

SAFETY DATA SHEET (SDS) / HB-1

Section 1 Product / Company Identification

Product Name	HB-1	
Product Description	Hydrocarbon mixture	
Manufacturer & Address	DYNA Metro Inc. 37 Creditstone Road Concord, Ontario L4K 1N3 Canada	
Manufacturer's Phone Number	+1 905.761.3309	
Manufacturer's Facsimile	+1 905.761.2114	
Date Of Issue	June 5, 2018	
Prepared By	Mark Gagro	
Emergency Phone Numbers	Canutech	1-613-996-6666 (Canada)
	Chemtec	1-800-424-9300 (U.S.)

Section 2 Emergency And First Aid

Emergency Information

Eyes	Rinse the eyes with a gentle stream of water for at least 15 minutes. Consult a physician immediately.
Skin	Remove contaminated clothing. Wash the skin with soap and water. Decontaminate or discard clothing. If irritation occurs, seek medical attention.
Inhalation	Remove from exposure and provide fresh air. If breathing has stopped, administer artificial respiration or oxygen as necessary. Consult a physician immediately.
Ingestion	Remove from exposure and provide fresh air. If breathing has stopped, administer artificial respiration or oxygen as necessary. Consult a physician immediately.

Section 3 Composition Information

Physical State	Clear Liquid
Colour	Translucent clear and mobile liquid
Odour and Appearance	Hydrocarbon odour
Odour Threshold	> .2 - 2.0 ppm
Water Solubility	Immiscible
Specific Gravity	.95
Boiling Point	137 - 143° C
Freezing Point	< - 50° C
Flash Point	45° C
Melting Point	Not applicable
Percent Volatile	60 - 80 %
Vapour Density (Air =1)	3.7 @ 20 °C
Vapour Pressure (mm Hg)	> 5 @ 20 °C
pH	Not applicable
Partition Coefficient (K o/w)	Not applicable
Evaporation Rate	.72 n-butyl acetate=1
Viscosity	20.01 cSt
VOC	<395 g/L

Section 4 Hazardous Ingredients

Ingredient	CAS #	OSHA PEL	ACGIHTLV-TWA	NOISH REL
Similar to Xylene	1330-20-7	10 - 15 %	100 ppm	LD50 > 4300 mg\kg oral rat LC50 > 6700 ppm\4hr LD50 > 2000 mg\kg dermal rabbit
Acrylic Polymer	Trade secret	20 - 35 %		Not available
Acetone	67-64-1	10 - 30 %		Oral LD50 (Rat) = 5800 mg/kg Oral LD50 (Mouse) = 3000 mg/kg Oral LD50 (Rabbit) = 5340 mg/kg Inhalation LC50 (Rat) = 44000 mg/m ³ 4 h
TBAc	540-88-5	10 - 30 %		Oral LD50 (Rat) = 4100 mg/kg Dermal LD50 (Rabbit) > 2 g/kg Inhalation LC50 (Rat) > 2230 mg/m ³ 4 h

Critical Hazards

Single overexposure, above recommended guidelines, may cause : central nervous system depression with signs and symptoms such as headache, dizziness, drowsiness, incoordination, slowed reaction time, slurred speech, giddiness and unconsciousness. Combustible liquid and vapour. Vapours may ignite explosively.

Section 5 Hazardous Identification

Eye Contact

Avoid eye contact. Wear vented goggles.

Skin Contact

Wear appropriate gloves when handling this material. A pair of gloves made from the following material(s) are recommended : Polyvinyl alcohol and polyethylene / ethylene vinyl alcohol. Avoid butyl rubber, nitrile rubber and neoprene rubbers.

Inhalation

Avoid breathing of vapours created during the cure cycle. Avoid breathing of vapours, mist or spray. Avoid breathing of airborne material. Select one of the NIOSH approved respirators based on airborne concentration of contaminants : half-mask organic vapour respirator with dust/mist and fume pre-filter ; full-face organic vapour respirator with dust/mist and fume pre-filter.

Ingestion

Not applicable.

Recommended Ventilation

Use with appropriate local exhaust ventilation. Use with functioning spray booth or local exhaust. Provide sufficient ventilation to maintain emissions below recommended exposure limits. If exhaust ventilation is not adequate, use appropriate respiratory protection.

Other Protection

An eyebath and safety shower should be available. All food should be kept in a separate area away from the storage / use location. Eating, drinking and smoking should be prohibited in areas where there is a potential for significant exposure to this material. Wash hands and face thoroughly before eating and drinking or smoking to remove any residual material.

