides
HAZARDOUS POLYMERIZATION Will not occur

SECTION 11: TOXICOLOGICAL INFORMATION

EFFECTS OF OVEREXPOSURE TO SPECIFIC ELEMENTS

ACUTE:

CARBON (C) Irritation of the eyes and mucous membranes.
MANGANESE (Mn) Irritation of eyes, nose, and throat; metallic taste in the mouth; acute pneumonia and pneumonitis (respiratory disease).
IRON (FE) Irritation of eyes, nose, and throat; metal fume fever.
CHROMIUM (Cr) Irritation of eyes and mucous membranes; dermatitis, skin ulcers, and nasal septum perforation.
NICKEL (Ni) Irritation of eyes and mucous membranes; dermatitis, "nickel itch", pulmonary edema, asthma, headache, and vomiting.
MOLYBDENUM (Mo) Irritation of eyes and mucous membranes.
VANADIUM (V) As vanadium pentoxide dust or fumes, it may cause irritation of eyes, nose, and respiratory tract.
ALUMINUM (Al) Possible irritation of eyes and mucous membranes.
COBALT (Co) Irritation of eyes and mucous membranes.
COPPER (Cu) Irritation of eyes, nose, and throat; metal fume fever.
BORON(B) Irritation of nose and throat.
TANTALUM (Ta) Dust may cause slight irritation to eyes, nose, and throat.
TITANIUM (Ti) Considered a physiologically inert dust; however, high concentrations may cause irritation of eyes and mucous membranes.
TUNGSTEN (W) No adverse health effects have been reported in humans.

CHRONIC:

CARBON (C) Irritation of eyes and mucous membranes.
MANGANESE (Mn) Inhalation of fumes and dust can cause central nervous system disturbances, increased upper respiratory disorders and infections, cumulative lung damage, psychiatric disorders, liver cirrhosis, and anemia.

6.4 Ruvo Bits

IRON (Fe) Inhalation of iron oxide fumes and dust may cause chronic bronchitis, conjunctivitis; choroiditis, retinitis, and siderosis of tissues.

CHROMIUM (Cr) The toxicity and health hazards of chromium are heavily dependent upon its oxidation state. Trivalent and devalent chromium as in chromium metal and chromium-containing alloys have a low order of toxicity. The hexavalent form (chromates and chromic acids) may cause irritant and allergic contact dermatitis, skin ulcers and nasal irritation varying from rhinitis to perforation of the nasal septum. Reported carcinogen.

NICKEL (Ni) Nickel dust or fume can cause sensitization dermatitis, "nickel itch", and may cause cancer of the paranasal sinuses and lungs.

MOLYBDENUM (Mo) Human industrial poisoning by molybdenum has yet to be reported.

VANADIUM (V) As vanadium pentoxide dust or fumes, it may cause irritation of eyes, nose, and respiratory tract. (more severe than acute exposure), chronic bronchitis, and allergic skin rash.

ALUMINUM (Al) Possible irritation of eyes and mucous membranes. Reported as a cause of pulmonary fibrosis.

COBALT (Co) May cause allergic skin rashes and respiratory disease.

COPPER (Cu) Skin irritation; discoloration of the skin or the hair and metal fume fever.

BORON (B) Possible irritation of the respiratory tract and nose bleeds.

TANTALUM (Ta) Dust may cause slight irritation of the eyes, nose, and throat.

TITANIUM (Ti) Considered a physiologically inert dust; however, high concentrations may cause irritation of eyes and mucous membranes.

TUNGSTEN (W) No adverse health effects have been reported in humans.

SECTION 12: ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL INFORMATION	No information
CHEMICAL FATE INFORMATION	No information

SECTION 13: DISPOSAL CONSIDERATIONS

Discard in accordance with local, state, and federal regulations.

SECTION 14: TRANSPORT INFORMATION

Not regulated

SECTION 15: REGULATORY INFORMATION

No data

SECTION 16: OTHER INFORMATION

MSDS #	015
REVISION DATE	August 31, 1994 (Revision 0)
SUPERSEDED DATE	Not applicable

The MSDS information is believed accurate to the best of our knowledge. Therma-Tru does not assume any legal responsibility for reliance on the same.

