



SAFETY DATA SHEET

ANTI-OX PETROLEUM-BASED OXIDE INHIBITOR

SECTION 1. IDENTIFICATION

Product Identifier

Product name: Anti-Ox

Product code(s): F4P N00X-X 8 0216-0516; F4P N00X-X 4 Stock Code: 0250-0554

Synonym(s): Petroleum-based oxide inhibitor.

Product Type: Paste

Relevant identified uses of the substance or mixture and uses advised against

General use: Oxide inhibitor for electrical connections and other electrical applications.

Details of the supplier and of the safety data sheet

Manufacturer: Everkem Diversified Products, 5180 Indiana Avenue, Winston-Salem, NC 27106 USA +1-800-638-3160

Distributor: F4P, 11675 SW Tom Mackie Blvd, Port St. Lucie, FL 34987

Emergency telephone number: Everkem Diversified Products 1-800-638-3160

Poison Control telephone number: 1-800-222-1222

SECTION 2. HAZARDS IDENTIFICATION

Classification of the substance or mixture

Product definition: Mixture

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Aquatic Hazard (Acute) - Category 1

Aquatic Hazard (Long-Term) - Category 1

Label elements

Hazard Symbol(s)



Signal Word:

Warning

Hazard Statement(s)

H410 - Very toxic to aquatic life with long-lasting effects.

Precautionary

Statements (Prevention) P273 - Avoid release to the environment.

(Response)

P391 - Collect spillage.

(Disposal)

P501 - Dispose of contents and containers in accordance with all local, regional, national and international regulations.

(Storage)

Not applicable.

(Hazards not otherwise classified)

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substances Petroleum-based oxide inhibitor.

Mixtures

Ingredient name	%	CAS Number
1-Propene, 2-methyl-, homopolymer	≥75 - ≤90	9003-27-4
Zinc powder - zinc dust (stabilized)	≥10 - ≤25	7440-66-6
Silica, amorphous, fumed, cryst.-free	≥1 - ≤3	112945-52-5
Zinc Oxide	≥0.3 - ≤1	1314-13-2
Cadmium Oxide	<0.1	1306-19-0

Any concentration shown as a range is to protect confidentiality or is due to batch variation. There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section. Occupational exposure limits, if available, are listed in Section 8.

SECTION 4. FIRST AID MEASURES

Description of necessary first aid measures

Inhalation

Remove victim to fresh air and keep at rest in a position comfortable for breathing. If breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Eye contact

Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 20 minutes. Get medical attention if irritation occurs.

Skin contact

Remove contaminated clothing. Flush contaminated skin with plenty of water. Clean contaminated clothing and shoes before reuse. If irritation persists, seek medical advice.

Ingestion

Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by a medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.



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SECTION 4. FIRST AID MEASURES

Most important symptoms and effects, both acute and delayed

Potential acute health symptoms and effects:

Eye contact No known significant effects or critical hazards.

Skin contact No known significant effects or critical hazards.

Inhalation No known significant effects or critical hazards.

Ingestion No known significant effects or critical hazards.

Over-exposure signs/symptoms

Eye contact No known significant effects or critical hazards.

Skin contact No known significant effects or critical hazards.

Inhalation No known significant effects or critical hazards.

Ingestion No known significant effects or critical hazards.

Indication of any immediate medical attention and special treatment needed

Advice to Doctor and Hospital Personnel

Notes to physician: Treat symptomatically. Contact poison treatment specialist immediately, if large quantities have been ingested or inhaled.

Specific treatments: No specific treatment.

Protection of first-aiders: No action shall be taken involving any personal risk without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.



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SECTION 5. FIRE-FIGHTING MEASURES

Extinguishable media

Suitable methods of extinction Use extinguishing agent suitable for the surrounding fire.

Unsuitable methods of extinction None known.

Specific hazards arising from the chemical In a fire or if heated, a pressure increase will occur and the container may burst. This material is very toxic to aquatic life with long-lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

Hazardous thermal decomposition products Decomposition products may include the following materials:
Carbon Dioxide, Carbon Monoxide, Metal Oxide/Oxides

Advice for firefighters Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.



