## Material Safety Data Sheet acc. to ISO/DIS 11014

Printing date 12/14/2004 Reviewed on 12/14/2004

#### 1 Identification of substance

Trade name: HT 1810 FLAT BLACK ENAMEL

Product code: ZB00980010

Manufacturer/Supplier: Hi-Tech Industries

19270 West Eight Mile Road Southfield, MI 48075

**Information department:** Health & Safety Department INFOTRAC 1-800-535-5053

CHEMTEL 1-800-255-3924, 813-248-0585 if located outside the U.S.

#### 2 Composition/Data on components

**Chemical Description:** This product is a mixture of the substances listed below with nonhazardous additions.

Dangerous components:				
67-64-1	acetone	R Xi, K F; R 11-36-66-67	22.77%	
74-98-6	propane	<b>N</b> F+; R 12	18.9%	
1317-65-3	Calcium Carbonate	<sub>R</sub> Xi; R 36/37/38	12.09%	
64742-89-8	VM&P Naptha	R Xn; R 20/22	12.03%	
106-97-8	n-butane	<b>№</b> F+; R 12	11.1%	
108-88-3	toluene	R Xn, N F; R 11-20	8.76%	
64742-47-8	Mineral Spirits	R Xn, N F; R 11-65	2.77%	
67-63-0	isopropyl alcohol	K Xi, K F; R 11-36-67	2.26%	

**Additional information:** For the wording of the listed risk phrases refer to section 3.

#### 3 Hazards identification

Hazard description:

Xn Harmful

F+ Extremely flammable

**Physical dangers:** Warning! Pressurized container. Keep away from heat, sparks, and flame.

R 12 Extremely flammable. R 20 Harmful by inhalation. R 36 Irritating to eyes.

Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C, i.e.

electric lights. Do not pierce or burn, even after use.

Keep out of the reach of children.

Effects of short-term overexposure:

Causes irritation to the eyes, nose, throat, skin, and central nervous system. Symptoms may include

dizziness, throat irritation, headache, fatigue, swelling of eyes, and nausea.

Effects of chronic overexposure:

May cause permanent brain and nervous system damage. Repeated overexposure can also damage

kidneys, lungs, liver, heart, and blood. Intentional misuse by deliberately inhaling the contents may be

harmful or fatal.

**NFPA ratings (scale 0 - 4):** Health =

Fire = 4 Reactivity = 3

#### 4 First aid measures

General information: Symptoms of poisoning may occur even after several hours. Medical observation for at least 48 hours

after the accident is recommended.

After inhalation: Supply fresh air. If necessary, provide artificial respiration. Keep patient warm. Consult doctor if

symptoms persist.

**After skin contact:** Remove contaminated clothing. Wash exposed area with soap and water.

**After eye contact:** Move to fresh air. Rinse opened eye for several minutes under running water. If symptoms persist,

consult a doctor.

**After swallowing:** Contact physician or poison control center.

#### 5 Fire fighting measures

**Extinguishing agents:** CO2, sand, extinguishing powder, or water spray. Fight larger fires with water spray or alcohol resistant

foam.

**Protective equipment:** A respiratory protective device may be necessary.

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#### 6 Accidental release measures

Personal safety precautions:

Wear protective equipment. Keep unprotected persons away.

Environmental safety precautions:

Do not allow product to reach sewage systems or ground water.

Inform appropriate authorities in case of seepage into water course or sewage system.

Measures for cleaning/

collecting:

Do not flush with water or aqueous cleansing agents. Use diluted caustic solution. Soak up spills with

inert absorbent material. Refer to section 13 for disposal information.

#### 7 Handling and storage

**Fire/explosion protection:** Do not spray on a naked flame or any incandescent material.

Do not smoke. Protect from electrostatic charges.

**Storage requirements:** Observe pressurized container storage regulations. Consult with your local authorities.

Keep away from sources of heat and direct sunlight. Do not warehouse in subfreezing conditions.

# 8 Exposure controls and personal protection: Components with limit values that require monitoring at the workplace: 67-64-1 acetone PEL | 2400 mg/m³, 1000 ppm | 590 mg/m³, 250 ppm | 590 mg/m³, 250 ppm | Short-term value: 1782 mg/m³, 750 ppm | Long-term value: 1188 mg/m³, 500 ppm

74-98-6 propane

PEL	1800 mg/m³, 1000 ppm
	1800 mg/m <sup>3</sup> , 1000 ppm
TLV	$(4508) \text{ mg/m}^3$ , $(2500) \text{ ppm}$

#### 1317-65-3 Calcium Carbonate

PEL 15\*; 5\*\* mg/m<sup>3</sup>

\*Total dust \*\*Respirable fraction

REL 10\*; 5\*\* mg/m<sup>3</sup>

\*Total dust \*\*Respirable fraction

TLV 10 mg/m³ (e)

#### 106-97-8 n-butane

	1900 mg/m <sup>3</sup> ,		
TLV	1900 mg/m³,	800 ppm	1

#### 108-88-3 toluene

PEL	Short-term value: C 300; 500* ppm
	Long-term value: 200 ppm
	*10-min peak per 8-hr shift
	Short-term value: 560 mg/m <sup>3</sup> , 150 pp

