

Safety Data Sheet

D.E.H.™ 804 Epoxy Hardener

Version 1.3

Revision Date: 12/14/2020

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : D.E.H.™ 804 Epoxy Hardener

Recommended use of the chemical and restrictions on use

Recommended use : Hardener

Manufacturer or supplier's details

Company : Univar Solutions México, S. de R.L. de C.V.
Address : Av. Xola, número 535, piso 2, Col. Del Valle Norte
 Deleg. Benito Juárez CP 03103
 Ciudad de México
 Mexico

Emergency telephone number:

Transport North America: CHEMTREC (1-800-424-9300)

CHEMTREC INTERNATIONAL Tel # 703-527-3887

SETIQ 800 00 214 00 / 55 55 59 15 88

Additional Information: : Responsible Party: Product Compliance Department
 E-Mail: SDSLA@univarsolutions.com
 SDS Requests: 55 1107 0170
 Website: www.univarsolutions.com

SECTION 2. HAZARDS IDENTIFICATION

GHS Classification

Skin irritation : Category 2

Serious eye damage : Category 1

GHS label elements

Hazard pictograms :



Signal word : Danger

Hazard statements : H315 Causes skin irritation.
 H318 Causes serious eye damage.

Precautionary statements : **Prevention:**
 P264 Wash skin thoroughly after handling.
 P280 Wear protective gloves/ eye protection/ face protection.
Response:
 P302 + P352 IF ON SKIN: Wash with plenty of water.
 P305 + P351 + P338 + P310 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 or doctor/ physician.
 P332 + P313 If skin irritation occurs: Get medical advice/ attention.
 P362 + P364 Take off contaminated clothing and wash it before reuse.

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Other hazards

None known.

This SDS was prepared according to NOM-018-STPS-2015.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Hazardous components

CAS-No.	Chemical name	Weight percent
64-19-7	Acetic acid	1 - 3
112-24-3	Triethylenetetramine	0.1 - 1

Any concentration shown as a range is due to batch variation.

SECTION 4. FIRST AID MEASURES

- General advice : Move out of dangerous area.
Consult a physician.
Show this safety data sheet to the doctor in attendance.
Do not leave the victim unattended.
- If inhaled : Move to fresh air.
If symptoms persist, call a physician.
- In case of skin contact : If skin irritation persists, call a physician.
Wash off immediately with soap and plenty of water.
Remove contaminated clothing and shoes.
Wash contaminated clothing before reuse.
- In case of eye contact : Small amounts splashed into eyes can cause irreversible tissue damage and blindness.
In case of contact, immediately flush eyes with plenty of water for at least 30 minutes.
Continue rinsing eyes during transport to hospital.
Remove contact lenses.
Protect unharmed eye.
Keep eye wide open while rinsing.
If eye irritation persists, consult a specialist.
Take victim immediately to hospital.
- If swallowed : Obtain medical attention.
Do not induce vomiting without medical advice.
Do not give milk or alcoholic beverages.
Never give anything by mouth to an unconscious person.
If symptoms persist, call a physician.
- Most important symptoms and effects, both acute and delayed : None known.

SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media : Water spray

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	Carbon dioxide (CO ₂) Dry chemical Foam
Unsuitable extinguishing media	: High volume water jet
Specific hazards during fire-fighting	: Do not allow run-off from fire fighting to enter drains or water courses.
Hazardous combustion products	: No hazardous combustion products are known
Specific extinguishing methods	: Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.
Special protective equipment for firefighters	: Wear self-contained breathing apparatus for firefighting if necessary.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	: Use personal protective equipment.
Environmental precautions	: Prevent product from entering drains. Prevent further leakage or spillage if safe to do so. If the product contaminates rivers and lakes or drains inform respective authorities.
Methods and materials for containment and cleaning up	: Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Keep in suitable, closed containers for disposal.

SECTION 7. HANDLING AND STORAGE

Advice on protection against fire and explosion	: Normal measures for preventive fire protection.
Advice on safe handling	: Do not breathe vapours/dust. Avoid exposure - obtain special instructions before use. Avoid contact with skin and eyes. For personal protection see section 8. Smoking, eating and drinking should be prohibited in the application area. To avoid spills during handling keep bottle on a metal tray. Dispose of rinse water in accordance with local and national regulations. Persons susceptible to skin sensitisation problems or asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this mixture is being used.
Hygiene measures	: When using do not eat or drink. When using do not smoke.