**MATERIAL SAFETY DATA SHEET
THERMA-TRU CORPORATION**

**SECTION 1: CHEMICAL PRODUCT AND COMPANY
INFORMATION**

PRODUCT NAME	Moistureshield End Rails
MANUFACTURER	Therma-Tru Corporation 108 Mutzfeld Road Butler, IN 46721
EMERGENCY PHONE	219-868-5811 x4266 or x4258 (7 a.m. to 5 p.m. EST) 219-868-5811 x4215 (5 p.m. to 7 a.m. EST)

**SECTION 2: COMPOSITION, INFORMATION ON
INGREDIENTS**

This section lists all components in this mixture that are defined as hazardous that are present above 1 wt% or 0.1 wt% if carcinogenic; could be released in concentration in excess of the threshold limit concentrations; act as marine pollutants, or are listed in SARA Title III, Section 313.

<u>CHEMICAL NAME AND NUMBER</u>	<u>WT%</u>	<u>OSHA PEL (PPM)</u>	<u>ACGIH TLV (PPM)</u>
Polyolefin	N/A	N/A	N/A
Cedar wood fibers, deoiled	N/A	N/A	N/A

N/A = Not available

SECTION 3: HAZARDS IDENTIFICATION

HEALTH HAZARDS

POTENTIAL HEALTH EFFECTS

EYE Solid or dust may cause irritation or corneal injury due to mechanical action.

SKIN Essentially nonirritating to skin. Mechanical injury only.

INGESTION May cause choking if swallowed. Single dose oral toxicity is believed to be very low. Considered physiologically inert.

INHALATION Vapors are unlikely due to physical properties. Single exposure to dust is not likely to be hazardous.

6.5 Moistureshield End Rails

SECTION 4: FIRST AID MEASURES

EYE Irrigate immediately with water for at least 5 minutes. Mechanical irritation only.

SKIN Wash off in flowing water or shower.

INGESTION No adverse effects anticipated by this route of exposure incidental to proper industrial handling.

INHALATION No data available.

SECTION 5: FIRE FIGHTING MEASURES

FLAMMABLE PROPERTIES Dense smoke emitted when burned without sufficient oxygen. Accumulation of fine particles could pose explosion hazard.

FLAMMABLE LIMITS No data available.

AUTOIGNITION TEMPERATURE No data available.

HAZARDOUS COMBUSTION PRODUCTS No data available.

EXTINGUISHING MEDIA Water fog, foam, alcohol foam, carbon dioxide, dry chemical.

FIRE FIGHTING INSTRUCTIONS Wear positive pressure, self-contained breathing apparatus in any closed space.

SECTION 6: ACCIDENTAL RELEASE MEASURES

CLEAN-UP PROCEDURES

SMALL SPILL Sweep up and discard.

LARGE SPILL Not applicable

SECTION 7: HANDLING AND STORAGE

HANDLING & STORAGE Not applicable

SECTION 8: EXPOSURE CONTROLS, PERSONAL PROTECTION

ENGINEERING CONTROLS When cutting, provide local exhaust to control dust particles.

RESPIRATORY PROTECTION Wear dust mask when cutting or sanding.

SKIN PROTECTION Not required.

EYE PROTECTION As required to prevent dust or particles in eyes when cutting or sanding.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

BOILING POINT	Not applicable
MELTING POINT	Not applicable
VAPOR PRESSURE (mmHg)	Not applicable
VAPOR DENSITY	Not applicable
SOLUBILITY IN WATER	Insoluble
SPECIFIC GRAVITY (WATER=1)	0.855 (water=1)
PH	Not Applicable.
ODOR	Slight Cedar Wood
APPEARANCE	Wood-colored parts

SECTION 10: STABILITY AND REACTIVITY

CHEMICAL STABILITY	Stable
INCOMPATIBILITY	None
HAZARDOUS DECOMPOSITION PRODUCTS	Combustible gases when exposed to temperatures above 500 degrees f.
HAZARDOUS POLYMERIZATION	Will not occur

SECTION 11: TOXICOLOGICAL INFORMATION

EYE	See section 3
SKIN	See section 3
INGESTION	See section 3
INHALATION	See section 3
SUBCHRONIC	No data available
CHRONIC/CARCINOGENICITY	No data available
TERATOLOGY	No data available
REPRODUCTION	No data available
MUTAGENICITY	No data available

SECTION 12: ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL INFORMATION	No information
CHEMICAL FATE INFORMATION	No information

SECTION 13: DISPOSAL CONSIDERATIONS

Discard in accordance with local, state, and federal regulations.

6.5 Moistureshield End Rails

SECTION 14: TRANSPORT INFORMATION

Not regulated

SECTION 15: REGULATORY INFORMATION

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:

Not to have met any hazard category.

SECTION 16: OTHER INFORMATION

MSDS #	016
REVISION DATE	August 30, 1994 (Revision 0)
SUPERSEDED DATE	Not applicable

The MSDS information is believed accurate to the best of our knowledge. Therma-Tru does not assume any legal responsibility for reliance on the same.