

SAFETY DATA SHEET

BONDAID I

Section 1. Identification

Product identifier
Product code
Chemical name
Other means of identification
Product type

BONDAID I 1291218-500ML, 1291218, 1291218-01LT BONDAID I BONDAID I liquid

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

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Identified uses Ink and Coatings, Printing		
Supplier's details	:	INX International Ink Co. MSDS@inxintl.com 150 N Martingale Rd, Suite 700 Schaumburg USA 60173 800.347.4657
Emergency telephone number		800.535.5053 INFOTRAC 24 Hour Spill and Emergency (010-1-

Emergency telephone number:800.535.5053 INFOTRAC 24 Hour Spill and Emergency (010-1(with hours of operation)352-323-3500 outside of North America)

Section 2. Hazards identification

OSHA/HCS status	:	This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
Classification of the substance or mixture	:	FLAMMABLE LIQUIDS - Category 2 SKIN IRRITATION - Category 2 EYE IRRITATION - Category 2A
GHS label elements		
Hazard pictograms	:	
Signal word Hazard statements	:	Danger H225:Highly flammable liquid and vapor. H319:Causes serious eye irritation. H315:Causes skin irritation.

Precautionary statements

General	:	P103:Read label before use. P102:Keep out of reach of children. P101:If medical advice is needed, have product container or label at hand.
Prevention	:	 P280:Wear protective gloves. P280:Wear eye or face protection. P210:Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P241:Use explosion-proof electrical, ventilating, lighting and all material-handling equipment. P242:Use only non-sparking tools. P243:Take precautionary measures against static discharge. P233:Keep container tightly closed. P264:Wash hands thoroughly after handling.
Response	:	 P303:IF ON SKIN (or hair): P361:Take off immediately all contaminated clothing. P353:Rinse skin with water or shower. P302:IF ON SKIN: P352:Wash with plenty of soap and water. P362+P364:Take off contaminated clothing and wash it before reuse. P332:If skin irritation occurs: P313:Get medical attention. P305:IF IN EYES: P351:Rinse cautiously with water for several minutes. P338:Remove contact lenses, if present and easy to do. Continue rinsing. P337:If eye irritation persists: P313:Get medical attention.
Storage	:	P403:Store in a well-ventilated place. P235:Keep cool.
Disposal	:	P501:Dispose of contents and container in accordance with all local, regional, national and international regulations.
Hazards not otherwise classified	:	None known.

Section 3. Composition/information on ingredients

Substance/mixture	1.1	Mixture
Chemical name	- E -	BONDAID I
Other means of identification	1	BONDAID I

Ingredient name	%	CAS number
Isopropanol	> 0 - <= 5	67-63-0

Acetic acid, propyl ester	> 0 - <= 5	109-60-4
Silane component	> 0 - <= 3	-

- indicates the ingredient name and/or exact percentage is being withheld as a trade secret. Any concentration shown as a range is withheld 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

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 10 minutes. Get medical attention.
Inhalation	:	Remove victim to fresh air and keep at rest in a position comfortable for breathing.\'20 If not 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.
Skin contact	:	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Continue to rinse for at least 10 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.
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 medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the 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.

Most important symptoms/effects, acute and delayed

Potential acute health effects

Eye contact :	Causes serious eye irritation.
Inhalation :	No known significant effects or critical hazards.
Skin contact :	Causes skin irritation.
Ingestion :	No known significant effects or critical hazards.

Eye contact	: Adverse symptoms may include the following: pain or irritation watering redness
Inhalation	: No specific data.
Skin contact	 Adverse symptoms may include the following: irritation redness
Ingestion	: No specific data.
Indication of immediate me	dical attention and special treatment needed, if necessary
Notes to physician	: Treat symptomatically. Contact poison treatment specia

Notes to physician Specific treatments	:	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled. No specific treatment.
Protection of first-aiders	:	No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media Unsuitable extinguishing media	:	Use dry chemical, CO_2 , water spray (fog) or foam. Do not use water jet.
Specific hazards arising from the chemical	:	Highly flammable liquid and vapor. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Runoff to sewer may create fire or explosion hazard.
Hazardous thermal decomposition products	:	_ '
Special protective actions for fire-fighters	:	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. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.
Special protective equipment for fire-fighters	:	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

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. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment. 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).

Methods and materials for containment and cleaning up

Small spill	:	Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water- insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
Large spill	:	Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. 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.\'20 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

Protective measures

: Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapor or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosionproof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container.

Advice on general occupational : 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. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

 Conditions for safe storage, including any incompatibilities
 Store in accordance with local regulations. Store in a segregated and approved area.\'20 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. Eliminate all ignition sources. Separate from oxidizing materials. 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.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
Acetic acid, propyl ester	ACGIH TLV (1994-09-01) TWA 835 mg/m3 200 ppm STEL 1,040 mg/m3 250 ppm OSHA PEL 1989 (1989-03-01) TWA 840 mg/m3 200 ppm STEL 1,050 mg/m3 250 ppm OSHA PEL (1993-06-30) TWA 840 mg/m3 200 ppm NIOSH REL (1994-06-01) TWA 840 mg/m3 200 ppm STEL 1,050 mg/m3 250 ppm
Isopropanol	ACGIH TLV (2003-01-01) TWA 200 ppm STEL 400 ppm OSHA PEL 1989 (1989-03-01) TWA 980 mg/m3 400 ppm STEL 1,225 mg/m3 500 ppm OSHA PEL (1993-06-30) TWA 980 mg/m3 400 ppm NIOSH REL (1994-06-01) TWA 980 mg/m3 400 ppm STEL 1,225 mg/m3 500 ppm
Silane component	None.

