

Safety Data Sheet

PalmaLite Body Coat Hardener 1

Issue Date: 11/01/2017 Print Date: 11/01/2017

Palma Inc. encourages and expects you lo read and understand the entire (M)SDS there is important information throughout the document. We expect you to follow the precautions identified in this document unless your use conditions would necessitate other appropriate methods or actions.

1. IDENTIFICATION

Product name: PalmaLite Body Coat Hardener 1

Recommended use of the chemical and restrictions on use

Identified uses: Hardener for epoxy resin.

COMPANY IDENTIFICATION

Palma Inc, 628 NJ-10 Suites 2 & 3 Whippany, NJ 07981

Customer Information Number: 1-800-336-7256 or info@palmainc.com

EMERGENCY TELEPHONE NUMBER

24-Hour Emergency Contact: 1-800-336-7256

1. HAZARDS IDENTIFICATION

Hazard classification

Physical hazards Not classified

Health hazards

Skin corrosion/irritation

Serious eye damage/eye irritation

Sensitization, respiratory

Sensitization, skin

Reproductive toxicity

Category 1

Category 1

Category 1

Category 1

Specific target organ toxicity, single exposure Category 3 respiratory tract irritation

Environmental hazards Not classified.

OSHA defined hazards Not classified.

Label elements - Hazard pictograms







Signal word: **DANGER!**

Hazards

Causes severe skin burns and eye damage. May cause an allergic skin reaction. Causes serious eye damage. May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause respiratory irritation. May damage fertility or the unborn child

Precautionary statements

Prevention

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe mist or vapor. Wash thoroughly after handling. Use only outdoors or in a well-ventilated area. Contaminated work clothing must not be allowed out of the workplace. Wear protective gloves/protective clothing/eye protection/ face protection. In case of inadequate ventilation wear respiratory protection.

Response

If swallowed: Rinse mouth. Do NOT induce vomiting. If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. If inhaled: Remove person to fresh air and keep comfortable for breathing. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center/doctor. If skin irritation or rash occurs: Get medical advice/attention. Wash contaminated clothing before reuse.

Storage

Store in a well-ventilated place. Keep container tightly closed. Store locked up.

Disposal

Dispose of contents/container in accordance with local/regional/national/international regulations

3. COMPOSITION/INFORMATION ON INGREDIENTS

MIXTURES

Chemical name	CAS number	%
112-ETHANEDIAMINE, N 1-(2-AMI NOETHYL)1-	111-40-0	20
1-PIPERAZINEETHANAM IN E	140-31-8	10
PHENOL, 4,4*-(1-METHYLETHYLIDENE)BIS	80-05-7	10
Other components below reportable levels		60

^{*}Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

Description of first aid measures

IF exposed or concerned: Get medical advice/attention. If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance. Wash contaminated clothing before reuse.

Inhalation: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Oxygen or artificial respiration if needed. Do not use mouth-to-mouth method if victim inhaled the substance. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.

Skin contact: Remove contaminated clothing Immediately and wash skin with soap and water. Call a physician or poison control center immediately. Chemical bums must be treated by a physician. Wash contaminated clothing before reuse.

Eye contact: Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician or poison control center immediately.

Ingestion: Call a physician or poison control center immediately. Rinse mouth. Do not induce vomiting. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.

Most important symptoms and effects, both acute and delayed: Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. May cause respiratory irritation. Difficulty in breathing

Indication of any immediate medical attention and special treatment needed

Provide general supportive measures and treat symptomatically. Chemical bums: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital. Keep victim under observation. Symptoms may be delayed.

5. FIREFIGHTING MEASURES

Suitable extinguishing media: Alcohol resistant foam. Powder. Carbon dioxide (CO2).

Unsuitable extinguishing media: Do not use direct water stream. May spread fire.

Specific hazards arising from the chemical

During fire, gases hazardous to health may be formed.

Unusual Fire and Explosion Hazards: Violent steam generation or eruption may occur upon application of direct water stream to hot liquids. Dense smoke is produced when product bums.

Special protective equipment and precautions for firefighters

Move containers from fire area if you can do so without risk. Use standard firefighting procedures and consider the hazards of other involved materials.

General fire hazards No unusual fire or explosion hazards noted.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures: Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Do not breathe mist or vapor. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities

should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SOS.

Environmental precautions: Avoid discharge into drains, water courses or onto the ground.

