Safety Data Sheet
Hempel's High Protect Ii Base

HSNO 2017 - New Zealand

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Product name : Hempel's High Protect Ii Base

Product identity : 3578924700

Product type : epoxy paint (base for 2-component product)

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

Field of application : used only as part of two- or multi component products.

Ready-for-use mixture : 35780 = 35789 3 vol. / 95078 2 vol.

Identified uses : Professional applications.

1.3 Details of the supplier of the safety data sheet

Company details : Hempel (Wattyl) New Zealand Limited
2-14 Patiki Road
Avondale, Auckland 1026
Tel.: 09 820 6700
Email: sales.nz@hempel.com

Date of Preparation : 27 October 2024

Date of previous issue : No previous validation.

1.4 Emergency telephone number

Emergency telephone number (with hours of operation)

Poisons Centre New Zealand: 0800 764 766 (24 hour)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Product definition : Mixture

GHS Classification

SKIN IRRITATION - Category 2
EYE IRRITATION - Category 2
SKIN SENSITIZATION - Category 1
SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2
AQUATIC HAZARD (LONG-TERM) - Category 2

2.2 Label elements

Hazard pictograms :

Signal word : Warning

Hazard statements :
H315 - Causes skin irritation.
H317 - May cause an allergic skin reaction.
H319 - Causes serious eye irritation.
H373 - May cause damage to organs through prolonged or repeated exposure.
H411 - Toxic to aquatic life with long lasting effects.

Precautionary statements :

General : Do not apply directly into or onto water. Take all reasonable steps to ensure that the substance does not cause any significant adverse effects to the environment beyond the application area.

Prevention : Wear protective gloves. Wear eye or face protection. Avoid release to the environment. Do not breathe vapor, mist or spray. Wash thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace.

Response : Collect spillage. Get medical advice or attention if you feel unwell. Take off contaminated clothing and wash it before reuse. IF ON SKIN: Wash with plenty of water. If skin irritation or rash occurs: Get medical advice or attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice or attention.

Disposal : Dispose of contents and container in accordance with all local, regional, national and international regulations.

2.3 Other hazards

SECTION 2: Hazards identification

Other hazards which do not result in classification : None known.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Product/ingredient name	Identifiers	%
bisphenol A-(epichlorhydrin) epoxy resin MW =< 700	1675-54-3	≥30 - ≤60
titanium dioxide	13463-67-7	≥10 - ≤30
formaldehyde, polymer with (chloromethyl)oxirane and phenol	9003-36-5	≥10 - ≤30
1,6-hexanediol diglycidylether	16096-31-4	≤10
oxirane, mono[(C12-14-alkyloxy)methyl] derivs.	68609-97-2	≤10
bis(isopropyl)naphthalene	38640-62-9	≤10
C12-14 alcohols	80206-82-2	≤0.3

Occupational exposure limits, if available, are listed in Section 8.

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.

SECTION 4: First aid measures

4.1 Description of first aid measures

General : In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person.

If breathing is irregular, drowsiness, loss of consciousness or cramps: Call 112 and give immediate treatment (first aid).

Eye contact : Check for and remove any contact lenses. Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Seek immediate medical attention/advice.

Inhalation : Remove to fresh air and keep at rest in a position comfortable for breathing. Give nothing by mouth. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. If unconscious, place in recovery position and get medical attention immediately.

Skin contact : Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognized skin cleanser. Do NOT use solvents or thinners.

Ingestion : If swallowed, seek medical advice immediately and show this container or label. Keep person warm and at rest. Do not induce vomiting unless directed to do so by medical personnel. Lower the head so that vomit will not re-enter the mouth and throat.

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. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

4.2 Most important symptoms and effects, both 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. May cause an allergic skin reaction.

Ingestion : No known significant effects or critical hazards.

Over-exposure signs/symptoms

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.

4.3 Indication of any immediate medical attention and special treatment needed

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

SECTION 4: First aid measures

Specific treatments : No specific treatment.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Extinguishing media : Recommended: alcohol resistant foam, CO_2, powders, water spray.
Not to be used: waterjet.

5.2 Special hazards arising from the substance or mixture

Hazards from the substance or mixture : In a fire or if heated, a pressure increase will occur and the container may burst. This material is 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 combustion products : Decomposition products may include the following materials: carbon oxides halogenated compounds metal oxide/oxides

5.3 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 will produce dense black smoke. Exposure to decomposition products may cause a health hazard. Cool closed containers exposed to fire with water. Do not release runoff from fire to drains or watercourses. Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Avoid all direct contact with the spilled material. Refer to protective measures listed in sections 7 and 8. No action shall be taken involving any personal risk or without suitable training. If the product contaminates lakes, rivers, or sewers, inform the appropriate authorities in accordance with local regulations.

6.2 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.

6.3 Methods and materials for containment and cleaning up

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). Contaminated absorbent material may pose the same hazard as the spilled product.

6.4 Reference to other sections

See Section 1 for emergency contact information.
See Section 8 for information on appropriate personal protective equipment.
See Section 13 for additional waste treatment information.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Contains epoxy constituents. Avoid all possible skin contact with epoxy and amine containing products, they may cause allergic reactions. Avoid inhalation of vapour, dust and spray mist. Avoid contact with skin and eyes. Eating, drinking and smoking should be prohibited in area where this material is handled, stored and processed. Appropriate personal protective equipment: see Section 8. Always keep in containers made from the same material as the original one.

