

SAFETY DATA SHEET

Hardener 222



Prepared to U.S. OSHA, CMA, ANSI, Canadian WHMIS, Australian WorkSafe, Japanese Industrial Standard JIS Z 7250:2000, and European Union REACH Regulations

SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Hardener 222
CHEMICAL FAMILY NAME: None known
PRODUCT CODE: 222
PRODUCT USE: Curing Agent
U.N. NUMBER: N/A
U.N. DANGEROUS GOODS CLASS: Non-Regulated Material
HS CODE: 3208.90.00.00
SUPPLIER/MANUFACTURER'S NAME: ADDRESS: Royal Coatings, Inc.
2705 Concord Rd., Belle Chasse, LA 70037
EMERGENCY PHONE: 1-800-255-3924 ChemTel, Inc
BUSINESS PHONE: 1-504-392-8811
EMAIL ADDRESS: info@royalcoatings.net
WEB SITE INFORMATION: www.royalcoatings.net
DATE OF PREPARATION: February 12, 2021
DATE OF LAST REVISION: April 20, 2015

SECTION 2 - HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW: This product is an amber liquid with a ammoniacal odor. Contact may cause skin irritation. May cause skin sensitization. Direct contact with eyes may cause serious irritation. Inhalation of vapors may cause respiratory tract irritation. Prolonged exposure may cause dizziness or drowsiness. May be harmful if swallowed. This product is not considered flammable material with flash point greater than 200°F. The environmental effects of this product have not been investigated.

US DOT SYMBOLS

Non-Regulated

CANADA (WHMIS) SYMBOLS



EUROPEAN and (GHS) Hazard Symbols



Signal Word: **Danger!**

GHS LABELING AND CLASSIFICATION:

Classification of the substance or mixture according to 29 CFR 1910.1200 and Regulation (EC) No1272/2008

EC# 202-859-9 Annex I Index# 603-057-00-3

Methyleneoxide, Polymer with Benzenamine is not listed in Annex I

Organic Acid CAS# is not available

EC# 217-168-8 This substance are not classified in the Annex I of Directive 67/548/EEC

Substances not listed either individually or in group entries must be self classified

Components Contributing to Hazard(s):

All ingredients

GHS Hazard Classification(s):

Acute Oral Toxicity Category 4

Skin Corrosion Category 2

Serious Eye Damage Category 1

Skin Sensitization Category 1

STOT RE Category 2

Hazard Statement(s):

H302: Harmful if swallowed

H315: Causes skin irritation

H317: May cause allergic skin reaction

H373: May cause damage to organs through prolonged or repeated exposure if swallowed

H318: Causes serious eye damage

Precautionary Statement(s):

P260: Do not breathe dust/fume/gas/mist/vapors/spray

P264: Wash hands thoroughly after handling

P280: Wear protective gloves/protective clothing/eye protection/face protection

SAFETY DATA SHEET

Epoxy Part B / Curing Agent

EU HAZARD CLASSIFICATION PER DIRECTIVE 1999/45/EC:

[Xn] Harmful

Risk Phrases:

R20/21/22:Harmful by inhalation, in contact with skin and if swallowed.

Safety Phrases:

S23: Do not breathe gas/fumes/vapour/spray
S36/37: Wear suitable protective clothing and gloves.

HEALTH HAZARDS OR RISKS FROM EXPOSURE:

ACUTE:

INHALATION: Inhalation of vapors/mist may cause respiratory tract irritation. May cause central nervous system effects, such as headache, nausea, dizziness, confusion and breathing difficulties.

EYE: Direct contact may cause severe irritation with possible burns.

SKIN: Prolonged or repeated contact with skin may cause irritation. If absorbed through the skin, may cause central nervous system effects.

INGESTION: Harmful if swallowed.