Methods and materials for containment and cleaning up: Use water spray to reduce vapors or divert vapor cloud drift. Large Spills: Stop the flew of material, if this is without risk. Dike the spilled material, where this is possible. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water. Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination. Never return spills to original containers for re-use. For waste disposal, see section 13 of the SOS.

7. HANDLING AND STORAGE

Precautions for safe handling: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe mist or vapor. Do not get in eyes, on skin, or on clothing. Pregnant or breastfeeding women must not handle this product. Provide adequate ventilation. Avoid prolonged exposure. Wear appropriate personal protective equipment. Should be handled in closed systems, if possible. Observe good industrial hygiene practices.

Conditions for safe storage: Store locked up. Store in original tightly closed container. Store in a wellventilated place. Store away from incompatible materials (see Section 10 of the SOS).

Storage stability

Storage temperature: Shelf life: Use within

0 - 30 CC (32 - 86 °F) 24 Month

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational exposure limits

US. ACGIH Threshold Limit Values

Value/Notation Components **Type**

1,2-ETHANEDIAMINE, **TWA** 1ppm

N1-(2-AMINOETHYL)

(CAS 111-40-0)

US. NIOSH: Pocket Guide to Chemical Hazards

Value/Notation Components **Type**

1,2-ETHANEDIAMINE, TWA 4 mg/m3

N1-(2-AMINOETHYL)

(CAS 111-40-0)

1ppm

Biological limit values No biological exposure limits noted for the ingredient(s).

Exposure guidelines

US - California OELs: Skin designation

1,2-ETHANEDIAMINE, N1-(2-AMINOETHYL)- (CAS Can be absorbed through the skin. 111-40-0)

Print Date: 11/01/2017

US - Minnesota Haz Subs: Skin designation applies

1,2-ETHANEDIAMINE, N1-(2-AMINOETHYL)- (CAS Skin design 111-40-0)

Skin designation applies...

Issue Date: 11/01/2017

US ACGIH Threshold Limit Values: Skin designation

1,2-ETHANEDIAMINE, N1-(2-AMINOETHYL)- (CAS Can be absorbed through the skin. 111-40-0)

US NIOSH Pocket Guide to Chemical Hazards: Skin designation

1,2-ETHANEDIAMINE, N1-(2-AMINOETHYL)- (CAS Can be absorbed through the skin. 111-40-0)

Appropriate engineering controls Good general ventilation (typically 1 a air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. General ventilation normally adequate. Eye wash facilities and emergency shower must be available when handling this product.

Individual protection measures, such as personal protective equipment

The following are recommendations for Personnel Protective Equipment (PPE). The employer/user of this product must perform a Hazard Assessment of the workplace according to OSHA regulations 29 CFR 1910.132 to determine the appropriate PPE for use while performing any task involving potential exposure to this product.

Eye/face protection: Chemical respirator with organic vapor cartridge and full face piece . **Skin protection**

Hand protection: Wear appropriate chemical resistant gloves. Suitable gloves can be recommended by the glove supplier.

Other protection: Wear appropriate chemical resistant clothing. Use of an impervious apron is recommended.

Respiratory protection: Chemical respirator with organic vapor cartridge and full face piece.

Thermal hazards: Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations: Observe any medical surveillance requirements. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Contaminated work clothing should not be allowed out of the workplace.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Physical stateLiquid.FormLiquid

Color PALE STRAW

Odor Amine

Odor Threshold Not available pH Not available

Melting point/freezing point 72.32 "F (22.4 11C) estimated 113.73 "F (212.07 "C) estimated

Flash point 220.0 °F (104.4 "C)

Evaporation RateFlammability (solid, gas)
Not available
Not applicable

Issue Date: 11/01/2017 Print Date: 11/01/2017

Upper/lower flammability or explosive limits

Flammability limit -lower (%)
Flammability limit .. upper (%)
Explosive limit - lower (%)
Explosive limit -upper (%)
Not available
Not available
Vapor pressure
Not available
Not available
Not available
Not available
Not available

Solubility(ies)

Solubility (water) Not available Partition coefficient Not available

(n-octanol/water)

Auto-ignition temperature 750.02 °F (398.9 °C) estimated

Decomposition temperatureViscosity
Not available
Not available

Other information

Density 8.20 lbs/gal **Explosive properties** Not explosive.

