

MATERIAL SAFETY DATA SHEET

DATE ISSUED :	8/4/2011
MSDS REF. No :	100V27

MIL-C-46168D Ty. IV Catalyst (4:1 Mix)

1. PRODUCT AND COMPANY INFORMATION

PRODUCT NAME: MIL-C-46168D Ty. IV Catalyst (4:1 Mix)
PRODUCT CODE: 100V27

MANUFACTURER INFORMATION

MACH-DYNAMICS
494 Main Street
Susquehanna, PA 18847
Phone: (775) 278-9308
Fax: (775) 599-4585
Contact : Mark Gingerella

24 HR. EMERGENCY TELEPHONE NUMBER

(US Transportation): +1 (800) 392-7701
(International Transportation): +001 (800) 392-7701

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

PHYSICAL APPEARANCE : Liquid

IMMEDIATE CONCERNS : DANGER! Flammable liquid and vapor. May cause eye, skin and respiratory tract irritation. May cause asphyxiation, or brain, lung or other organ injury if inhaled, swallowed or absorbed by the skin.

POTENTIAL HEALTH EFFECTS

EYES : Liquid is severely irritating to the eyes. High vapor concentrations are also irritating.

SKIN : Liquid is moderately irritating to the skin. Prolonged or repeated contact can result in drying of the skin which may result in skin irritation and dermatitis (rash). Liquid may be absorbed through the skin.

INGESTION : Ingestion may cause headache, dizziness, fatigue, and central nervous system depression along with gastrointestinal disturbances.

INHALATION : Vapors may be irritating to the nose, throat, and respiratory tract. Exposure to high vapor concentrations may cause central nervous system (CNS) depression. Aspiration of liquid may cause pneumonitis, pulmonary edema, and hemorrhaging.

CHRONIC : No chronic health concerns known.

CARCINOGENICITY : This material is not currently known to have carcinogenic properties.

MUTAGENICITY : This material is not know to have mutagenic effects on genetic material.

IRRITANCY: This material may cause irritation to the eyes, skin, and respiratory tract. Use correct PPE when handling this material.

REPRODUCTIVE TOXICITY

REPRODUCTIVE EFFECTS : This material is not known to cause any reproductive system damage.

TERATOGENIC EFFECTS : This material is not known to contain any teratogenic substances.

3. COMPOSITION/CHEMICAL INFORMATION

Chemical Name	CAS Number	Weight %
Hexane, 1,6-Diisocyanato-, Homopolymer	822-06-0	50% to 75%
*Butyl Acetate	123-86-4	10% to 15%
*Xylenes, Mixed Isomers	1330-20-7	10% to 15%

* Toxic chemical subject to the reporting requirements of section 313 of Title III and of 40 CFR 372.

4. FIRST AID MEASURES

EYES : Immediately flush eyes with plenty of water for at least 15 minutes while holding eyelids open. Seek medical aid if irritation persists.

SKIN : Flush skin with soap and water while removing contaminated clothing. If irritation occurs, seek immediate medical attention. Do not reuse clothing or shoes until thoroughly cleaned.

INGESTION : Do not induce vomiting, and seek immediate medical attention. Do not attempt to give any liquids if victim is unconscious.

INHALATION : Immediately remove victim to fresh air. If victim is not breathing, give artificial respiration. If breathing is difficult, oxygen should be administered by qualified personnel. Seek immediate medical attention.

NOTES TO PHYSICIAN: If the victim is a child, give no more than 1 glass of water and 15cc (1 tablespoon) syrup of ipecac. If symptoms such as loss of gag reflex, convulsions, or unconsciousness occur before emesis, gastric lavage should be considered following intubation with a cuffed endotracheal tube.

5. FIRE FIGHTING MEASURES

FLASH POINT AND METHOD : 95 degrees Fahrenheit Tagliabue Closed Cup (TCC)

FLAMMABLE LIMITS : 1.0% to 12.8%

AUTOIGNITION TEMPERATURE : No data available.

GENERAL HAZARD : Carbon monoxide and unidentified organic compounds may be formed during combustion.

EXTINGUISHING MEDIA : Use water fog, "alcohol" foam, dry chemical, or CO₂.

FIRE FIGHTING PROCEDURES : WARNING! Flammable Liquid. Clear the fire area of unprotected personnel. Do not enter confined fire space without full bunker gear; including a positive pressure NIOSH approved SCBA. Cool fire exposed containers with water. If water is used, fog nozzles are preferred

EXPLOSION HAZARD : When heated above the flash point, this material emits flammable vapors which, when mixed with air, can burn or be explosive. Fine mists or sprays may be flammable at temperatures below the flash point.

6. ACCIDENTAL RELEASE MEASURES

GENERAL PROCEDURES : WARNING. Flammable. Ventilate area of leak or spill for at least 24 hours or until it has been declared safe. Remove all sources of ignition. Stop the leak if there is no risk involved. Clean-up personnel require protective clothing and respiratory protection from vapors. Absorb liquid with inert material. Only specially trained or qualified personnel should handle the emergency.

ENVIRONMENTAL PRECAUTIONS

WATER SPILL : Keep material out of storm sewers and ditches which lead to waterways.

LAND SPILL : Contact applicable authorities and determine applicable regulations based on MSDS information.

AIR RELEASE : Contact applicable authorities and determine applicable regulations based on MSDS information.