CHRONIC: None known

TARGET ORGANS: ACUTE: Eye, Respiratory System, Skin CHRONIC: None Known

SECTION 3 - COMPOSITION and INFORMATION ON INGREDIENTS

HAZARDOUS INGREDIENTS:	CAS #	EINECS #	ICSC #	WT %	HAZARD CLASSIFICATION; RISK PHRASES
Benzyl Alcohol	100-51-6	202-859-9	Not Listed	30 -60%	HAZARD CLASSIFICATION: : [Xn] Harmful RISK PHRASES: R20/22
Methyleneoxide, polymer with benzenamine, hydrogenated	135108-88-2	Not Listed in ESIS	Not Listed	30 – 60%	HAZARD CLASSIFICATION: : [Xn] Harmful RISK PHRASES: R21/22
Organic Acid	Not Available	Not Available	Not Listed	3 – 7%	HAZARD CLASSIFICATION: : [Xn] Harmful RISK PHRASES: R21/22
Methylenebiscyclohexanamine, 4,4	1761-71-3	217-168-8	Not Listed	1 – 5%	HAZARD CLASSIFICATION: : [Xn] Harmful RISK PHRASES: R21/22
Balance of other ingredients are non-hazardous or less than 1% in concentration (or 0.1% for carcinogens, reproductive toxins, or respiratory sensitizers).					

NOTE: ALL WHMIS required information is included in appropriate sections based on the ANSI Z400.1-2010 format. This product has been classified in accordance with the hazard criteria of the CPR and the SDS contains all the information required by the CPR, EU Directives and the Japanese Industrial Standard JIS Z 7250: 2000.

SECTION 4 - FIRST-AID MEASURES

Contaminated individuals of chemical exposure must be taken for medical attention if any adverse effect occurs. Rescuers should be taken for medical attention, if necessary. Take copy of label and SDS to health professional with contaminated individual.

EYE CONTACT: If product enters the eyes, open eyes while under gentle running water for at least 20 minutes. Seek medical attention.

SKIN CONTACT: Wash skin thoroughly after handling. Seek medical attention if irritation develops and persists. Remove contaminated clothing. Launder before re-use.

INHALATION: If breathing becomes difficult, remove victim to fresh air. If necessary, use artificial respiration to support vital functions. Seek medical attention if breathing difficulty continues.

INGESTION: If product is swallowed, call physician or poison control center for most current information. If professional advice is not available, do not induce vomiting. Never induce vomiting or give diluents (milk or water) to someone who is unconscious, having convulsions, or who cannot swallow. Seek medical advice. Take a copy of the label and/or MSDS with the victim to the health professional.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: Pre-existing skin or respiratory problems may be aggravated by prolonged exposure to this product.

RECOMMENDATIONS TO PHYSICIANS: Treat symptoms and reduce over-exposure.

SECTION 5 - FIRE-FIGHTING MEASURES

FLASH POINT: Non-Flammable with flash >200°F

AUTOIGNITION TEMPERATURE: Not Applicable

SAFETY DATA SHEET

Epoxy Part B / Curing Agent

FLAMMABLE LIMITS (in air by volume, %):

FIRE EXTINGUISHING MATERIALS:

UNUSUAL FIRE AND EXPLOSION HAZARDS:

Explosion Sensitivity to Mechanical Impact:

Explosion Sensitivity to Static Discharge:

SPECIAL FIRE-FIGHTING PROCEDURES:

Lower (LEL): Not Applicable Upper (UEL): Not Applicable

Water, carbon dioxide, foam, or dry chemical

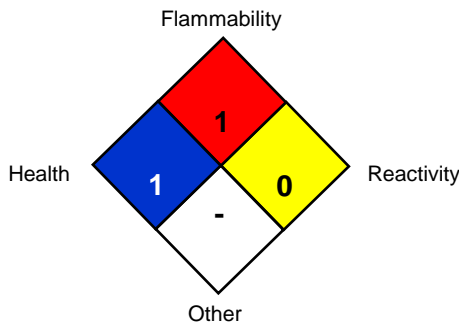
If involved in a fire this product may generate ammonia gas, toxic nitrogen oxide gases noxious and toxic fumes.

