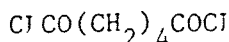


MATERIAL SAFETY DATA SHEET



PRODUCT NAME: Adipoyl Chloride, Pract. Gr.

CAS # 111-50-2

CHEMICAL NATURE: Acid Dichloride

% ACTIVITY: 100%

I. PHYSICAL DATA

BOILING POINT, 760 mm Hg	105-107°/2mm	FREEZE POINT	No Data
SPECIFIC GRAVITY	1.26	VAPOR PRESSURE AT 20°C.	No Data
VAPOR DENSITY	No Data	SOLUBILITY IN H ₂ O	Reacts
PER CENT VOLATILES BY WEIGHT	No Data	IONIC NATURE	No
APPEARANCE AND ODOR	dark liquid, pungent odor		

II. HAZARDOUS INGREDIENTS

MATERIAL	CAS#	%	TLV (Units)
Adipoyl Chloride	111-50-2	100%	Not determined

III. FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (test method)	> 230°F	AUTOIGNITION TEMPERATURE	Not established	
FLAMMABLE LIMITS IN AIR, % by volume	Not established	LOWER	No data	UPPER No data
EXTINGUISHING MEDIA	Non-Combustible DO NOT USE WATER. Use potassium bicarbonate(urea-based)dry chemical agent such as a MONNEX [®] , carbondioxide is effective at close range only.			
SPECIAL FIRE FIGHTING PROCEDURES	No special firefighting procedures needed, use normal procedures which include wearing NIOSH/MSHA approved self-contained breathing apparatus, flame and chemical resistant clothing; hats, boots and gloves. If without risk, remove material from fire area. Cool containers with water from maximum distance.			
UNUSUAL FIRE AND EXPLOSION HAZARDS	Water hydrolyzes adipoyl chloride, liberating hydrogen chloride, which in contact with metals can generate flammable hydrogen gas.			

IV. HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE	Not established
EFFECTS OF OVEREXPOSURE	Acid chlorides such as adipoyl chloride are extremely irritating to airway, eyes and skin. Symptoms of exposure include burning sensation, coughing, wheezing, shortness of breath, headache, nausea and vomiting. Eye contact causes pain, tearing, inflammation and possible destruction of the eye. Skin contact will cause severe burns.
EMERGENCY AND FIRST AID PROCEDURES	Remove from exposure. Eyes: Flush with copious amounts of water for at least 15 minutes. Skin: Remove any contaminated clothing. Flush skin with large volumes of water for 15 minutes. Ingestion/Inhalation: Seek prompt, competent medical attention.

V. REACTIVITY DATA

STABILITY		CONDITIONS TO AVOID	Extreme heat, moisture, sources of ignition.
UNSTABLE	STABLE X		
INCOMPATIBILITY (materials to avoid)		Water, alcohols, alkali, oxidizers and certain hydrogen-containing materials	
HAZARDOUS DECOMPOSITION PRODUCTS		Hydrogen Chloride	
HAZARDOUS POLYMERIZATION		CONDITIONS TO AVOID	Not applicable
May Occur	Will not Occur		

VI. SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED	Wearing full protective clothing and respiratory protection (See Sect. VII), eliminate all sources of ignition. Cover spill with dry sand or dry vermiculite, mix well and carefully transfer to a well-marked container. Close container tightly. Submit or retain for disposal.
WASTE DISPOSAL METHOD	Consult state, local, and federal regulations for proper disposal.

VII. SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION (specify type)	NIOSH/MSHA approved respirator with organic vapor cartridges for ordinary use, self-contained breathing apparatus for emergency use.		
VENTILATION	LOCAL EXHAUST	Adequate	SPECIAL Not applicable
	MECHANICAL	Fume hood	OTHER Not applicable
PROTECTIVE GLOVES	Rubber	EYE PROTECTION	OSHA approved safety goggles
OTHER PROTECTIVE EQUIPMENT	Lab coat and apron, flame & chemical resistant coveralls, eyewash capable of sustained flushing.		

VIII. SPECIAL PRECAUTIONS

PRECAUTIONARY LABELING	Warning! Corrosive Liquid!
OTHER HANDLING AND STORAGE CONDITIONS	Keep container tightly closed. Store in a cool, dry, well-ventilated area. Wash thoroughly after use. Segregate containers from caustic or basic materials and oxidizing agents. Keep away from moisture.