

Safety Data Sheet

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial preparation date: 07.25.2018

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2K Hardener/ Concrete Floor Armor Hardener

SECTION 1: Identification

Product identifier

Product name: 2K Hardener/ Concrete Floor Armor Hardener

Product code: 43211B, 43214B, 47311B, 47314B



Recommended use of the product and restriction on use

Relevant identified uses: Not determined or not applicable.

Uses advised against: Not determined or not applicable.

Reasons why uses advised against: Not determined or not applicable.

Manufacturer or supplier details

Manufacturer:

United States

P.O.R. Products

38 Portman Road

New Rochelle, NY 10801

914-636-0700

Supplier:

United States

P.O.R. Products

38 Portman Road

New Rochelle, NY 10801

914-636-0700

Emergency telephone number:

United States

ChemTel Inc.

+1 800 255 3924

+1 813 248 0585

SECTION 2: Hazard(s) identification

GHS classification:

Flammable liquids, category 3

Eye irritation, category 2A

Skin irritation, category 2

Respiratory sensitization, category 1

Specific target organ toxicity - single exposure, category 2

Specific target organ toxicity - repeated exposure, category 2

Label elements

Hazard pictograms:



Signal word: Danger

Hazard statements:

H226 Flammable liquid and vapor.

H319 Causes serious eye irritation.

H315+H320 Causes skin and eye irritation.

H315 Causes skin irritation.

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H371 May cause damage to organs. (or state all organs affected, if known)(state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard)

H373 May cause damage to organs (state all organs affected, if known) through prolonged or repeated

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exposure. (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard)

Precautionary statements:

- P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.
- P233 Keep container tightly closed.
- P240 Ground/bond container and receiving equipment.
- P241 Use explosion-proof electrical/ventilating/lighting/.../equipment.
- P242 Use only non-sparking tools.
- P243 Take precautionary measures against static discharge.
- P280 Wear protective gloves/protective clothing/eye protection/face protection.
- P264 Wash ... thoroughly after handling.
- P261 Avoid breathing dust/fume/gas/mist/vapors/spray.
- P284 Wear respiratory protection.
- P285 In case of inadequate ventilation wear respiratory protection.
- P260 Do not breathe dust/fume/gas/mist/vapors/spray.
- P270 Do not eat, drink or smoke when using this product.
- P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
- P370+P378 In case of fire: Use ... for extinction.
- P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P337+P313 If eye irritation persists get medical advice/attention
- P321 Specific treatment (see ... on this label).
- P362 Take off contaminated clothing and wash before reuse
- P302+P352 IF ON SKIN: Wash with plenty of soap and water.
- P332+P313 If skin irritation occurs: Get medical advice/attention
- P362+P364 Take off contaminated clothing and wash it before reuse.
- P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
- P304+P341 IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.
- P342+P311 If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.
- P309+P311 If exposed or if you feel unwell: Call a POISON CENTER or doctor/physician.
- P308+P311 IF exposed or concerned: Call a POISON CENTER/doctor/physician.
- P314 Get medical advice/attention if you feel unwell
- P403+P235 Store in a well ventilated place. Keep cool.
- P405 Store locked up.
- P501 Dispose of contents/container to ...

Hazards not otherwise classified: None

SECTION 3: Composition/information on ingredients

Identification	Name	Weight %
CAS number: 1330-20-7	Xylene	8-15
CAS number: 100-41-4	Ethyl Benzene	0.8-3
CAS number: 28182-81-2	Hexamethylene diisocyanate, oligomers	50.75-64.9 4

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CAS number: 822-06-0	Hexamethylene-di-isocyanate	0.05-0.33
CAS number: 763-69-9	Ethyl 3-ethoxypropionate	24.75-35
CAS number: 128-37-0	2,6-Di-tert-butyl-p-cresol	<0.04

Additional Information: None

SECTION 4: First aid measures

Description of first aid measures

General notes:

Not determined or not applicable.

After inhalation:

Loosen clothing as necessary and position individual in a comfortable position

Maintain an unobstructed airway

Get medical advice/attention if you feel unwell

After skin contact:

Rinse affected area with soap and water

If symptoms develop or persist, seek medical attention

Take off all contaminated clothing

Gently blot or brush away excess product

Wash with plenty of lukewarm, gently flowing water

Get medical advice if skin irritation occurs or you feel unwell

After eye contact:

Rinse/flush exposed eye(s) gently using water for 15-20 minutes

If symptoms develop or persist, seek medical attention

Rinse eyes cautiously with lukewarm, gently flowing water for several minutes, while holding the eyelids open

Remove contact lenses, if present and easy to do so

Continue rinsing for 15-20 minutes

Get medical advice if eye irritation persists

After swallowing:

Rinse mouth thoroughly

Seek medical attention if irritation, discomfort, or vomiting persists

Most important symptoms and effects, both acute and delayed

Acute symptoms and effects:

Not determined or not applicable.