Not Applicable

Not Applicable

Incipient fire responders should wear eye protection. Structural firefighters must wear Self-Contained Breathing Apparatus and full protective equipment. Isolate materials not yet involved in the fire and protect personnel. Move containers from fire area if this can be done without risk; otherwise, cool with carefully applied water spray. If possible, prevent runoff water from entering storm drains, bodies of water, or other environmentally sensitive areas.

NFPA RATING SYSTEM



HMIS RATING SYSTEM

HAZARDOUS MATERIAL IDENTIFICATION SYSTEM			
HEALTH HAZARD (BLUE)	1		
FLAMMABILITY HAZARD (RED)	1		
PHYSICAL HAZARD (YELLOW)	1		
PROTECTIVE EQUIPMENT			
EYES	RESPIRATORY	HANDS	BODY
	See Sect 8		See Sect 8
For Routine Industrial Use and Handling Applications			

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe * = Chronic hazard

SECTION 6 - ACCIDENTAL RELEASE MEASURES

SPILL AND LEAK RESPONSE: Personnel should be trained for spill response operations.

SPILLS: Contain spill if safe to do so. Prevent entry into drains, sewers, and other waterways. Soak up with an absorbent material and place in an appropriate container for disposal. Dispose of in accordance with applicable Federal, State, and local procedures (see Section 13, Disposal Considerations).

SECTION 7 - HANDLING and STORAGE

WORK PRACTICES AND HYGIENE PRACTICES: As with all chemicals, avoid getting this product ON YOU or IN YOU. Wash thoroughly after handling this product. Do not eat, drink, smoke, or apply cosmetics while handling this product. Avoid breathing vapors/mists/sprays generated by this product. Use in a well-ventilated location. Remove contaminated clothing immediately.

STORAGE AND HANDLING PRACTICES: Store containers in a cool, dry, well ventilated location. Keep container tightly closed when not in use. Store away from alkalis..

SECTION 8 - EXPOSURE CONTROLS - PERSONAL PROTECTION

EXPOSURE LIMITS/GUIDELINES:

Chemical Name	CAS#	ACGIH TWA	OSHA TWA
Benzyl Alcohol	100-51-6	10 ppm	10 ppm

Currently, International exposure limits are not established for all the components of this product. Please check with competent authority in each country for the most recent limits in place.

SAFETY DATA SHEET

Epoxy Part B / Curing Agent

VENTILATION AND ENGINEERING CONTROLS: Use with adequate ventilation to ensure exposure levels are maintained below the limits provided below. Use local exhaust ventilation to control airborne dust. Ensure eyewash/safety shower stations are available near areas where this product is used.

The following information on appropriate Personal Protective Equipment is provided to assist employers in complying with OSHA regulations found in 29 CFR Subpart I (beginning at 1910.132) or equivalent standard of Canada, or standards of EU member states (including EN 149 for respiratory PPE, and EN 166 for face/eye protection), and those of Japan. Please reference applicable regulations and standards for relevant details.

RESPIRATORY PROTECTION: Maintain airborne contaminant concentrations below guidelines listed above, if applicable. If necessary, use only respiratory protection authorized in the U.S. Federal OSHA Respiratory Protection Standard (29 CFR 1910.134), equivalent U.S. State standards, Canadian CSA Standard Z94.4-93, the European Standard EN149, or EU member states.

EYE PROTECTION: Splash goggles or safety glasses with side shields recommended. If necessary, refer to U.S. OSHA 29 CFR 1910.133, Canadian Standards, and the European Standard EN166, Australian Standards, or relevant Japanese Standards.

HAND PROTECTION: Compatible protective gloves recommended. Wash hands after removing gloves. If necessary, refer to U.S. OSHA 29 CFR 1910.138, the European Standard DIN EN 374, the appropriate Standards of Canada, Australian Standards, or relevant Japanese Standards.

BODY PROTECTION: Use body protection appropriate to prevent contact (e.g. lab coat, overalls). If necessary, refer to appropriate Standards of Canada, or appropriate Standards of the EU, Australian Standards, or relevant Japanese Standards.