7. HANDLING AND STORAGE

GENERAL PROCEDURES : Keep away from heat, sparks, and flame. Surfaces that are hot may ignite liquid even in the absence of sparks or flame. Extinguish pilot lights, cigarettes, and turn off all other sources of ignition prior to use, and until all vapors are gone. Keep containers tightly closed and upright to prevent leakage.

COMMENTS : KEEP OUT OF REACH OF CHILDREN! Empty containers retain product residue 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.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

EXPOSURE GUIDELINES :

OSHA HAZARDOUS COMPONENTS (29 CFR 1910.1200)

CHEMICAL NAME	EXPOSURE LIMITS				
		OSHA PEL		ACGIH TLV	
		ppm	mg/m ₃	ppm	mg/m ₃
Hexane, 1,6-Diisocyanato-, Homopolymer	TWA	NL	NL	0.01	0.11
	STEL	NL	NL	NL	NL
*Butyl Acetate	TWA	150	710	150	710
	STEL	NL	NL	200	950
*Xylenes, Mixed Isomers	TWA	100	435	100	435

	STEL	NL	NL	150	635
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OSHA TABLE COMMENTS:

NL = Not Listed

Ca = "WARNING: THIS PRODUCT CONTAINS CHEMICALS KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER AND BIRTH DEFECTS OR OTHER REPRODUCTIVE HARM."

ENGINEERING CONTROLS: Provide exhaust ventilation sufficient to keep the airborne concentration of this product below its exposure limits. Exhaust air may need to be cleaned by scrubbers or filters to reduce environmental contamination.

PERSONAL PROTECTIVE EQUIPMENT

EYES AND FACE: Use chemical safety goggles and/or full face shield where splashing is possible. Contact lenses should not be worn when working with this material. Maintain eye wash fountain and quick-drench facilities in work areas.

SKIN: Wear resistant gloves (consult your safety equipment supplier). To prevent repeated or prolonged skin contact, wear impervious clothing and boots.

RESPIRATORY: If exposure may or does exceed occupational exposure limits (Section 8) use a NIOSH approved respirator to prevent overexposure. In accord with 29 CFR 1910.134, use either an atmosphere-supplying respirator or an air-purifying respirator for organic vapors.

HYGIENIC WORK PRACTICES: Use good personal hygiene when handling this product. Wash hands after use, before eating, drinking, smoking, or using the toilet.

OTHER USE PRECAUTIONS: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

COMMENTS: May be harmful or fatal if swallowed. May irritate body tissues. Use with adequate ventilation. Avoid breathing vapor. Do not get in eyes, on skin, on clothing. Wash thoroughly after handling.

9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE : Liquid

ODOR : Typical paint odor.

pH : Not Applicable

BOILING POINT : 280 Degrees Fahrenheit

FREEZING POINT : No data available

VOLATILE ORGANIC COMPOUNDS: 262.52 G/L (2.19 LBS/G)
(VOC Theoretical – As Packaged)

SOLUBILITY IN WATER : Soluble in most organic solvents. Not soluble in water.

EVAPORATION RATE : No data available

DENSITY : 8.76 (Lbs/G)

10. STABILITY AND REACTIVITY

STABLE : Yes

HAZARDOUS POLYMERIZATION : Will not occur

100V27

MIL-C-46168D Ty. IV Catalyst (4:1 Mix)

CONDITIONS TO AVOID : Avoid heat, sparks, flame and contact with strong oxidizing agents. Prevent vapor accumulation.

POLYMERIZATION : Avoid heat, flame, and other sources of ignition.

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon monoxide and unidentified organic compounds may be formed during combustion.

INCOMPATIBLE MATERIALS : Strong oxidizers.

11. TOXICOLOGICAL INFORMATION

GENERAL COMMENTS: None identified.

12. ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL INFORMATION: Keep out of waterways.

13. DISPOSAL INFORMATION

DISPOSAL METHOD: This material is a US EPA defined ignitable hazardous waste. The preferred options for disposal are to send to licensed reclaimers, or to permitted incinerators. Any disposal practice must be in compliance with federal, state, and local regulations. Do not dump into sewers, ground, or any body of water.

EMPTY CONTAINER: KEEP OUT OF REACH OF CHILDREN! Empty containers retain product residue 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.

RCRA/EPA WASTE INFORMATION: Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

14. TRANSPORT INFORMATION

DOT (DEPARTMENT OF TRANSPORTATION)

PROPER SHIPPING NAME : UN1263, Paint, Class 3, PG III

(UN#, Proper Shipping Name, Class, Packing Group)

15. REGULATORY INFORMATION

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)

311/312 HAZARD CATEGORIES: This product should be reported as an immediate (acute) health hazard, delayed (chronic) health hazard, and a fire hazard.

FIRE : Yes **PRESSURE GENERATING :** No

REACTIVITY : No **ACUTE :** Yes **CHRONIC :** Yes

313 REPORTABLE INGREDIENTS: To the best of our knowledge, this product is not listed as a toxic chemical.

100V27

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302/304 EMERGENCY PLANNING

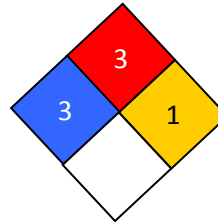
EMERGENCY PLAN: To the best of our knowledge, this material is not listed as an extremely hazardous substance.

16. OTHER INFORMATION

APPROVED BY : Mark Gingerella

TITLE : President / QC Manager

NFPA CODES



HMIS RATING	
Health :	3
Flammability :	3
Reactivity :	1
Personal Protection :	G

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