Delayed symptoms and effects:

Not determined or not applicable.

Immediate medical attention and special treatment

Specific treatment:

Not determined or not applicable.

Notes for the doctor:

Not determined or not applicable.

SECTION 5: Firefighting measures

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Extinguishing media

Suitable extinguishing media:

Use Water (fog only), dry chemical, chemical foam, carbon dioxide, or alcohol-resistant foam

Unsuitable extinguishing media:

Not determined or not applicable.

Specific hazards during fire-fighting:

Thermal decomposition can lead to release of irritating gases and vapors

Vapors can flow to distant ignition sources and flashback

Liquid is volatile and may generate an explosive atmosphere

Special protective equipment for firefighters:

Use typical firefighting equipment, self-contained breathing apparatus, special tightly sealed suit

Special precautions:

Shut off sources of ignition

Carbon monoxide and carbon dioxide may form upon combustion

Heating causes a rise in pressure, risk of bursting and combustion

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures:

Ensure adequate ventilation

Ensure air handling systems are operational

Wear protective eye wear, gloves and clothing

Beware of vapors accumulating to form explosive concentrations

Vapors can accumulate in low areas

Environmental precautions:

Should not be released into the environment

Prevent from reaching drains, sewer or waterway

Methods and material for containment and cleaning up:

Wear protective eye wear, gloves and clothing

Use spark-proof tools and explosion-proof equipment

Absorb with non-combustible liquid-binding material (sand, diatomaceous earth (clay), acid binders, universal binders)

Dispose of contents / container in accordance with local regulations

Reference to other sections:

Not determined or not applicable.

SECTION 7: Handling and storage

Precautions for safe handling:

Use only with adequate ventilation.

Avoid breathing mist or vapor.

Do not eat, drink, smoke or use personal products when handling chemical substances.

Take precautionary measures against electrostatic discharges.

Use only non-sparking tools.

Conditions for safe storage, including any incompatibilities:

Keep container tightly sealed.

Protect from freezing and physical damage.

Store in a cool, well-ventilated area.

Store away from all ignition sources (open flames, hot surfaces, direct sunlight, spark sources).

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SECTION 8: Exposure controls/personal protection

Only those substances with limit values have been included below.

Occupational Exposure limit values:

Country (Legal Basis)	Substance	Identifier	Permissible concentration
ACGIH	Hexamethylene-di-isocyanate	822-06-0	ACGIH TLV TWA 0.005 ppm
	2,6-Di-tert-butyl-p-cresol	128-37-0	ACGIH TLV TWA 2.0 mg/m ³ (inhalable fraction, vapor and aerosol)
	Xylene	1330-20-7	ACGIH TWA: 100.0 ppm
	Xylene	1330-20-7	ACGIH STEL: 150.0 ppm
	Ethyl Benzene	100-41-4	ACGIH TWA: 20.0 ppm
	Ethyl Benzene	100-41-4	ACGIH STEL: 125.0 ppm
NIOSH	Hexamethylene-di-isocyanate	822-06-0	NIOSH REL 0.005 ppm (0.035 mg/m ³)
	Hexamethylene-di-isocyanate	822-06-0	NIOSH REL C 0.020 ppm (0.140 mg/m ³) [10-min]
	Ethyl Benzene	100-41-4	NIOSH TWA 100.0 ppm 435.0 mg/m ³
	Ethyl Benzene	100-41-4	NIOSH ST 125.0 ppm 545.0 mg/m ³
	Xylene	1330-20-7	REL TWA: 435.0 mg/m ³ (100.0 ppm)
	Xylene	1330-20-7	REL ST: 655 mg/m ³ (150 ppm)
United States (OSHA)	Xylene	1330-20-7	STEL: 655 mg/m ³ (150 ppm)
	Ethyl Benzene	100-41-4	OSHA PEL (STEL): 125.0 ppm
	Ethyl Benzene	100-41-4	OSHA TWA 100 ppm 435 mg/m ³
	Xylene	1330-20-7	OSHA TWA: 435.0 mg/m ³ (100.0 ppm)

Biological limit values:

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

Information on monitoring procedures:

Monitoring of the concentration of substances in the breathing zone of workers or in the general workplace may be required to confirm compliance with an OEL and adequacy of exposure controls.

Biological monitoring may also be appropriate for some substances.

Appropriate engineering controls:

Emergency eye wash fountains and safety showers should be available in the immediate vicinity of use or handling.

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapor and mists below the applicable workplace exposure limits (Occupational Exposure Limits-OELs) indicated above. Use explosion-proof ventilation equipment.

