1. IDENTIFICATION

Product Name	ACRYLITHANE HS2 ENAMEL CATALYST
Product Code	99951
Document ID	G99951
Revision Number	1
Prior Version Date	None
Intended Use	Urethane Paint Hardener/Catalyst
Restrictions On Use	For Industrial Use Only
Chemical Family	Urethane Co-Reactant
Chemical Manufacturer / Importer	JONES-BLAIR [®] Company, LLC
	2728 Empire Central
	Dallas, TX 75235
	1-214-353-1600
Emergency Telephone Number:	ChemTrec Center 1-800-424-9300
	International: 703-527-3887

2. HAZARD(S) IDENTIFICATION

Classification of the chemical in accordance with paragraph (d) of §1910.1200;

Hazard Pictograms	
GHS Classification	Respiratory Sensitisation Category 1 Skin Sensitisation Category 1 Specific Target Organ Systemic Toxicity (STOT) - Repeated Exposure Category 2 Flammable Liquid Category 3 Specific Target Organ Systemic Toxicity (STOT) - Single Exposure Category 3 Acute Toxicity - Inhalation Vapour Category 4
Signal Word	Danger
Hazard Statements	Flammable liquid and vapour. May cause an allergic skin reaction. Harmful if inhaled. May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause respiratory irritation. May cause drowsiness or dizziness. May cause damage to organs through prolonged or repeated exposure.
Precautionary Statements	
Prevention	Keep away from heat, sparks, open flames and hot surfaces. No smoking. Ground/bond container and receiving equipment. Use explosion-proof electrical, ventilating, and lighting equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Do not breathe dust, fume, mist, vapours or spray. Use only outdoors or in a well-ventilated area. Contaminated work clothing should not be allowed out of the workplace. Wear protective gloves, protective clothing, eye protection and face protection. In case of inadequate ventilation wear respiratory protection.

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	Floudel Code: 99931
Response	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or physician if you feel unwell. If skin irritation or rash occurs: Get medical attention. If experiencing respiratory symptoms: Call a POISON CENTER or physician. Wash contaminated clothing before reuse. In case of fire: Use alcohol resistant foam, carbon dioxide, dry chemical, or water spray for extinction.
Storage	Store locked up. Store in a cool, well-ventilated place. Keep container tightly closed.
Disposal	Dispose of contents and container in accordance with all local, regional, national and international regulations.
Hazards Not Otherwise Classified (HNOC)	Not applicable
Additional Information	

Not applicable

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Component	CAS #	<u>%</u>	
Homopolymer of Hexamethylene Diisocyanate	28182-81-2	80 - 90	
n-Butyl acetate	123-86-4	1 - 5	
Light aromatic solvent naphtha	64742-95-6	1 - 5	
1,2,4-Trimethylbenzene	95-63-6	1 - 5	
Hexamethylene diisocyanate	822-06-0	0.01 - 0.1	
Xylene	1330-20-7	0.01 - 0.1	

The specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST-AID MEASURES

Inhalation	nhalation Remove individual to fresh air after an airborne exposure if any symptoms develop a precautionary measure. If breathing difficulty persists or occurs later, consult a physician and have MSDS available.	
Eye Contact	In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention immediately.	
Skin Contact		vith soap and water. Remove contaminated clothing and launder. Get medical n if irritation develops or persists.
Ingestion	If swallowed, do not induce vomiting. Get medical attention immediately.	
Most Important Acute Sympt and Effects	toms	Not Available
Most Important Delayed Syn and Effects	nptoms	Not Available
Special treatment needed:		No additional first aid information available
5. FIRE-FIGHTING MEASURE	ES	
Suitable Extinguishing Medi	a	Use alcohol resistant foam, carbon dioxide, dry chemical, or water spray when fighting fires. Water or foam may cause frothing if liquid is burning but it still may be a useful extinguishing agent if carefully

Unsuitable Extinguishing Media Fire and/or Explosion Hazards	Revision Date: 05-05-2015 Product Code: 99951 applied to the fire. Do not direct a water stream directly into the hot burning liquid. No data available Vapors may be ignited by sparks, flames or other sources of ignition if material is above the flash point giving rise to a fire (Class B). Vapors are heavier than air and may travel to a source of ignition and flash back. Container may explode in heat of fire.
Hazardous Combustion Products	Carbon dioxide, Carbon monoxide, Hydrogen cyanide, Isocyanates, Nitrogen containing gases
Special Protective Equipment and Precautions for Fire-Fighters	Do not enter fire area without proper protection including self-contained breathing apparatus and full protective equipment. Fight fire from a safe distance and a protected location due to the potential of hazardous vapors and decomposition products. Do not enter fire area without proper protection including self-contained breathing apparatus and full protective equipment. Fight fire from a safe distance and a protected location due to the potential of hazardous vapors and decomposition products.
6. ACCIDENTAL RELEASE MEASURES	
Personal Precautions, Protective Equipment and Emergency Procedures Methods and Material for Containment	Exposure to the spilled material may be irritating or harmful. Follow personal protective equipment recommendations found in Section VIII of this SDS. Additional precautions may be necessary based on special circumstances created by the spill including the material spilled, the quantity of the spill, the area in which the spill occurred. Also consider the expertise of employees in the area responding to the spill. Prevent the spread of any spill to minimize harm to human health and
and Cleaning Up	the environment if safe to do so. Dike with suitable absorbent material. Gather and store in a sealed container pending disposal. Shut off ignition sources; including electrical equipment and flames. Do not allow smoking in the area.
7. HANDLING AND STORAGE	
Precautions for Safe Handling	Harmful or irritating material. Avoid contacting and avoid breathing the material. Use only in a well ventilated area. As with all chemicals, good industrial hygiene practices should be followed when handling this material.
Conditions for Safe Storage	Store in a cool dry place. Keep container(s) closed. Keep away from sources of ignition.
Materials to Avoid/Chemical Incompatibility	Oxidizing agents, Caustics (bases, alkalis), Acids, Amines, Water, Alcohols