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SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

Environmental precautions Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities. Collect spillage.

Methods and materials for containment and cleaning up spill Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

SECTION 7. HANDLING AND STORAGE

Precautions for safe handling

Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapor or mist. Avoid release to the environment. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. See also Section 8 for additional information on hygiene measures.

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.



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Occupational exposure limits (Canada)

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Occupational exposure limits (OSHA United States)

Ingredient name	Exposure limits
1-Propene, 2-methyl-, homopolymer Zinc powder - zinc dust (stabilized) Silica, amorphous, fumed, cryst.-free	None. None. NIOSH REL (United States, 10/2016). TWA: 6 mg/m ³ 10 hours.
Zinc oxide	NIOSH REL (United States, 10/2016). CEIL: 15 mg/m ³ Form: Dust TWA: 5 mg/m ³ 10 hours. Form: Dust and fumes STEL: 10 mg/m ³ 15 minutes. Form: Fertilizer and/or industrial use. OSHA PEL (United States, 6/2016). TWA: 5 mg/m ³ 8 hours. Form: Fertilizer and/or industrial use. TWA: 5 mg/m ³ 8 hours. Form: Respirable fraction TWA: 15 mg/m ³ 8 hours. Form: Total dust
Cadmium Oxide	TWA: 0.01 mg/m ³ , [as Cd] 8 hours. Form: Inhalable fraction TWA: 0.002 mg/m ³ , [as Cd] 8 hours. Form: Respirable fraction

Exposure controls

Engineering Measures Good general ventilation should be sufficient to control worker exposure to airborne contaminants. Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation.

Hygiene measures Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.



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SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Hand Protection	Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
Body protection	Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Other skin protection	Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Respiratory protection	Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.



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SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance	Opaque, gloss gray paste-like fluid
Odor	Mild
Odor threshold	No data available
Molecular Weight	Not applicable
Chemical Formula	Not applicable
pH	?
Melting/Freezing Point	No data available
Initial Boiling Point	No data available
Evaporation Rate	<1 [Ether. = 1]
Flash Point	Closed cup: >232°C (>449.6°F)
Auto-ignition temperature:	No data available
Decomposition temperature:	No data available
Lower and upper explosive (flammable) limits (LEL)	No data available
Vapor pressure	No data available
Vapor density	>1 [Air = 1]
Relative density	1.05 to 1.15

Solubility in Water	No data available
Flammability (solid, gas)	No data available
Partition coefficient: noctanol/water	Not Determined
Viscosity	No data available
Molecular weight	No data available
Explosive Properties	Not applicable
Other Data	No data available



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SECTION 10. STABILITY AND REACTIVITY

Reactivity	No special reactivity has been reported.
Chemical stability	The product is stable.
Possibility of hazardous reactions	Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	No specific data.
Incompatible materials	Reactive or incompatible with the following materials: oxidizing materials.
Hazardous decomposition products	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11. TOXICOLOGICAL INFORMATION

Information on toxicological effects Acute toxicity:

Ingredient	Result	Species	Dose	Exposure
Silica, amorphous, fumed, cryst.-free Cadmium Oxide	LD50 Oral	Rat	3160 mg/kg	-
	LC50 Inhalation Vapor	Rat	45 mg/m ³	1 hours
	LD50 Oral	Rat	72 mg/kg	-

Irritation/Corrosion: There is no data available.

Sensitization: There is no data available.

Mutagenicity: There is no data available.

Carcinogenicity Classification

Product/ingredient name	OSHA	IARC	NTP
Silica, amorphous, fumed, cryst.-free Cadmium Oxide	-	3	-
	+	1	Known to be a human carcinogen.

Reproductive toxicity: There is no data available.

Teratogenicity: There is no data available.



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SECTION II. TOXICOLOGICAL INFORMATION

Specific target organ toxicity (single exposure)

Name	Category	Target organs
Silica, amorphous, fumed, cryst.-free	Category 3	Respiratory tract irritation

Specific target organ toxicity (repeated exposure)

Name	Category	Target organs
Cadmium Oxide	Category 1	Not determined

Aspiration hazard There is no data available.