Personal protection equipment

Eye and face protection:

Safety goggles or glasses, or appropriate eye protection.

Skin and body protection:

Select glove material impermeable and resistant to the substance.

Wear appropriate clothing to prevent any possibility of skin contact.

Respiratory protection:

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If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn.

General hygienic measures:

- Avoid contact with skin, eyes and clothing.
- Wash hands before breaks and at the end of work.
- Wash contaminated clothing before reuse.

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Appearance	Not determined or not available.
Odor	Not determined or not available.
Odor threshold	Not determined or not available.
pH	Not determined or not available.
Melting point/freezing point	Not determined or not available.
Initial boiling point/range	Not determined or not available.
Flash point (closed cup)	Not determined or not available.
Evaporation rate	Not determined or not available.
Flammability (solid, gas)	Not determined or not available.
Upper flammability/explosive limit	Not determined or not available.
Lower flammability/explosive limit	Not determined or not available.
Vapor pressure	Not determined or not available.
Vapor density	Not determined or not available.
Density	Not determined or not available.
Relative density	Not determined or not available.
Solubilities	Not determined or not available.
Partition coefficient (n-octanol/water)	Not determined or not available.
Auto/Self-ignition temperature	Not determined or not available.
Decomposition temperature	Not determined or not available.
Dynamic viscosity	Not determined or not available.
Kinematic viscosity	Not determined or not available.
Explosive properties	Not determined or not available.
Oxidizing properties	Not determined or not available.

Other information

SECTION 10: Stability and reactivity

Reactivity:

Does not react under normal conditions of use and storage.

Chemical stability:

Stable under normal conditions of use and storage.

Possibility of hazardous reactions:

None under normal conditions of use and storage.

Conditions to avoid:

None known.

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Incompatible materials:

None known.

Hazardous decomposition products:

None known.

SECTION 11: Toxicological information

Acute toxicity

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data:

Name	Route	Result
Hexamethylene-di-isocyanate	inhalation	LC50 - Rat - 124 mg/m ³ - 4h
Ethyl 3-ethoxypropionate	oral	LD50 Rat male >5,000 mg/kg
	dermal	LD50 Rabbit male 4,080 mg/kg
Ethyl Benzene	inhalation	LCLo - Rat - 4,000 ppm/4 h
Xylene	dermal	LD50 - Rat - > 1,700 mg/kg
	inhalation	LC50 - Rat - 5,000 ppm/4 h

Skin corrosion/irritation

Assessment: Causes skin irritation

Product data:

No data available.

Substance data:

Name	Result
Hexamethylene-di-isocyanate	Irritating to the skin.
Xylene	Irritating to the skin.

Serious eye damage/irritation

Assessment: Causes serious eye irritation

Product data:

No data available.

Substance data:

Name	Result
Hexamethylene-di-isocyanate	Irritating effect on the eyes.

Respiratory or skin sensitization

Assessment: May cause allergy or asthma symptoms or breathing difficulties if inhaled

Product data:

No data available.

Substance data:

Name	Result
Hexamethylene-di-isocyanate	Sensitization possible through skin and respiratory contact.
Hexamethylene diisocyanate, oligomers	Sensitization possible through skin contact.

Carcinogenicity

Assessment: Based on available data, the classification criteria are not met.

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Product data: No data available.

Substance data: No data available.

International Agency for Research on Cancer (IARC):

Name	Classification
2,6-Di-tert-butyl-p-cresol	Group 3 - Not classifiable as to its carcinogenicity to humans
Ethyl Benzene	Group 2B - Possibly carcinogenic to humans
Xylene	Group 3 - Not classifiable as to its carcinogenicity to humans

National Toxicology Program (NTP): None of the ingredients are listed.

Germ cell mutagenicity

Assessment: Based on available data, the classification criteria are not met.

Product data:

No data available.

Substance data: No data available.

Reproductive toxicity

Assessment: Based on available data, the classification criteria are not met.

Product data:

No data available.

Substance data: No data available.

Specific target organ toxicity (single exposure)

Assessment: May cause damage to organs

Product data:

No data available.

Substance data:

Name	Result
Hexamethylene-di-isocyanate	Component affects the respiratory system.
Ethyl Benzene	Repeated exposure damages the hearing organs.

Specific target organ toxicity (repeated exposure)

Assessment: May cause damage to organs through prolonged or repeated exposure

Product data:

No data available.

Substance data: No data available.

Aspiration toxicity

Assessment: Based on available data, the classification criteria are not met.

Product data:

No data available.

Substance data:

Name	Result
Ethyl Benzene	May be fatal if swallowed and enters airway.

Information on likely routes of exposure:

No data available.

Symptoms related to the physical, chemical and toxicological characteristics:

No data available.

Other information:

No data available.