Flammability class Combustible III8 estimated

Oxidizing properties Not oxidizing.

Specific gravity 0.98

VOC 5 % estimated

10. STABILITY AND REACTIVITY

Reactivity: The product is stable and non-reactive under normal conditions of use, storage and transport.

Chemical stability: Material is stable under normal conditions.

Possibility of hazardous reactions: Hazardous polymerization does not occur.

Conditions to avoid: Contact with incompatible materials.

Incompatible materials: Strong acids. Alkaline metals. Peroxides. Phenols.

Hazardous decomposition products: No hazardous decomposition products are known...

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Inhalation May cause irritation to the respiratory system. May cause allergy or asthma symptoms or breathing difficulties if inhaled. Prolonged inhalation may be harmful.

Skin Contact Causes severe skin bums. May cause an allergic skin reaction.

Eye Contact Causes serious eye damage.

Ingestion Causes digestive tract bums.

Symptoms related to the physical, chemical and toxicological characteristics Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may Include stinging, tearing,

Print Date: 11/01/2017

Issue Date: 11/01/2017

redness, swelling, and blurred vision. Permanent eye damage including blindness could result. May cause respiratory irritation. Difficulty in breathing.

Information on toxicological effects

Acute toxicity May cause respiratory irritation. May cause an allergic skin reaction.

Skin corrosion/irritation Causes severe skin bums and eye damage.

Serious eye damage/eye Irritation Causes serious eye damage.

Respiratory or skin sensitization

Respiratory sensitization May cause allergy or asthma symptoms or breathing difficulties if inhaled. **Skin sensitization** May cause an allergic skin reaction.

Germ cell mutagenicity No data available to indicate product or any components present at greater than 0.1 % are mutagenle or genotoxic.

Carcinogenicity This product is not considered to be a carcinogen by IARC, ACGIH. NTP, or OSHA.

IARC Monographs. Overall Evaluation of Carcinogenicity Not listed.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050) Not regulated.

US. National Toxicology Program (NTP) Report on Carcinogens Not Listed

Reproductive toxicity May damage fertility or the unborn child.

Specific target organ toxicity- single exposure May cause respiratory irritation.

Specific target organ toxicity - repeated exposure Not classified.

Aspiration hazard Not an aspiration hazard.

Chronic effects Prolonged inhalation may be harmful.

12. ECOLOGICAL INFORMATION

Ecotoxicity: the product is not classified as environmentally hazardous. However this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Components 1,2-ETHANEDIAMINE, I	N1-(2-AMINOETI	Species HYL)- (CAS 111-40-0)	Test Results	
Aquatic Fish	LC50	Guppy (Poecilia reticulata)	1014 mg/l, 96 hours	
1-PIPERAZINEETHANAMINE (CAS 140-31-8) Aquatic				
Fish	LC50	Fathead minnow (Pimephales promelas)	1950 -2460 mg/l, 96 hours	
PHENOL, 4,4'-(1-METHYLETHYLIDENE)BIS- (CAS 80-05-7				

Aquatic

Crustacea	EC50	Water flea (Daphni a magna)	9.2 - 11.4 mg/l, 48 hours
Fish	LC50	Fathead minnow (Pimephales promelas)	3.6 - 5.4 mg/l, 96 hours)

^{*}Estimates for product may be based on additional component data not shown.

Persistence and degradability No data is available on the degradability of this product.

Bioaccumulative potential

Partition coefficient n-octanol / water (log Kow)
PHENOL, 4,4'-(1-METHYL ETHYLIDENE)BIS 3.32

Mobility in soil No data available.

Other adverse effects No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation

13. DISPOSAL CONSIDERATIONS

Disposal instructions Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of contents/container in accordance with local/regional/national/international regulations.

Local disposal regulations Dispose in accordance with all applicable regulations.

Hazardous waste code The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

Waste from residues/ unused products Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

Contaminated packaging Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal

14. TRANSPORT INFORMATION

DOT

Proper shipping name AMINES, LIQUID, CORROSIVE, N.O.S. (DIETHYLENETRIAMINE)

UN number UN UN2735

Class 8 Packing group |||

Classification for SEA transport (IMO-IMDG):

Proper shipping name ISOPHORONEDIAMINE SOLUTION

UN number UN 2289

Class 8
Packing group III
ERF number 153

Special precautions for user

Read safety instructions, SDS and emergency procedures before handling.