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Limits

Chemical Component	OSHA PEL	ACGIH TLV-TWA	ACGIH STEL
Homopolymer of Hexamethylene Diisocyanate		5mg/m³ TWA	10mg/m³ (15 Min.)
n-Butyl acetate	150 ppm TWA; 710 mg/m³ TWA	150 ppm TWA; 713 mg/m3 TWA	200 ppm STEL; 950 mg/m³ STEL
1,2,4-Trimethylbenzene		25ppm; 123mg/m ³ TWA	
Hexamethylene diisocyanate		0.005 ppm TWA; 0.034 mg/m3 TWA	

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Appropriate Engineering Controls	Use local exhaust ventilation or other engineering controls to minimize exposure. Engineering controls must be designed to meet the OSHA chemical specific standard in 29 CFR 1910.
Respiratory Protection	General or local exhaust ventilation is the preferred means of protection. In cases where ventilation is inadequate, respiratory protection may be required to avoid overexposure. Follow respirator manufacturer's directions for respirator use. For poorly ventilated areas or during spray application use NIOSH approved supplied air respirator unless air monitoring demonstrates vapor/mist levels below applicable limits. When monomeric isocyanate concentrations are below 0.05 ppm (10 times the 8 hour TWA exposure limit), an appropriate combination organic vapor and particulate respirator (NIOSH approved) may be appropriate. An end-of-service-life Indicator (ESLI) or a change schedule is mandatory.
Eye Protection	Wear safety glasses with side shields when handling this product. Wear additional eye protection such as chemical splash goggles and/or face shield when the possibility exists for eye contact with splashing or spraying liquid, or airborne material. Have an eye wash station available.
Skin Protection	Avoid all skin contact by covering as much of the exposed skin area as possible with appropriate clothing to prevent skin contact. Wash hands and other exposed areas with mild soap and water before eating, drinking, and when leaving work. Clothing suitable to prevent skin contact.
General Hygiene Conditions	As with all chemicals, good industrial hygiene practices should be followed when handling this material.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	
Physical State	Liquid
Color	Colorless
Odor	Solvent
Odor Threshold	No data available
рН	No data available
Melting Point/Freezing Point (°F/°C)	No data available / No data available
Initial Boiling Point and Boiling Range	
Low (°F)	220.0
Flash Point (°F/°C)	116 / 47
Flammability (solid, gas)	No data available
Upper Flammable/Explosive Limit	7.5 %
Lower Flammable/Explosive Limit	1.0 %
Vapor Density	No data available
Relative Density	0.883
Solubility in Water	Reacts slowly with water.
Partition coefficient: n-octanol/water	No data available
Auto-ignition Temperature	No data available
Decomposition Temperature:	No data available
Viscosity	450 - 900 CPS
Volatiles, % by volume	12.90
Volatiles, % by weight	10.00
Volatile Organic Chemicals (g/L)	
(Regulatory, Calculated)	112.64
(Actual, Calculated)	112.64
Density	9.30 - 9.50 lbs./Gal
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10. STABILITY AND REACTIVITY

Chemical stability
Possibility of Hazardous Reactions
Conditions to Avoid

Stable under normal conditions. No data available Temperatures above flash point in combination with sparks,

	Revision Date: 05-05-2015 Product Code: 99951 open flames, or other sources of ignition. Moisture (potentially will lead to gas formation and warming). Contamination.
	Elevated temperatures.
Incompatible Materials	Oxidizing agents, Caustics (bases, alkalis), Acids, Amines, Water, Alcohols
Hazardous Decomposition Products	Carbon dioxide, Carbon monoxide, Hydrogen cyanide, Isocyanates, Nitrogen containing gases