SECTION 12: Ecological information

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Acute (short-term) toxicity

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data:

Name	Result
Ethyl 3-ethoxypropionate	static test LC50 - Pimephales promelas (fathead minnow) - 55.3 mg/l - 96 h
	Immobilization EC50 - Daphnia magna (Water flea) - 785 mg/l - 48 h
2,6-Di-tert-butyl-p-cresol	LC50 - Daphnia magna (Water flea) - 0.48 mg/L - 48 h

Chronic (long-term) toxicity

Product data: No data available.

Substance data: No data available.

Persistence and degradability

Product data: No data available.

Substance data: No data available.

Bioaccumulative potential

Product data: No data available.

Substance data: No data available.

Mobility in soil

Product data: No data available.

Substance data: No data available.

Other adverse effects: No data available.

SECTION 13: Disposal considerations

Disposal methods:

It is the responsibility of the waste generator to properly characterize all waste materials according to applicable regulatory entities

SECTION 14: Transport information

United States Transportation of dangerous goods (49 CFR DOT)

UN number	Not regulated
UN proper shipping name	Not regulated
UN transport hazard class(es)	None
Packing group	None
Environmental hazards	None
Special precautions for user	None

International Maritime Dangerous Goods (IMDG)

UN number	Not regulated
UN proper shipping name	Not regulated
UN transport hazard class(es)	None
Packing group	None
Environmental hazards	None
Special precautions for user	None

International Air Transport Association Dangerous Goods Regulations (IATA-DGR)

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UN number	Not regulated
UN proper shipping name	Not regulated
UN transport hazard class(es)	None
Packing group	None
Environmental hazards	None
Special precautions for user	None

SECTION 15: Regulatory information

United States regulations

Inventory listing (TSCA):

822-06-0	Hexamethylene-di-isocyanate	Listed
28182-81-2	Hexamethylene diisocyanate, oligomers	Listed
763-69-9	Ethyl 3-ethoxypropionate	Listed
128-37-0	2,6-Di-tert-butyl-p-cresol	Listed
100-41-4	Ethyl Benzene	Listed
1330-20-7	Xylene	Listed

Significant New Use Rule (TSCA Section 5): Not determined.

Export notification under TSCA Section 12(b): Not determined.

SARA Section 302 extremely hazardous substances: Not determined.

SARA Section 313 toxic chemicals:

822-06-0	Hexamethylene-di-isocyanate	Not Listed
763-69-9	Ethyl 3-ethoxypropionate	Not Listed
128-37-0	2,6-Di-tert-butyl-p-cresol	Not Listed
100-41-4	Ethyl Benzene	Listed
1330-20-7	Xylene	Listed

CERCLA:

100-41-4	Ethyl Benzene	Listed	1,000 lb
1330-20-7	Xylene	Listed	100 lb

RCRA:

1330-20-7	Xylene	Listed	U239
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Section 112(r) of the Clean Air Act (CAA): Not determined.

Massachusetts Right to Know:

822-06-0	Hexamethylene-di-isocyanate	Listed
763-69-9	Ethyl 3-ethoxypropionate	Not Listed
128-37-0	2,6-Di-tert-butyl-p-cresol	Listed
100-41-4	Ethyl Benzene	Listed
1330-20-7	Xylene	Listed

New Jersey Right to Know:

822-06-0	Hexamethylene-di-isocyanate	Listed
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763-69-9	Ethyl 3-ethoxypropionate	Not Listed
128-37-0	2,6-Di-tert-butyl-p-cresol	Listed
100-41-4	Ethyl Benzene	Listed
1330-20-7	Xylene	Listed

New York Right to Know:

822-06-0	Hexamethylene-di-isocyanate	Listed
763-69-9	Ethyl 3-ethoxypropionate	Not Listed
128-37-0	2,6-Di-tert-butyl-p-cresol	Listed
100-41-4	Ethyl Benzene	Listed
1330-20-7	Xylene	Listed

Pennsylvania Right to Know:

822-06-0	Hexamethylene-di-isocyanate	Listed
763-69-9	Ethyl 3-ethoxypropionate	Not Listed
128-37-0	2,6-Di-tert-butyl-p-cresol	Listed
100-41-4	Ethyl Benzene	Listed
1330-20-7	Xylene	Listed

California Proposition 65:

⚠️ WARNING: This product can expose you to chemicals including Ethyl 3-ethoxypropionate and Ethyl Benzene which are known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

SECTION 16: Other information

Abbreviations and Acronyms: None

Disclaimer:

This product has been classified in accordance with OSHA HCS 2012 guidelines. The information provided in this SDS is correct, to the best of our knowledge, based on information available. The information given is designed only as a guidance for safe handling, use, storage, transportation and disposal 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, unless specified in the text. The responsibility to provide a safe workplace remains with the user.

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End of Safety Data Sheet