Appropriate engineering controls Environmental exposure controls	:	Use only with adequate ventilation.\'20 Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment. Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation.\'20 In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.
Individual protection measures		
Hygiene measures Eye/face protection	:	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. 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: chemical splash goggles.
Skin 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.\'20 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., When there is a risk of ignition from static electricity, wear anti-static protective clothing., For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.
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.\'20 Respirators must be used according to a respiratory protection program to ensure proper fitting, training,

Section 9. Physical and chemical properties

Appearance

Physical state	: liquid
Color	: Colorless.
Odor	: Not available.
Odor threshold	: Not available.
рН	: Not available.
Melting point	: Not available.
Boiling point	: Not available.
Flash point	: Not Measured. Flashpoint is estimated to be < 23°C (73°F).
Fire point	: Not available.
Evaporation rate	: Not available.
Flammability (solid, gas)	: Not available.
Lower and upper explosive	: Lower: Not available.
(flammable) limits	Upper: Not available.
Vapor pressure	: Not available.
Vapor density	: Not available.
Relative density	: 1
Solubility	: Not available.
Solubility in water	: Not available.
Partition coefficient: n-	: Not available.
octanol/water	
Auto-ignition temperature	: Not available.
Decomposition temperature	: Not available.
Viscosity	: Dynamic: Not available.
	Kinematic:Not available.
Flow time (ISO 2431)	: Not available.
VOC %	: 90.04 %(m) Weight %

Section 10. Stability and reactivity

Reactivity	:	No specific test data related to reactivity available for this product or its ingredients.
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	:	Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition.
Incompatible materials	:	Reactive or incompatible with the following materials: oxidizing materials

Hazardous decomposition	:	Under normal conditions of storage and use, hazardous
products		decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Isopropanol				
	LD50 Oral	Rat	5,000 mg/kg	-
	LD50 Dermal	Rabbit	12,800 mg/kg	-
Acetic acid, propyl ester				
	LD50 Oral	Rat	9,370 mg/kg	-

Conclusion/Summary : Not available.

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Isopropanol	Eyes - Moderate irritant	Rabbit	-	24 hrs	-
	Skin - Mild irritant	Rabbit	-		-
	Eyes - Severe irritant	Rabbit	-		-
	Eyes - Moderate irritant	Rabbit	-		-
Acetic acid, propyl ester	Eyes - Mild irritant	Rabbit	-	24 hrs	-
	Skin - Mild irritant	Rabbit	-		-
Silane component	Eyes - Severe irritant	Rabbit	-		-

Conclusion/Summary Skin Eyes Respiratory Sensitization	:	Not available. Not available. Not available.	
Conclusion/Summary Skin Respiratory	:	Not available. Not available.	
Mutagenicity			
Conclusion/Summary	:	Not available.	
Carcinogenicity			
Conclusion/Summary		Not available.	
Classification			
Product/ingredient	OSHA	IARC	NTP

name			
Isopropanol	-	3	-

Reproductive toxicity

Conclusion/Summary : Not available.

Teratogenicity

Conclusion/Summary : Not available.

Specific target organ toxicity (single exposure)

Name	Category	Route of exposure	Target organs
Acetic acid, propyl ester	Category 3	Not applicable	Narcotic effects
Isopropanol	Category 3	Not applicable	Narcotic effects

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

Information on the likely routes : Not available. of exposure

Potential acute health effects

Eye contact	: Causes serious eye irritation.
Inhalation	: No known significant effects or critical hazards.
Skin contact	: Causes skin irritation.
Ingestion	: No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact	:	Adverse symptoms may include the following: pain or irritation watering redness
Inhalation	10	No specific data.
Skin contact	:	Adverse symptoms may include the following: irritation redness
Ingestion	:	No specific data.

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

Short term exposure

Potential immediate effects	:	Not available.
Potential delayed effects	÷ .	Not available.

Long term exposure

Potential immediate effects Potential delayed effects	:	Not available. Not available.
Potential chronic health effects		
Conclusion/Summary	:	Not available.
General Carcinogenicity Mutagenicity Teratogenicity Developmental effects Fertility effects		No known significant effects or critical hazards. No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Route	ATE value
Oral	123,061.8 mg/kg
Inhalation (vapors)	550.8 mg/l

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
Isopropanol			
	Acute LC50 4,200 mg/l Fresh water	Fish - Rasbora heteromorpha	96 h
	Acute LC50 1,400 mg/l Marine water	Crustaceans - Crangon crangon	48 h
Acetic acid, propyl ester			
	Acute LC50 60 mg/l Fresh water	Fish - Pimephales promelas	96 h

Conclusion/Summary : No

: Not available.