REL Short-term value: 560 mg/m³, 150 ppm Long-term value: 375 mg/m³, 100 ppm

TLV 188 mg/m³, 50 ppm Skin; BEI

#### 64742-47-8 Mineral Spirits

TLV 200 mg/m<sup>3</sup>

As total hydrocarbon vapor; Skin; (P)

#### 67-63-0 isopropyl alcohol

PEL 980 mg/m<sup>3</sup>, 400 ppm

REL Short-term value: 1225 mg/m³, 500 ppm Long-term value: 980 mg/m³, 400 ppm TLV Short-term value: 984 mg/m³, 400 ppm Long-term value: 492 mg/m³, 200 ppm

Protective hygienic

**measures:** Keep away from foodstuffs and animal feed. Wash hands after use.

**Breathing equipment:** A respirator is generally not necessary when using this product outdoors or in large open areas. In cases

of inadequate ventilation, a respiratory protective device should be worn to prevent overexposure.

**Protection of hands:** Due to missing tests, no glove material recommendation can be given.

Protective gloves. The glove material has to be impermeable and resistant to the substance. No glove recommendation can be given.

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**Eye protection:** Tightly sealed goggles

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#### 9 Physical and chemical properties:

**General Information:** 

Form: Aerosol

**Color:** According to trade name description in section 1.

Odor:<br/>Boiling point/Boiling range:Solvent<br/>-44°C (-47°F)Flash point:-19°C (-2°F)

**Ignition temperature:** 365.0°C (689°F)

**Auto igniting:** Product is not self-igniting.

**Danger of explosion:** Stable at normal temperatures. Can may burst when exposed to temperatures exceeding 120

degrees fahrenheit.

In use, may form flammable/explosive vapour-air mixture.

Lower Explosion Limit:0.9 Vol %Upper Explosion Limit:13.0 Vol %Vapor Pressure:40 PSI, 2750 hPa

**Density:** Not determined.

**Specific Gravity:** Between 0.77 and 0.90 (Water equals 1.00)

**VOC content:** 0.57 kg/l / 4.74 lb/gl

**VOC** in weight percent (less acetone): 56.9 % **Solids content:** 20.2 %

#### 10 Stability and reactivity:

**Conditions to be avoided:** Do not allow the can to exceed 120 degrees Fahrenheit. Stable at normal temperatures.

**Possibility of Hazardous** 

**Reactions:** No dangerous reactions known.

#### 11 Toxicological information:

**Primary effect on the skin:** No irritant effect. **Primary effect on the eye:** Irritating effect.

**Sensitization:** No sensitizing effects known.

Additional toxicological

**information:** Harmful

#### 12 Ecological information

Other information: This product does not contain any chloroflourocarbons (cfc's), chlorinated solvents, or lead. No specific

ecological data is available for this product.

**Acquatic toxicity:** Harmful to aquatic organisms.

Hazardous for water, do not empty into drains.

#### 13 Disposal considerations

DISPOSAL METHOD: Dispose of in accordance with local, state, and federal regulations. Do not puncture, incinerate, or compact. Partially empty cans cannot be disposed of with regular trash. Do not heat or cut empty containers with electric or gas torches.

**Recommendation:** Empty cans should be recycled.

#### 14 Transport information:

Hazard class: 2.1 Identification number: N/A Label 2.1

ADR/RID class: 2 5F Gases
UN-Number: 1950
IMDG Class: 2
Packaging group: II
EMS Number: F-D.S-U

**EMS Number:** F-D, Marine pollutant: No

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ICAO/IATA Class: 2.1

**Propper shipping name:** Aerosols, Flammable

Consumer Commodity ORM-D

15 Regulations					
SARA Section 355 (extremely hazardous substances):					
None of the ingredients in this product are listed.					
SARA Section 313 (Speci	ific toxic chemical listings):				
108-88-3 toluene					
67-63-0 isopropyl alcohol					
TSCA (Toxic Substances Control Act):	All ingredients are listed.				
	nicals known to cause cancer:				
100-41-4 ethyl benzene					
PROPOSITION 65 Chem	nicals known to cause reproductive toxicity:				
108-88-3 toluene					
Canadian WHMIS: EPA:	Class A, B5Flammable Aerosols A= Known human carcinogen C= Possible human carcinogen D= Not classifiable as to human carcinogenicity: Inadequate human and animal evidence of carcinogenicity (or no data is available).				
67-64-1 acetone D					
108-88-3 toluene D					
IARC:	Group 2B: The ingredient is possibly carcinogenic to humans. There is limited evidence of carcinogenicity.  Group 3: The ingredient is unclassifiable as to its carcinogenicity to humans.				
108-88-3 toluene	3				
67-63-0 isopropyl alcoho					
ACGIH TLVs:	A1-designates a confirmed human carcinogen. A2-designates a suspected human carcinogen. A3-designates an animal carcinogen. A4-designates "not classifiable as a human carcinogen".				
67-64-1 acetone A4					
108-88-3 toluene A4					
NIOSH:					

#### 16 Other information

1333-86-4 Carbon black

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.