SECTION 9 - PHYSICAL and CHEMICAL PROPERTIES

PHYSICAL STATE:	Liquid
APPEARANCE & ODOR:	This product is an amber liquid with a ammoniacial odor.
ODOR THRESHOLD (PPM):	Not Available
VAPOR PRESSURE (mmHg):	0.70 mmHg at 70°F
VAPOR DENSITY (AIR=1):	>1
LIQUID DENSITY	Not Available
EVAPORATION RATE (nBuAc = 1):	<1
BOILING POINT (C°):	222°C
FREEZING POINT (C°):	Not Available
pH:	Not Available
SPECIFIC GRAVITY 20°C: (WATER =1)	Not Available
SOLUBILITY IN WATER (%)	Not Available
VOC:	Not Available
MOLECULAR WEIGHT	Not Available

SECTION 10 - STABILITY and REACTIVITY

STABILITY: Product is stable

DECOMPOSITION PRODUCTS: When heated to decomposition this product produces Oxides of carbon (CO_x), and toxic and irritating fumes.

MATERIALS WITH WHICH SUBSTANCE IS INCOMPATIBLE: Amines, incompatible bases and reducing agents.

HAZARDOUS POLYMERIZATION: Will not occur.

CONDITIONS TO AVOID: Incompatible materials.

SECTION 11 - TOXICOLOGICAL INFORMATION

TOXICITY DATA:

CAS# 100-51-6: Benzyl Alcohol

LD₅₀ Oral, Rat = >1200 mg/kg

SUSPECTED CANCER AGENT: None of the ingredients are found on the following lists: FEDERAL OSHA Z LIST, NTP, CAL/OSHA, IARC and therefore are not considered to be, nor suspected to be a cancer-causing agent by these agencies.

IRRITANCY OF PRODUCT: Contact with this product can be irritating to exposed skin, eyes and respiratory system.

SENSITIZATION OF PRODUCT: This product may cause skin sensitization

REPRODUCTIVE TOXICITY INFORMATION: No information concerning the effects of this product and its components on the human reproductive system.

SAFETY DATA SHEET

Epoxy Part B / Curing Agent

SECTION 12 - ECOLOGICAL INFORMATION

ALL WORK PRACTICES MUST BE AIMED AT ELIMINATING ENVIRONMENTAL CONTAMINATION.

ENVIRONMENTAL STABILITY: No Data available at this time.

EFFECT OF MATERIAL ON PLANTS or ANIMALS: No evidence is currently available on this product's effects on plants or animals.

EFFECT OF CHEMICAL ON AQUATIC LIFE: No data available

SECTION 13 - DISPOSAL CONSIDERATIONS

PREPARING WASTES FOR DISPOSAL: Waste disposal must be in accordance with appropriate Federal, State, and local regulations, those of Canada, Australia, EU Member States and Japan.

SECTION 14 - TRANSPORTATION INFORMATION

US DOT; IATA; IMO; ADR:

THIS PRODUCT IS NOT HAZARDOUS AS DEFINED BY 49 CFR 172.101 BY THE U.S. DEPARTMENT OF TRANSPORTATION.

PROPER SHIPPING NAME: Non-Regulated Material

HAZARD CLASS NUMBER and DESCRIPTION: None

UN IDENTIFICATION NUMBER: NA

PACKING GROUP: NA

DOT LABEL(S) REQUIRED: NA

NORTH AMERICAN EMERGENCY RESPONSE GUIDEBOOK NUMBER (2004): NA

MARINE POLLUTANT: None of the ingredients are classified by the DOT as a Marine Pollutant (as defined by 49 CFR 172.101, Appendix B)

U.S. DEPARTMENT OF TRANSPORTATION (DOT) SHIPPING REGULATIONS:

This product is not classified as dangerous goods, per U.S. DOT regulations, under 49 CFR 172.101.

TRANSPORT CANADA, TRANSPORTATION OF DANGEROUS GOODS REGULATIONS:

This product is not classified as Dangerous Goods, per regulations of Transport Canada.