Persistence and degradability

Conclusion/Summary : Not available.

Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
Isopropanol	0.05	-	low
Acetic acid, propyl ester	1.4	-	low

Mobility in soil

Soil/water partition coefficient (KOC)	:	Not available.	

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Other adverse effects : No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods

The generation of waste should be avoided or minimized wherever possible.\'20 Disposal of this product, solutions and any by-products should at all times 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.\'20 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 emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

	DOT Classificati	TDG Classificati	Mexico Classificati	ADR/RID	IMDG	ΙΑΤΑ
	on	on	on			
UN number	UN1210	UN1210	UN1210	UN1210	UN1210	UN1210
UN proper shipping name	Printing ink related material					
Transport hazard class(es)		3	3	3	3	3
Packing group	11	11	11	11	11	11
Environme ntal hazards	No.	No.	No.	No.	11	II

Additional information

DOT Classification

Special provisions: 383

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TDG Classification	:	Product classified as per the following sections of the Transportation of Dangerous Goods Regulations: 2.18-2.19 (Class 3)
ADR/RID	:	<u>Special provisions</u> : 640C <u>Tunnel code</u> : (D/E)
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.

Transport in bulk according to Annex II of MARPOL and the IBC Code

Not available.

Section 15. Regulatory information

U.S. Federal regulations

: TSCA 8(a) CDR Exempt/Partial exemption: Not determined

Clean Air Act Section 112(b) Hazardous Air Pollutants	:	Listed
(HAPs)		
Clean Air Act Section 602	1.1	Not listed
Class I Substances		
Clean Air Act Section 602	1.1	Not listed
Class II Substances		
DEA List I Chemicals	1.1	Not listed
(Precursor Chemicals)		
DEA List II Chemicals	1.1	Not listed
(Essential Chemicals)		

SARA 302/304

Composition/information on ingredients

Name	%	EHS	SARA 302/304	
Propylene Oxide	> 0 - < 0.1	Yes.	SARA 304 RQ: 100 lb(s) SARA 302 TPQ: 10000 lb(s)	

SARA 304 RQ

10000000 lbs

SARA 311/312

Classification

: FLAMMABLE LIQUIDS Category 2SKIN IRRITATION Category 2EYE IRRITATION Category 2A

Composition/information on ingredients

Name	%	Classification
Isopropanol	> 0 - <= 5	312 DELAY HLTH312 IMMED

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		HLTH312 FIREFlam. Liq., 2Eye Irrit., 2ASTOT SE,, 3
Acetic acid, propyl ester	> 0 - <= 5	312 FIRE312 IMMED HLTHFlam. Liq., 2Eye Irrit., 2ASTOT SE,, 3
Silane component	> 0 - <= 3	Flam. Liq., 4Acute Tox.,, 4Skin Corr., 1BEye Irrit., 2A

SARA 313

Form R - Reporting requirements

Product name	CAS number	%
Isopropanol	67-63-0	> 0 - <= 5

Supplier notification

Product name	CAS number	%
Isopropanol	67-63-0	> 0 - <= 5

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.

State regulations

Massachusetts	1	None of the components are listed.
New York	:	None of the components are listed.
New Jersey	:	The following components are listed: Isopropanol Acetic acid, propyl ester Ethanol
Pennsylvania	:	The following components are listed: Ethanol Acetic acid, propyl ester

California Prop. 65

WARNING: This product can expose you to Propylene Oxide, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

Ingredient name	No significant risk level	Maximum acceptable dosage level
Propylene Oxide	No.	No.

International regulations

Inventory list

Australia :	Not determined.
Canada :	Not determined.
China :	All components are listed or exempted.
Europe :	At least one component is not listed in EINECS but all such

	components are listed in ELINCS.
	Please contact your supplier for information on the inventory status of this material.
Japan	: Japan inventory (ENCS): Not determined.
oapan	Japan inventory (ISHL): Not determined.
Malaysia	: Not determined.
New Zealand	: Not determined.
Philippines	: All components are listed or exempted.
Republic of Korea	: All components are listed or exempted.
Taiwan	: Not determined.Not determined.
Turkey	: Not determined.
United States	: All components are listed or exempted.

Section 16. Other information

Procedure used to derive the classification

Classification	Justification
FLAMMABLE LIQUIDS - Category 2	On basis of test data
SKIN IRRITATION - Category 2	Calculation method
EYE IRRITATION - Category 2A	Calculation method

History

Date of printing Date of issue/Date of revision Date of previous issue Version Prepared by		07/19/2021 07/19/2021 07/09/2021 12.0 WOLTMANA
Key to abbreviations	:	ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor GHS = Globally Harmonized System of Classification and Labelling of Chemicals IATA = International Air Transport Association IBC = Internediate Bulk Container IMDG = International Maritime Dangerous Goods LogPow = logarithm of the octanol/water partition coefficient MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution) UN = United Nations
References	1	Not available.

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.