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- Conditions for safe storage : Wash hands before breaks and at the end of workday.
: Keep container tightly closed in a dry and well-ventilated place.
Electrical installations / working materials must comply with the technological safety standards.
- Recommended storage temperature : 0 - 25 °C
- Storage period : 24 Months

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

CAS-No.	Components	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
64-19-7	Acetic acid	LMPE-CT	15 ppm 37 mg/m ³	MX OEL
		LMPE-PPT	10 ppm 25 mg/m ³	MX OEL
		VLE-PPT	10 ppm	NOM-010-STPS-2014
		VLE-CT	15 ppm	NOM-010-STPS-2014
R7		TWA	10 ppm	ACGIH
R7		STEL	15 ppm	ACGIH

Personal protective equipment

- Respiratory protection : Use respiratory protection unless adequate local exhaust ventilation is provided or exposure assessment demonstrates that exposures are within recommended exposure guidelines.
- Filter type : Organic vapour type
- Hand protection
- Remarks : The suitability for a specific workplace should be discussed with the producers of the protective gloves.
- Eye protection : Eye wash bottle with pure water
Tightly fitting safety goggles
Wear face-shield and protective suit for abnormal processing problems.
- Skin and body protection : Impervious clothing
Choose body protection according to the amount and concentration of the dangerous substance at the work place.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

- Appearance : liquid
- Colour : yellow
- Odour : characteristic
- Odour Threshold : No data available
- pH : Calculated 8 - 11
- Freezing point : No data available
- Boiling point (Boiling) : > 100 °C (> 212 °F)

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point/boiling range)	(1013 hPa)
Flash point	: > 100 °C (> 212 °F) Method: closed cup
Evaporation rate	: No data available
Flammability (solid, gas)	: No data available
Upper explosion limit	: No data available
Lower explosion limit	: No data available
Vapour pressure	: < 5 hPa @ 50 °C (122 °F)
Relative vapour density	: No data available
Relative density	: Calculated 0.9 - 1.2 @ 20 °C (68 °F) Reference substance: (water = 1)
Density	: No data available
Solubility(ies)	
Water solubility	: soluble
Solubility in other solvents	: No data available
Partition coefficient: n-octanol/water	: No data available
Auto-ignition temperature	: No data available
Thermal decomposition	: No data available
Viscosity	
Viscosity, dynamic	: Calculated 10,000 mPa.s @ 20 °C (68 °F)

SECTION 10. STABILITY AND REACTIVITY

Reactivity	: No dangerous reaction known under conditions of normal use.
Chemical stability	: Stable under normal conditions.
Possibility of hazardous reactions	: No hazards to be specially mentioned. Hazardous polymerisation does not occur.
Conditions to avoid	: Keep away from heat, flame, sparks and other ignition sources. elevated temperatures
Incompatible materials	: Acetic anhydride Alcohols Aldehydes Amines Bases carbonates halogens hydroxides Metals nitrates Oxidizing agents Strong acids Peroxides Acids

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Hazardous decomposition products : halogenated hydrocarbons
: Amines
: Hydrocarbons
Other hazardous decomposition products may be formed.

SECTION 11. TOXICOLOGICAL INFORMATION

Acute toxicity

Product:

Acute dermal toxicity : Acute toxicity estimate: > 5,000 mg/kg

Components:

112-24-3:

Acute dermal toxicity : LD50 (Rabbit): 805 mg/kg
Assessment: The component/mixture is toxic after single contact with skin.

Skin corrosion/irritation

Product:

Result: Irritating to skin.

Components:

64-19-7:

Species: Rabbit
Result: Causes severe burns.

112-24-3:

Species: Rabbit
Result: Causes burns.

Serious eye damage/eye irritation

Product:

Result: Risk of serious damage to eyes.

Respiratory or skin sensitisation

Components:

112-24-3:

Species: Guinea pig
Result: The product is a skin sensitiser, sub-category 1B.

Further information

Product:

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Remarks: No data available

SECTION 12. ECOLOGICAL INFORMATION**Ecotoxicity****Components:****112-24-3:**Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 31.1 mg/l
Exposure time: 48 h

Acute aquatic toxicity- Assessment : Harmful to aquatic life.

Chronic aquatic toxicity- Assessment : Harmful to aquatic life with long lasting effects.