Section 6 Accidental Release Measures

Personal Precautions	Refer to other sections of this MSDS for information regarding physical and health hazards, respiratory protection, ventilation, and personal protective equipment.
Spill Response	Extinguish all ignition sources. Contain spill. Cover with absorbent material. Collect spilled material. Place in an approved metal container.
Methods of Disposal	Incinerate in a permitted hazardous waste incinerator in the presence of a combustible material.

Section 7 Fire And Explosion

Flash Point	45° C (109° F)	
Method	TAG CC	
Auto-ignition Temperature	>500°C	
Flammable Limits in Air, by % Volume	<i>Upper:</i> 10.5 <i>Lower:</i> 0.9	
Means of Extinction	Carbon dioxide, dry chemical, foam.	
Exposure Hazards During Fire	Vapours may travel long distances along the ground or floor to an ignition source and flash back.	
Fire Fighting	Firefighters should wear positive pressure, self-contained breathing apparatus. Equipment should be decontaminated after use. Vapours could form an explosive mixture in air. Wear full protective clothing, including helmet, self-contained, positive pressure or pressure demand breathing apparatus, bunker coat and pants, bands around arms, waist and legs, face mask, and protective covering for exposed areas of the head.	
Explosion Data	Explosive Power Rate of Burning	Not available Not available
Sensitivity To Static	Yes	
Sensitivity to Impact	No	
Unusual Fire And Explosion Hazards	This product is considered a combustible liquid under WHMIS criteria and is a fire hazard. It supports combustion and decomposes under fire conditions. Do not pour, spill, use or store near heat, spark sources or open flames.	
Hazardous Combustion Products	Carbon monoxide, carbon dioxide acrylic monomers and toxic gases	

Section 8 Stability And Reactivity Data

Stability And Reactivity	Stable
Hazardous Polymerization	Will not occur
Conditions To Avoid	Heat and any ignition source, open flames.
Incompatibility	Strong oxidizing agents
Hazardous Decomposition	CO, CO ₂ , acylic monomers and traces of incompletely burned hydrocarbons upon combustion.
Reactivity	No

Section 9 Precautions For Handling And Storage

Storage Requirements	Keep container dry.
Incompatible Materials	Store away from acids or oxidizing agents . Store away from heat. Store out of direct sunlight.
Ventilation	Keep container in well ventilated area.
Fire Prevention	Ground containers securely when transferring contents. Wear low static or properly grounded shoes. No smoking while handling this material. Avoid shock or friction.
Explosion Prevention	Keep away from heat, sparks, open flame, and other sources of ignition. Prevent all sources of ignition. Vapours may ignite explosively.
Static Prevention	Avoid static discharge.
Use Instructions	Keep container tightly closed.

Section 10 Toxicological Information

See Section 5 for Hazard Identification	No recognized unusual toxicity to plants and animals.
Conditions Aggravated By Exposure	Skin disorders and Chronic Respiratory conditions.

Section 11 Personal Protection / Exposure Control

Engineering Controls	General room ventilation plus local exhaust at points of emission to maintain levels of airborne contaminants below exposure limits.
Respiratory Protection	For emergencies and unknown concentrations, use NIOSH/MSHA approved positive pressure self contained breathing apparatus. Utilize respiratory protective equipment in accordance with 29CFR 1910.134 (Respiratory Protection).
Eye / Face Protection	Wear chemical safety goggles plus full face shield to protect against splashing when appropriate (ANSI Z87.1).
Skin Protection	Wear chemical resistant gloves such as North Silver Shield® or Viton®. For limited use, PVC or nitrile gloves may be worn. Silver Shield is a registered trademark of Siebe North, Inc. Viton is a registered trademark of E. I. DuPont deNemours and Company, Inc. Wear plastic or rubber apron for splash protection.
Other	Emergency shower and eyewash facility should be in close proximity (ANSI Z358.1).

Section 12 Disposal

Product As Sold	No data available
Product Packaging	No data available
Special Instructions	Since regulations vary, consult appropriate and applicable regulations or authorities before disposal.

Section 13 Transportation Data

This product is not hazardous under U.S. DOT or TDG regulations.

Section 14 Other Regulatory Information

Labelling Requirements

UN	Number	1268
	Class	3 Combustible Liquid
	Packaging Group	III
HMIS Rating	Health	1
	Flammability	2
	Reactivity	0
	Personal Protection	Z (User supplied based on use conditions)
NFPA	Health	1
	Flammability	2
	Reactivity	0

Section 15 Other Information

WHMIS Classification	D2B	Causes eye,skin and mucous membrane irritation.
	B3	Combustible liquid

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

IMO Description	Resin Solution
	Class 3
	UN Number 1268
	Packaging Group III