

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 : BRIGHT GALVANIZING CO 9703257
 IDENTIFICATION NUMBER: 2117 838
 DATE PRINTED : 02/10/98

PRODUCT USE/CLASS : Hard hat/Aerosol

SUPPLIER:

Rust-Oleum Corporation
 11 Hawthorn Parkway
 Vernon Hills, Illinois
 60061 USA

MANUFACTURER:

Rust-Oleum Corporation
 11 Hawthorn Parkway
 Vernon Hills, Illinois
 60061 USA

(847) 367-7700 Rust-Oleum Corp.
 Mon.-Fri, 8:00 AM-4:30 PM

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PREPARER: LJW, PHONE: , PREPARE DATE: 01/05/98

SECTION 2 - COMPOSITION/INFORMATION ON INGREDIENTS
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ITEM	CHEMICAL NAME	CAS NUMBER	WT/WT % LESS THAN
01	Zinc Dust	7440-66-6	40.0 %
02	TOLUENE	108-88-3	30.0 %
03	LIQUIFIED PETROLEUM GAS	68476-85-7	15.0 %
04	NON-LEAF ALUMINUM PASTE	7429-90-5	10.0 %
05	XYLENE	1330-20-7	5.0 %
06	ALIPHATIC HYDROCARBON	64742-47-8	5.0 %
07	MINERAL SPIRITS	64742-88-7	5.0 %

EXPOSURE LIMITS

ITEM	ACGIH		OSHA		MEXICAN TLV-TWA	SKIN
	TLV-TWA	TLV-STEL	PEL-TWA	PEL-CEILING		
01	N.E.	N.E.	N.E.	N.E.	N.E.	NO
02	50 PPM	N.E.	200 PPM	300 PPM	N.E.	YES
03	1000 PPM	N.E.	1000 PPM	N.E.	N.E.	NO
04	10 MG/M ³	N.E.	15 MG/M ³	N.E.	N.E.	NO
05	100PPM	150PPM	100PPM	N.E.	N.E.	NO
06	N.E.	N.E.	N.E.	N.E.	N.E.	NO
07	100 PPM	N.E.	100 PPM	N.E.	N.E.	NO

(See Section 16 for abbreviation legend)

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SECTION 3 - HAZARDS IDENTIFICATION

*** EMERGENCY OVERVIEW ***: Harmful if inhaled. Harmful if swallowed. Extremely flammable liquid and vapor. Vapors may cause flash fire or explosion.

EFFECTS OF OVEREXPOSURE - EYE CONTACT: Causes eye irritation.

EFFECTS OF OVEREXPOSURE - SKIN CONTACT: Substance may cause slight skin irritation. Prolonged or repeated contact may cause skin irritation.

EFFECTS OF OVEREXPOSURE - INHALATION: Harmful if inhaled. High gas, vapor, mist or dust concentrations may be harmful if inhaled. Avoid breathing vapors or mists. High vapor concentrations are irritating to the eyes, nose, throat and lungs.

EFFECTS OF OVEREXPOSURE - INGESTION: Substance may be harmful if swallowed. Aspiration hazard if swallowed; can enter lungs and cause damage.

EFFECTS OF OVEREXPOSURE - CHRONIC HAZARDS: May cause central nervous system disorder (e.g., narcosis involving a loss of coordination, weakness, fatigue, mental confusion, and blurred vision) and/or damage. Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage. Overexposure to xylene in laboratory animals has been associated with liver abnormalities, kidney, lung, spleen and eye damage as well as anemia. Effects in humans have included liver and cardiac abnormalities. Overexposure to toluene in laboratory animals has been associated with liver abnormalities, kidney, lung and spleen damage. Effects in humans have included liver and cardiac abnormalities.

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

SECTION 4 - FIRST AID MEASURES

FIRST AID - EYE CONTACT: Hold eyelids apart and flush with plenty of water for at least 15 minutes. Get medical attention.

FIRST AID - SKIN CONTACT: Wash with soap and water. Get medical attention if irritation develops or persists.

FIRST AID - INHALATION: No Information.

FIRST AID - INGESTION: Aspiration hazard: Do not induce vomiting or give anything by mouth because this material can enter the lungs and cause severe lung damage. Get immediate medical attention.

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SECTION 5 - FIRE FIGHTING MEASURES

FLASH POINT: N.A.

LOWER EXPLOSIVE LIMIT: 0.9 %

UPPER EXPLOSIVE LIMIT: 9.5 %

AUTOIGNITION TEMPERATURE: ND

EXTINGUISHING MEDIA: DRY CHEMICAL FOAM WATER FOG

UNUSUAL FIRE AND EXPLOSION HAZARDS: FLASH POINT IS LESS THAN 20 DEG. F. - EXTREMELY FLAMMABLE LIQUID AND VAPOR! Water spray may be ineffective. Closed containers may explode when exposed to extreme heat due to buildup of steam. Closed containers may explode when exposed to extreme heat. Vapors may form explosive mixtures with air. Vapors can travel to a source of ignition and flash back. Keep containers tightly closed. Isolate from heat, electrical equipment, sparks and open flame. Perforation of the pressurized container may cause bursting of the can. Closed containers may explode when exposed to extreme heat.