Routes of Exposure	Skin contact
·	Inhalation
	Eye contact
	Skin absorption
	Ingestion
Immediate (Acute) Health Effects	s by Route of Exposure
Inhalation Irritation	Causes nose and throat irritation.
Inhalation Toxicity	Vapor harmful. May affect the brain or nervous system causing dizziness, headache or nausea.
Skin Contact	Can cause moderate skin irritation. Sensitizer. Avoid exposure. If sensitized repeated exposures will result in irritation, reddening, and rashes even for very low exposures.
Skin Absorption	May be harmful if absorbed through skin.
Eye Contact	Causes eye irritation.
Ingestion Toxicity	Harmful if swallowed.
Long-Term (Chronic) Health Effe	ects
Inhalation	Isocyanate vapors or mist at concentrations above the TLV can irritate the mucous membranes in the respiratory tract causing runny nose, sore throa coughing, chest discomfort, shortness of breath and reduced lung function. Exposure well above the TLV may lead to generally reversible bronchitis, bronchial spasm and pulmonary edema. Repeated overexposure causes sensitization in some individuals resulting in asthma-like symptoms on subsequent exposures below the TLV.
	Persons with preexisting bronchial hyperactivity can respond to concentrations below the TLV with similar symptoms as well as an asthma attack.
	NOTICE: Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal.
Skin Contact	Prolonged contact may cause an allergic skin reaction.
Skin Absorption	Upon prolonged or repeated exposure, harmful if absorbed through the skir May cause minor systemic damage.

Product Toxicology Data

Component Toxicology Data

Chemical Component	Oral LD50	Dermal LD50	Inhalation LC50
Homopolymer of Hexamethylene	Oral LD50 Rat > 5000	Dermal LD50 Rabbit >	Inhalation LC50 (4h) Rat >
Diisocyanate	mg/kg	5000 mg/kg	10.00 mg/L
n-Butyl acetate	Oral LD50 Rat 10,760	Dermal LD50 Rat 12,789	Inhalation LC50 (4h) Rat >
II-Bulyi acelale	mg/kg	mg/kg	21.00 mg/L
Light aromatic solvent naphtha	Oral LD50 Rat 8400 mg/kg	Dermal LD50 Rat > 2000	Inhalation LC50 (4h) Rat
Light aromatic solvent hapittha		mg/kg	5.60 mg/L
1,2,4-Trimethylbenzene	Oral LD50 Rat 6000 mg/kg	Dermal LD50 Rat > 3440	Inhalation LC50 (4h) Rat

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		mg/kg	10.20 mg/L			
Hexamethylene diisocyana	oral LD50 Rat 746 mg/kg	Dermal LD50 Rabbit > 7000 mg/kg	Inhalation LC50 (4h) Ra 0.12 mg/L			
Carcinogen Information		00114 0				
Chemical Name Not applicable	IARC Carcinogen	OSHA Carcinogen	NTP Carcinogen			
12. ECOLOGICAL INFORMATION						
Ecotoxicity (aquatic and	No data available					
terrestrial, where available) Mobility in soil No data available						
13. DISPOSAL CONSIDERA	TIONS					
Safe Handling of Waste	characteristics of the	ns of this SDS to determine th material to determine the pro posal in compliance with appli	per waste			
14. TRANSPORT INFORMA	TION					
	hipping classification information and e regulations for domestic, internation e.					
DOT Basic Description:	OT Basic Description: Paint Related Material					
Hazard Class: UN Number:	3 UN1263					
Packing Group:						
Other:						
IATA Air Shipping Name:	Paint Related Material					
IATA Hazard Class: IATA UN Number:	ss: 3					
IATA Packing Group:						
IMO Shipping Name:	Paint Related Material					
IMO Hazard Class: IMO UN Number:	3 UN1263					
IMO ON Number:	0111200					
imo Packing Group.	III					
Marine Pollutant:	III N					
Marine Pollutant:	N IATION					
Marine Pollutant: 15. REGULATORY INFORM TSCA Status All compo	Ν	d on the TSCA Inventory; or, a	are not subject to the			
Marine Pollutant: 15. REGULATORY INFORM TSCA Status All compo	N IATION onents of this product are either listed	d on the TSCA Inventory; or, a	are not subject to the			
Marine Pollutant: <u>15. REGULATORY INFORM</u> TSCA Status All compo- inventory Regulated Components <u>SARA EHS Chemicals</u>	N IATION onents of this product are either listed notification requirements.		are not subject to the			

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SARA 313		95-63-6	1 - 5				
1,2,4-Trimethylbenzene Hexamethylene-1,6-diise	oovanato	822-06-0	0.01 - 0.1				
Tiexametrylene-1,0-uils	Joyanale	022-00-0	0.01 - 0.1				
SARA 311/312							
Health (Acute):	Y						
Health (chronic):	Ý						
Fire (Flammable):	Y						
Pressure:	Ν						
Reactivity:	Y						
U. S. State Regulations	:						
California Prop 65 Che	micals						
Cancer		CAS #	<u>%</u>				
Not applicable							
Reproductive							
Not applicable							
Canadian Regulations:							
CEPA DSL:	The components of this product ARE listed on the Canadian Domestic Substances						
	List.						
WHMIS Hazard Class:	B3						
16. OTHER INFORMATI							
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Disclaimer	This SDS has been prepared in accordance with the OSHA Hazard Communication						
	Standard (29 CFR 1910.1200) and Canada's Controlled Product Regulations (CPR). To						
	the best of our knowledge the information contained herein is accurate. Determination of						
	safe handling, application and use of this material is the responsibility of the end user. This						
	information is furnished without warranty, expressed or implied.						