INTERNATIONAL AIR TRANSPORT ASSOCIATION (IATA):

This product is not classified as Dangerous Goods, by rules of IATA:

INTERNATIONAL MARITIME ORGANIZATION (IMO) DESIGNATION:

This product is not classified as Dangerous Goods by the International Maritime Organization.

EUROPEAN AGREEMENT CONCERNING THE INTERNATIONAL CARRIAGE OF DANGEROUS GOODS BY ROAD (ADR):

This product is not classified by the United Nations Economic Commission for Europe to be dangerous goods.

SECTION 15 - REGULATORY INFORMATION

UNITED STATES REGULATIONS

SARA REPORTING REQUIREMENTS: This product is subject to the reporting requirements of Sections 302, 304 and 313 of Title III of the Superfund Amendments and Reauthorization Act., as follows: None

TSCA: All components in this product are listed on the US Toxic Substances Control Act (TSCA) inventory of chemicals.

SARA 311/312:

Acute Health: Yes Chronic Health: No Fire: No Reactivity: No

U.S. SARA THRESHOLD PLANNING QUANTITY: There are no specific Threshold Planning Quantities for this product. The default Federal MSDS submission and inventory requirement filing threshold of 10,000 lb (4,540 kg) may apply, per 40 CFR 370.20.

U.S. CERCLA REPORTABLE QUANTITY (RQ): None

CLEAN WATER ACT: This product is not listed as a priority pollutant under the CWA.

STATE REGULATIONS: None known

CALIFORNIA SAFE DRINKING WATER AND TOXIC ENFORCEMENT ACT (PROPOSITION 65): None of the ingredients is on the California Proposition 65 lists.

CANADIAN REGULATIONS:

CANADIAN DSL/NDL INVENTORY STATUS: All of the components of this product are on the DSL Inventory

CANADIAN ENVIRONMENTAL PROTECTION ACT (CEPA) PRIORITIES SUBSTANCES LISTS: No component of this product is on the CEPA First Priorities Substance Lists.

SAFETY DATA SHEET

Epoxy Part B / Curing Agent

CANADIAN WHMIS CLASSIFICATION and SYMBOLS: This product is categorized as a Class D Division 2B Materials causing other toxic effects, as per the Controlled Product Regulations

EUROPEAN ECONOMIC COMMUNITY INFORMATION:

EU LABELING AND CLASSIFICATION:

Classification of the mixture according to Regulation (EC) No1272/2008. See section 2 for details.

AUSTRALIAN INFORMATION FOR PRODUCT:

AUSTRALIAN INVENTORY OF CHEMICAL SUBSTANCES (AICS) STATUS: All components of this product are listed on the AICS or Exempt from listing.

STANDARD FOR THE UNIFORM SCHEDULING OF DRUGS AND POISONS: Not applicable.

JAPANESE INFORMATION FOR PRODUCT:

JAPANESE MINISTER OF INTERNATIONAL TRADE AND INDUSTRY (MITI) STATUS: The components of this product are not listed as Class I Specified Chemical Substances, Class II Specified Chemical Substances, or Designated Chemical Substances by the Japanese MITI.

INTERNATIONAL CHEMICAL INVENTORIES:

Listing of the components on individual country Chemical Inventories is as follows:

Asia-Pac:	Listed or Exempt
Australian Inventory of Chemical Substances (AICS):	Listed or Exempt
Korean Existing Chemicals List (ECL):	Listed or Exempt
Japanese Existing National Inventory of Chemical Substances (ENCS):	Listed or Exempt
Philippines Inventory of Chemicals and Chemical Substances (PICCS):	Listed or Exempt
Swiss Giftliste List of Toxic Substances:	Listed or Exempt
U.S. TSCA:	Listed or Exempt

SECTION 16 - OTHER INFORMATION

PREPARED BY: Paul Eigbrett

GHS MSDS Compliance PLUS

Disclaimer: To the best of Royal Coating's knowledge, the information contained herein is reliable and accurate as of this date; however, accuracy, suitability or completeness is not guaranteed and no warranties of any type either express or implied are provided. The information contained herein relates only to this specific product.