DOT information on packaging may be different from that listed.

15. REGULATORY INFORMATION

US federal regulations

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

Issue Date: 11/01/2017 Print <u>Date: 11/01/2017</u>

Issue Date: 11/01/2017 Print Date: 11/01/2017

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

TSCA Chemical Action Plans, Chemicals of Concern

PHENOL, 4.4'-(1-METHYLETHYLIDENE)BIS- (CAS Bisphenol A Action Plan 80-05-7)

CERCLA Hazardous Substance List (40 CFR 302.4)

Not Listed

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not regulated.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories Immediate Hazard - Yes

Delayed Hazard - Yes Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous chemical Yes

SARA 313 (TRI reporting)

Chemical name CAS number % by wt. PHENOL, 4,4'-(1-METHYLETHYLI DENE)BIS- 80-05-7 10

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act (SOWA)

Not regulated.

US state regulations

US. California Controlled Substances. CA Department of Justice (California Health and Safety Code Section 11100)

Not listed.

US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69602.3, subd. (a))

PHENOL, 4,4'-(1-METHYLETHYLIDENE)BIS- (CAS 80-05-7)

Issue Date: 11/01/2017 Print Date: 11/01/2017

US. Massachusetts RTK - Substance List

1,2-ETHANEDIAMINE, N1-(2-AMINOETHYL)- (CAS 111-40-0) 1-PIPERAZINEETHANAMINE (CAS 140-31-8) PHENOL, 4,4'-(1-METHYLETHYLIDENE)BIS- (CAS 80-05-7)

US. New Jersey Worker and Community Right-to-Know Act

1,2-ETHANEDIAMINE, N1-(2-AMINOETHYL)- (CAS 111-40-0) 1-PIPERAZINEETHANAMINE (CAS 140-31-8) PHENOL, 4,4'-(1-METHYLETHVLIDENE)BIS- (CAS 80-05-7)

US. Pennsylvania Worker and Community Right-to-Know Law

1,2-ETHANEDIAMINE, N1-(2-AMINOETHYL)- (CAS 111-40-0) 1-PIPERAZINEETHANAMINE (CAS 140-31-8) PHENOL, 4,4'-(1-METHYLETHYLIDENE)BIS- (CAS 80-05-7)

US. Rhode Island RTK

PHENOL, 4,4'-(1-METHYLETHYLIDENE)BIS- (CAS 80-05-7)

US. California Proposition 66

WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.

US - California Proposition 65 - CRT: Listed date/Female reproductive toxin PHENOL, 4,4'-(1-METHYLETHYLIDENE)BIS- (CAS Listed: May 11, 2015 80-05-7

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IE	ECSC) Yes
Europe	European Inventory of Existing Commercial Chemical	Yes
·	Substances (EINECS)	
Europe	European List of Notified Chemical Substances (ELINC	CS) No
Japan	Inventory of Existing and New Chemical Substances (E	ENCS) No
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Subst	ances Yes
	(PICCS)	
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

^{&#}x27;A 'Yes" indicates that all components or this product comply with the inventory requirements administered by the governing country(s)

16. OTHER INFORMATION

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A "No" indicates that one or more components of the product are no t listed or exempt from listing on the inventor y administered by the governing country(s).

HMIS® ratings Health: 3

Flammability: 0 Instability: 0

NFPA ratings Health: 3

Flammability: 1 Instability: 0

PALMA INC. urges each customer or recipient of this (M)SDS to study it carefully and consult appropriate expertise, as necessary or appropriate, to become aware of and understand the data contained in this (M) SDS and any hazards associated with the product. The information herein is provided in good faith and believed to be accurate as of the effective date shown above. However, no warranty, express or implied, is given. Regulatory requirements are subject to change and may differ between various locations. It is the buyer's/user's responsibility to ensure that his activities comply with all federal, state, provincial or local laws. The information presented here pertains only to the product as shipped. Since conditions for use of the product are not under the control of the manufacturer, it is the buyer's/user's duty to determine the conditions necessary for the safe use of this product. Due to the proliferation of sources for information such as manufacturer specific (M)SDSs, we are not and cannot be responsible for (M)SDSs obtained from any source other than ourselves. If you have obtained an (M)SDS from another source or if you are not sure that the (M)SDS you have is current, please contact us for the most current version.