SPECIAL FIREFIGHTING PROCEDURES: Evacuate area and fight fire from a safe distance.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Evacuate the area, remove all sources of ignition and ventilate well. Contain spilled liquid with sand or earth. DO NOT use combustible materials such as sawdust. Remove all sources of ignition, ventilate area and remove with inert absorbent and non-sparking tools. Dispose of according to local, state (provincial) and federal regulations. Do not incinerate closed containers.

SECTION 7 - HANDLING AND STORAGE

HANDLING: Wash thoroughly after handling. Wash hands before eating. Use only in a well-ventilated area. Follow all MSDS/label precautions even after container is emptied because it may retain product residues. Avoid breathing vapor or mist.

STORAGE: Keep containers tightly closed. Isolate from heat, electrical equipment, sparks and open flame. Do not store above 120 degrees F. Store large quantities in buildings designed and protected for storage of NFPA Class I flammable liquids. Contents under pressure. Do not expose to heat or store above 120 degrees F.

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SECTION 8 - EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS: Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Use explosion-proof ventilation equipment. Prevent build-up of vapors by opening all doors and windows to achieve cross-ventilation.

RESPIRATORY PROTECTION: A respiratory protection program that meets OSHA 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace

conditions warrant a respirator's use. 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: Use impervious gloves to prevent skin contact and absorption of this material through the skin. Nitrile or Neoprene gloves may afford adequate skin protection.

EYE PROTECTION: Use safety eyewear designed to protect against splash of liquids.

OTHER PROTECTIVE EQUIPMENT: Refer to safety supervisor or industrial hygienist for further information regarding personal protective equipment and its application.

HYGIENIC PRACTICES: Wash thoroughly with soap and water before eating, drinking or smoking.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

BOILING RANGE	: -34 - 401 F	VAPOR DENSITY	: Is heavier than air
ODOR	: SOLVENT	ODOR THRESHOLD	: ND
APPEARANCE	: LIQUID	EVAPORATION RATE:	Is faster than Ether
SOLUBILITY IN H2O	: SLIGHT		
FREEZE POINT	: ND	SPECIFIC GRAVITY:	0.8922
VAPOR PRESSURE	: ND	pH @ 0.0 %	: ND
PHYSICAL STATE	: LIQUID	VISCOSITY	: ND
COEFFICIENT OF WATER/OIL DISTRIBUTION: ND			

(See Section 16 for abbreviation legend)

SECTION 10 - STABILITY AND REACTIVITY

CONDITIONS TO AVOID: Avoid temperatures above 120 degrees F. Avoid all possible sources of ignition.

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SECTION 10 - STABILITY AND REACTIVITY

INCOMPATIBILITY: Incompatible with strong oxidizing agents, strong acids and strong alkalis.

HAZARDOUS DECOMPOSITION PRODUCTS: By open flame, carbon monoxide and carbon dioxide.

HAZARDOUS POLYMERIZATION: Will not occur under normal conditions.

STABILITY: This product is stable under normal storage conditions.

SECTION 11 - TOXICOLOGICAL PROPERTIES

COMPONENT TOXICOLOGICAL INFORMATION:

----- CHEMICAL NAME -----	----- LD50 -----	----- LC50 -----
Zinc Dust	N.A.	N.A.
TOLUENE	RAT 5000MG/KG	MOUSE 5320PPM 8HR
LIQUIFIED PETROLEUM GAS	N.E.	N.E.
NON-LEAF ALUMINUM PASTE	N.E.	N.E.
XYLENE	RAT 4300MG/KG	RAT 5000PPM 4HR
ALIPHATIC HYDROCARBON	>25 ml/kg (rat)	>700ppm-4hr(rat)
MINERAL SPIRITS	RAT >8ML/KG	RAT >1400PPM 4HR

SECTION 12 - ECOLOGICAL INFORMATION

ECOLOGICAL INFORMATION: Product is a mixture of listed components.

SECTION 13 - DISPOSAL CONSIDERATIONS

DISPOSAL METHOD: Dispose of material in accordance to local, state and federal regulations and ordinances. Do not allow to enter storm drains or sewer systems.

SECTION 14 - TRANSPORTATION INFORMATION

DOT PROPER SHIPPING NAME: AEROSOLS

DOT TECHNICAL NAME:

DOT HAZARD CLASS: 2

HAZARD SUBCLASS: 1

DOT UN/NA NUMBER: UN1950

PACKING GROUP:

RESP. GUIDE PAGE: 126

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SECTION 14 - TRANSPORTATION INFORMATION

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 REACTION 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
TOLUENE	108-88-3		30.0 %
XYLENE	1330-20-7		5.0 %

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
No information is available.	

U.S. STATE REGULATIONS: AS FOLLOWS -

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 non-hazardous materials are among the top five ingredients.	

PENNSYLVANIA RIGHT-TO-KNOW:

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

CHEMICAL NAME	CAS NUMBER
No non-hazardous ingredients are present at greater than 3%.	

SECTION 15 - REGULATORY INFORMATION

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

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: 06/11/97

REASON FOR REVISION: TRANSPORTATION INFORMATION

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

: No Information.

The information contained on this MSDS has been checked and should be accurate. However, it is the responsibility of the user to comply with all Federal, State, and Local laws and regulations.