

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 : HY-TECH METAL SHIELD
 IDENTIFICATION NUMBER: PR1267 - L3 DATE PRINTED: 04/11/02
 PRODUCT USE/CLASS : LIQUID PAINT

MANUFACTURER:

HY-TECH Thermal Solutions, LLC
 2815 DORSEY PLACE
 MELBOURNE, FL 32901
 USA

EMERGENCY TELEPHONE: 800-424-9300 EMERGENCY TELEPHONE: 800-424-9300
 24 HOUR EMERGENCY HOTLINE 24 HOUR EMERGENCY HOTLINE

PREPARER: RICK NOLES, PHONE: 314-521-2000, PREPARE DATE: 04/11/02

SECTION 2 - COMPOSITION/INFORMATION ON INGREDIENTS

ITEM	CHEMICAL NAME	CAS NUMBER	WT/WT % EQUAL TO
01	ALIPHATIC HYDROCARBON	64742-88-7	18.6 %
02	ALIPHATIC HYDROCARBON	8052-41-3	3.6 %

ITEM	EXPOSURE LIMITS				COMPANY	SKIN
	ACGIH TLV-TWA	ACGIH TLV-STEL	OSHA PEL-TWA	OSHA PEL-CEILING		
01	100 ppm	100 ppm	100 ppm	100 ppm	N.E.	NO
02	100 ppm	N.E.	500 ppm	N.E.	N.E.	NO

(See Section 16 for abbreviation legend)

SECTION 3 - HAZARDS IDENTIFICATION

*** EMERGENCY OVERVIEW ***: Harmful if inhaled. Harmful if swallowed.
 Vapors irritating to eyes and respiratory tract. Vapor reduces oxygen
 available for breathing. Combustible liquid and vapor.

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.

EFFECTS OF OVEREXPOSURE - SKIN CONTACT: Prolonged or repeated contact can
 result in defatting and drying of the skin which may result in skin

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SECTION 3 - HAZARDS IDENTIFICATION

irritation and dermatitis (rash).

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

EFFECTS OF OVEREXPOSURE - INGESTION: Irritating to mouth, throat and stomach.

EFFECTS OF OVEREXPOSURE - CHRONIC HAZARDS: No Information.

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

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: Wash with soap and water. Get medical attention if irritation develops or persists.

FIRST AID - INHALATION: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get immediate medical attention.

FIRST AID - INGESTION: If swallowed, DO NOT induce vomiting, keep at rest and get prompt medical attention.

SECTION 5 - FIRE FIGHTING MEASURES

FLASH POINT: 105°F
(SETAFLASH CLOSED CUP)

LOWER EXPLOSIVE LIMIT: 0.8 %
UPPER EXPLOSIVE LIMIT: 6.0 %

AUTOIGNITION TEMPERATURE: Over 800°F

EXTINGUISHING MEDIA: ALCOHOL FOAM CO2 DRY CHEMICAL FOAM WATER FOG

UNUSUAL FIRE AND EXPLOSION HAZARDS: Combustible Liquid. Can form explosive mixtures at temperatures at or above the flashpoint. "Empty" containers retain product residue (liquid and/or vapor) and can be dangerous. DO NOT PRESSURIZE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND, OR EXPOSE SUCH CONTAINERS TO HEAT, FLAME, SPARKS, STATIC ELECTRICITY, OR OTHER SOURCES OF IGNITION; THEY MAY EXPLODE AND CAUSE INJURY OR DEATH. Empty drums should be completely drained, properly bunged and promptly returned to a drum reconditioner, or properly disposed of.

SPECIAL FIREFIGHTING PROCEDURES: As in any fire, wear self-contained breathing apparatus pressure-demand (MSHA/NIOSH approved or equivalent) and full protective gear.

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SECTION 6 - ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Absorb spill with inert material (e.g. dry sand or earth), then place in a chemical waste container. Avoid runoff into storm sewers and ditches which lead to waterways.

SECTION 7 - HANDLING AND STORAGE

HANDLING: Wash thoroughly after handling.

STORAGE: Keep away from heat, sparks and flame. Keep container closed when not in use.

SECTION 8 - EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS: Good general ventilation should be sufficient to control airborne levels. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

RESPIRATORY PROTECTION: Provide sufficient ventilation to keep vapor concentrations below the given TLV and LEL levels. A NIOSH/MSHA approved air purifying respirator with an organic vapor cartridge or canister is recommended where airborne concentrations are expected to exceed exposure limits.