Information on the likely routes of exposure

Potential acute health effects:

Eye contact No known significant effects or critical hazards.

Inhalation No known significant effects or critical hazards.

Skin contact No known significant effects or critical hazards.

Ingestion No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics:

Eye contact No known significant effects or critical hazards.

Inhalation No known significant effects or critical hazards.

Skin contact No known significant effects or critical hazards.

Ingestion No known significant effects or critical hazards.



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SECTION II. TOXICOLOGICAL INFORMATION

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure:

Potential immediate effects No known significant effects or critical hazards.

Potential delayed effects No known significant effects or critical hazards.

Long term exposure:

Potential immediate effects No known significant effects or critical hazards.

Potential delayed effects No known significant effects or critical hazards.

Potential chronic health effects

General No known significant effects or critical hazards.

Carcinogenicity No known significant effects or critical hazards.

Mutagenicity No known significant effects or critical hazards.

Teratogenicity No known significant effects or critical hazards.

Developmental effects No known significant effects or critical hazards.

Fertility effects No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Route	ATE value
Oral	110293.9 mg/kg



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SECTION 12. ECOLOGICAL INFORMATION

Toxicity

Product	Result	Species	Exposure	
1-Propene, 2-methyl-, homopolymer Zinc powder - zinc dust (stabilized)	Acute LC50 >5600000 µg/L Fresh water	Fish - Oncorhynchus mykiss	96 hours	
	Acute EC50 106 µg/L Fresh water	Algae - Pseudokirchneriella subcapitata - Exponential growth phase	72 hours 4 days	
	Acute EC50 10000 µg/L Fresh water	Aquatic plants - Lemna minor	48 hours	
	Acute IC50 65 µg/L Marine water	Algae - Nitzschia closterium - Exponential growth phase	48 hours 96 hours	
	Acute LC50 65 µg/L Fresh water	Crustaceans - Ceriodaphnia dubia - Neonate	72 hours 21 days	
	Acute LC50 68 µg/L Fresh water	Daphnia - Daphnia magna	3 days	
	Acute LC50 12.21 µg/L Marine water	Fish - Periophthalmus waltoni - Adult	21 days	
	Chronic EC10 27.3 µg/L Fresh water	Algae - Pseudokirchneriella subcapitata - Exponential growth phase	4 weeks 96 hours	
	Zinc oxide	Chronic EC10 59.2 µg/L Fresh water	Daphnia - Daphnia magna	48 hours
		Chronic NOEC 9 mg/L Fresh water	Aquatic plants - Ceratophyllum demersum	96 hours
Chronic NOEC 178 µg/L Marine water		Crustaceans - Palaemon elegans	48 hours	
Chronic NOEC 2.6 µg/L Fresh water		Fish - Cyprinus carpio	96 hours	
Acute IC50 1.85 mg/L Marine water		Algae - Skeletonema costatum		
Cadmium Oxide	Acute IC50 46 µg/L Fresh water	Algae - Pseudokirchneriella subcapitata - Exponential growth phase	96 hours	
	Acute LC50 98 µg/L Fresh water	Daphnia - Daphnia magna - Neonate		
	Acute LC50 1.1 ppm Fresh water	Fish - Oncorhynchus mykiss		
	Acute LC50 0.0054 µg/L Fresh water	Daphnia - Daphnia magna - Neonate		
	Acute LC50 177 µg/L Fresh water	Fish - Pimephales promelas - Neonate		

Persistence and degradability

There is no data available.



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SECTION 12. ECOLOGICAL INFORMATION

Bioaccumulative potential

Product	LogPow	BCF	Potential
Zinc Oxide	-	60960	High
Cadmium Oxide	-	1345	High

Mobility in soil There is no data available.







Soil/water partition coefficient (KOC) There is no data available.

Other adverse effects No known significant effects or critical hazards.