Persistence and degradability**Components:****64-19-7:**Biodegradability : aerobic
Inoculum: Activated sludge, domestic, adaption not specified
Result: Readily biodegradable.
Biodegradation: 96 %
Exposure time: 20 d**112-24-3:**Biodegradability : Inoculum: activated sludge
Result: Not readily biodegradable.
Biodegradation: 0 %
Exposure time: 28 d**Bioaccumulative potential****Components:****64-19-7:**

Bioaccumulation : Bioconcentration factor (BCF): 3.16

Mobility in soil

No data available

Other adverse effects**Product:**

Additional ecological information : No data available

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SECTION 13. DISPOSAL CONSIDERATIONS**Disposal methods**

- Waste from residues : Dispose of in accordance with all applicable local, state and federal regulations.
For assistance with your waste management needs - including disposal, recycling and waste stream reduction, contact Univar Solutions ChemCare: 1-800-909-4897
- Contaminated packaging : Empty remaining contents.
Dispose of as unused product.
Do not re-use empty containers.

SECTION 14. TRANSPORT INFORMATION**DOT (Department of Transportation):** Not regulated as a dangerous good**MX-DG(Mexico Road Transportation):** Not regulated as a dangerous good**IATA (International Air Transport Association):** Not regulated as a dangerous good**IMDG (International Maritime Dangerous Goods):** Not regulated as a dangerous good**Special precautions for user**

Not applicable

SECTION 15. REGULATORY INFORMATION**The components of this product are reported in the following inventories:**

- TSCA : On TSCA Inventory
- DSL : not determined
- AICS : not determined
- NZIoC : not determined
- ENCS : not determined
- KECI : not determined
- PICCS : not determined
- IECSC : not determined

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SECTION 16. OTHER INFORMATION

Further information

Other information

: The information accumulated is based on the data of which we are aware and is believed to be correct as of the date hereof. Since this information may be applied under conditions beyond our control and with which we may be unfamiliar and since data made become available subsequently to the date hereof, we do not assume any responsibility for the results of its use. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances. This SDS has been prepared by Univar Solutions Product Compliance Department (55 1107 0170) SDSLA@univarsolutions.com.

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

Key or legend to abbreviations and acronyms used in the safety data sheet

ACGIH	American Conference of Government Industrial Hygienists	LD50	Lethal Dose 50%
AICS	Australia, Inventory of Chemical Substances	LOAEL	Lowest Observed Adverse Effect Level
DSL	Canada, Domestic Substances List	NFPA	National Fire Protection Agency
NDSL	Canada, Non-Domestic Substances List	NIOSH	National Institute for Occupational Safety & Health
CNS	Central Nervous System	NTP	National Toxicology Program
CAS	Chemical Abstract Service	NZIoC	New Zealand Inventory of Chemicals
EC50	Effective Concentration	NOAEL	No Observable Adverse Effect Level
EC50	Effective Concentration 50%	NOEC	No Observed Effect Concentration
EGEST	EOSCA Generic Exposure Scenario	OSHA	Occupational Safety & Health Ad-

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EOSCA	Tool European Oilfield Specialty Chemi- cals Association	PEL	ministration Permissible Expo- sure Limit
EINECS	European Invento- ry of Existing Chemical Sub- stances	PICCS	Philippines Invento- ry of Commercial Chemical Sub- stances
MAK	Germany Maxi- mum Concentra- tion Values	PRNT	Presumed Not Toxic
GHS	Globally Harmo- nized System	RCRA	Resource Conser- vation Recovery Act
>=	Greater Than or Equal To	STEL	Short-term Expo- sure Limit
IC50	Inhibition Concen- tration 50%	SARA	Superfund Amendments and Reauthorization Act.
IARC	International Agency for Re- search on Cancer	TLV	Threshold Limit Value
IECSC	Inventory of Exist- ing Chemical Sub- stances in China	TWA	Time Weighted Average
ENCS	Japan, Inventory of Existing and New Chemical Substances	TSCA	Toxic Substance Control Act
KECI	Korea, Existing Chemical Invento- ry	UVCB	Unknown or Varia- ble Compositon, Complex Reaction Products, and Bio- logical Materials
<=	Less Than or Equal To	WHMIS	Workplace Haz- ardous Materials Information Sys- tem
LC50		Lethal Concentration 50%	