SKIN PROTECTION: Gloves are required for prolonged or repeated contact. Refer to safety equipment supplier for effective glove recommendations.

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

OTHER PROTECTIVE EQUIPMENT: Store contaminated clothing in well ventilated cabinets or closed containers, and wash thoroughly before reuse. Safety shower and eyebath should be in areas of use.

HYGIENIC PRACTICES: Wash hands before eating. Avoid contact with eyes, skin, and clothing.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES
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BOILING RANGE	: 300 - 415°F	VAPOR DENSITY	: Is heavier than air
ODOR	: MILD	ODOR THRESHOLD	: HIGH
APPEARANCE	: BLACK	EVAPORATION RATE	: Is slower than Ether
SOLUBILITY IN H2O	: NO		
FREEZE POINT	: N/A	SPECIFIC GRAVITY	: 0.8306
VAPOR PRESSURE	: 0.3 mm Hg	pH @ 100.0 %	: N/A
PHYSICAL STATE	: LIQUID	VISCOSITY	: 70 - 90 K.U.
COEFFICIENT OF WATER/OIL DISTRIBUTION: N/A			

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SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

(See Section 16 for abbreviation legend)

SECTION 10 - STABILITY AND REACTIVITY

CONDITIONS TO AVOID: Do not expose to heat, flame, sparks, static electricity or other sources of ignition; they may explode and cause injury or death.

INCOMPATIBILITY: Do not expose materials to strong oxidizing agents, concentrated nitric acid, halogens or molten sulphur.

HAZARDOUS DECOMPOSITION PRODUCTS: When burned, material will emit carbon monoxide, carbon dioxide and hydrocarbons.

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: Do not flush into sewers or waterways. Any spills must be cleaned up and disposed of according to local, state and federal regulations.

SECTION 13 - DISPOSAL CONSIDERATIONS

DISPOSAL METHOD: Consult an expert on disposal of recovered materials, and ensure conformity to local, state and federal regulations.

SECTION 14 - TRANSPORTATION INFORMATION

DOT PROPER SHIPPING NAME: NON-HAZARDOUS

DOT TECHNICAL NAME: NON-HAZARDOUS

DOT HAZARD CLASS:

HAZARD SUBCLASS:

DOT UN/NA NUMBER:

PACKING GROUP:

RESP. GUIDE PAGE:

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SECTION 15 - REGULATORY INFORMATION

THE COMPOSITION OF THIS PRODUCT IS AS FOLLOWS: (* = HAZADOUS, SECTION 2)

----- CHEMICAL NAME -----	CAS NUMBER	WT/WT %
CALCIUM SULFONATE	71486-79-8	28.9 %
HYTECH CERAMIC MICROSPHERES	1302-98-8	18.9 %
*ALIPHATIC HYDROCARBON	64742-88-7	18.6 %
CRYSTALLINE SILICA (QUARTZ)	14808-60-7	14.0 %
OIL MODIFIED ALKYD	86729-25-1	8.1 %
MICROTALC - MONTANA TALC	14807-96-6	6.4 %
*ALIPHATIC HYDROCARBON	8052-41-3	3.6 %
BENTONITE CLAY	68953-58-2	0.5 %
CARBON	7440-44-0	0.3 %
ZIRCONIUM ALKANOATE SALT	22464-99-9	0.2 %
METAL ALKYL ARYL SULFONATES	61789-86-4	0.1 %
METHYL ETHYL KETOXIME	96-29-7	0.1 %
TRIPROPYLENE GLYCOL MONOMETHYL ETHER	25498-49-1	0.1 %
HEXYLENE GLYCOL	107-41-5	0.1 %
COBALT	7440-48-4	0.1 %
		<u>100.0 %</u>

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:

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 %
No SARA Section 313 components exist in this product.		

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
CALCIUM SULFONATE	71486-79-8
OIL MODIFIED ALKYD	86729-25-1

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SECTION 15 - REGULATORY INFORMATION

PENNSYLVANIA RIGHT-TO-KNOW:

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

----- CHEMICAL NAME -----	CAS NUMBER
CALCIUM SULFONATE	71486-79-8
OIL MODIFIED ALKYD	86729-25-1

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
No Proposition 65 chemicals exist in this product.	

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: 1 FLAMMABILITY: 2 REACTIVITY: 0

PREVIOUS MSDS REVISION DATE: 04/11/02

VOLATILE ORGANIC COMPOUNDS (VOCS): 1.54 lbs/gal, 184 grams/ltr

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

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.

<END OF MSDS>