SECTION 13. DISPOSAL CONSIDERATIONS

The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling empty containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

SECTION 14. TRANSPORT INFORMATION

	DOT Classification	IMDG	IATA
UN number	UN3082	UN3082	UN3082
UN proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Zinc powder - zinc dust (stabilized))	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Zinc powder - zinc dust (stabilized)). Marine pollutant (Zinc powder - zinc dust (stabilized))	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Zinc powder - zinc dust (stabilized))
Transport hazard class(es)	9  	9  	9  
Packing group	3	3	3
Environmental hazards	Yes.	Yes.	Yes.

DOT-RQ Details Additional information:

Zinc powder - zinc dust (stabilized) 1000 lbs / 454 kg

DOT Classification:

Non-bulk packages of this product are not regulated as hazardous materials in package sizes less than the product reportable quantity, unless transported by inland waterway. The marine pollutant mark is not required when transported on inland waterways in sizes of :55 L or :55 kg.

Reportable quantity 5561.7 lbs / 2525 kg [606.4 gal / 2295.5 L]. Package sizes shipped in quantities less than the product reportable quantity are not subject to the RQ (reportable quantity) transportation requirements.

IMDG: This product is not regulated as a dangerous good when transported in sizes of :55 L or :55 kg, provided the packagings meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8.

Emergency schedules F-A, S-F

IATA : This product is not regulated as a dangerous good when transported in sizes of :55 L or :55 kg, provided the packagings meet the general provisions of 5.0.2.4.1, 5.0.2.6.1.1 and 5.0.2.8.

Special precautions for user:

Transport within user's premises: Always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.



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SECTION 15. REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for substance or mixture

U.S. Federal regulations

TSCA 8(a) CDR Exempt/Partial exemption: Not determined. **United States inventory (TSCA 8b):** All components are listed or exempted.

Clean Water Act (CWA) 307: Zinc powder - zinc dust (stabilized); Zinc oxide; Lead Monoxide; Cadmium Oxide.

Clean Air Act
Section 112
(b) Hazardous Air
Pollutants (HAPs)

Listed.

Clean Air Act
Section 602 Class
I Substances

Not listed.

Clean Air Act
Section 602 Class
II Substances

Not listed.

DEA List I
Chemicals
(Precursor
Chemicals)

Not listed.

DEA List II
Chemicals
(Essential
Chemicals)

Not listed.

SARA 302/304

Composition/information on ingredients

Product	EHS	SARA 302 TPQ		SARA 304 RQ	
		(lbs)	(gallons)	(lbs)	(gallons)
Cadmium Oxide	Yes.	100 / 10000	-	100	-

SARA 304 RQ: 1029951 lbs / 467597.7 kg [112296.6 gal / 425088.9 L]

SARA 311/312 Classification: Not applicable



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SECTION 15. REGULATORY INFORMATION

Composition/information on ingredients

Name	Classification
Silica, amorphous, fumed, cryst.-free	SKIN CORROSION/IRRITATION - Category 2 SERIOUS E E DAMAGE/ E E IRRITATION - Category 2A SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3

SARA 313

	Product name	CAS number
Form R - Reporting requirements	Zinc powder - zinc dust (stabilized) Lead Monoxide	7440-66-6 1317-36-8
Supplier notification	Zinc powder - zinc dust (stabilized)	7440-66-6

SARA 313 notifications must not be detached from the SDS and any copying and redistribution of the SDS shall include copying and redistribution of the notice attached to copies of the SDS subsequently redistributed.

U.S. State Regulations

Massachusetts: The following components are listed: Zinc powder - zinc dust (stabilized)

New York: The following components are listed: Zinc powder - zinc dust (stabilized)

New Jersey: The following components are listed: Zinc powder - zinc dust (stabilized)

Pennsylvania: The following components are listed: Zinc powder - zinc dust (stabilized)

California Prop. 65

WARNING: This product can expose you to Cadmium Oxide, which is known to the State of California to cause cancer and birth defects or other reproductive harm. This product can expose you to Lead Monoxide, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.



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SECTION 15. OTHER INFORMATION

Procedure used to derive the classification

Classification	Justification
AQUATIC HAZARD (ACUTE) - Category 1	Calculation method
AQUATIC HAZARD (LONG-TERM) - Category 1	Calculation method

Notice to Reader:

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.