7.2 Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations. Store in a cool, well-ventilated area away from incompatible materials and ignition sources. Keep out of the reach of children. Keep away from: Oxidizing agents, strong alkalis, strong acids. No smoking. Prevent unauthorized access. Containers that are opened must be carefully resealed and kept upright to prevent leakage.

7.3 Specific end use(s)

See separate Product Data Sheet for recommendations or industrial sector specific solutions.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Product/ingredient name	Exposure limit values
titanium dioxide	**HSWA 2015 - HSW (GRWM) 2016. Workplace exposure standards (WES) (New Zealand, 11/2023).** WES-TWA: 10 mg/m³ 8 hours. Form: The value for inhalable dust containing no asbestos and less than 1% free silica.

Recommended monitoring procedures

If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to appropriate monitoring standards. Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

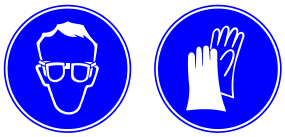
8.2 Exposure controls

Appropriate engineering controls

Arrange sufficient ventilation by local exhaust ventilation and good general ventilation to keep the airborne concentrations of vapors or dust lowest possible and below their respective threshold limit value. Ensure that eyewash stations and safety showers are proximal to the work-station location.

Individual protection measures

General : Gloves must be worn for all work that may result in soiling. Apron/coveralls/protective clothing must be worn when soiling is so great that regular work clothes do not adequately protect skin against contact with the product. Safety eyewear should be used when there is a likelihood of exposure.



Hygiene measures : Wash hands, forearms, and face thoroughly after handling compounds and before eating, smoking, using lavatory, and at the end of day.

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: chemical splash goggles.

Hand protection : Wear chemical-resistant gloves (tested to EN374) in combination with 'basic' employee training. The quality of the chemical-resistant protective gloves must be chosen as a function of the specific workplace concentrations and quantity of hazardous substances.

Since the actual work situation is unknown. Supplier of gloves should be contacted in order to find the appropriate type. Below listed glove(s) should be regarded as generic advice:

Recommended: Silver Shield / Barrier / 4H gloves, butyl rubber (>0.5 mm), Viton®
May be used: polyvinyl alcohol (PVA), polyvinyl chloride (PVC), butyl rubber (>0.3 mm), nitrile rubber (>0.3 mm), neoprene rubber (>0.1 mm)
Short term exposure: natural rubber (latex) (>0.4 mm), nitrile rubber (>0.1 mm)

Body protection : Personal protective equipment for the body should be selected based on the task being performed and the risks involved handling this product.

Respiratory protection : Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. Wear appropriate respirator when ventilation is inadequate. Be sure to use approved/certified respirator or equivalent. It is not possible to specify precise filter type, since the actual work situation is unknown. Supplier of respirators should be contacted in order to find the appropriate filter.

Environmental exposure controls

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state :	Liquid.
Color :	Cream
Odor :	Amine-like.
pH :	Testing not relevant or not possible due to nature of the product.
Melting point/freezing point :	-16°C This is based on data for the following ingredient: bisphenol A-(epichlorhydrin) epoxy resin MW = < 700
Boiling point/boiling range :	Testing not relevant or not possible due to nature of the product.
Flash point :	Closed cup: 143°C (289.4°F)
Evaporation rate :	Testing not relevant or not possible due to nature of the product.
Flammability :	Not available.
Lower and upper explosive (flammable) limits :	No specific data.
Vapor pressure :	0 kPa This is based on data for the following ingredient: bisphenol A-(epichlorhydrin) epoxy resin MW = < 700
Vapor density :	Testing not relevant or not possible due to nature of the product.
Relative density :	1.34 g/cm³
Partition coefficient (LogKow) :	Testing not relevant or not possible due to nature of the product.
Auto-ignition temperature :	Testing not relevant or not possible due to nature of the product.
Decomposition temperature :	Testing not relevant or not possible due to nature of the product.
Viscosity :	Aspiration hazard (H304) Not classified. Testing not relevant due to nature of the product.
Explosive properties :	Testing not relevant or not possible due to nature of the product.
Oxidizing properties :	Testing not relevant or not possible due to nature of the product.

9.2 Other information

Solvent(s) % by weight :	Weighted average: 1 %
Water % by weight :	Weighted average: 0 %
VOC content :	10.9 g/l
TOC Content :	Weighted average: 8 g/l
Solvent Gas :	Weighted average: 0.002 m³/l

SECTION 10: Stability and reactivity

10.1 Reactivity

No specific test data related to reactivity available for this product or its ingredients.

10.2 Chemical stability

The product is stable.

10.3 Possibility of hazardous reactions

Under normal conditions of storage and use, hazardous reactions will not occur.

10.4 Conditions to avoid

No specific data.

10.5 Incompatible materials

10.6 Hazardous decomposition products

When exposed to high temperatures (i.e. in case of fire) harmful decomposition products may be formed:

Decomposition products may include the following materials: carbon oxides halogenated compounds metal oxide/oxides

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Epoxy and amine containing products can cause skin disorders such as allergic eczema. The allergy may arise after only a short exposure period.

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
bisphenol A-(epichlorhydrin) epoxy resin MW =< 700	LD50 Dermal	Rabbit	>2000 mg/kg	-
	LD50 Dermal	Rat	>2000 mg/kg	-
	LD50 Oral	Rat	>2000 mg/kg	-
titanium dioxide	LC50 Inhalation Dusts and mists	Rat	>6.8 mg/l	4 hours
	LD50 Dermal	Rabbit	>5000 mg/kg	-
	LD50 Oral	Rat	>5000 mg/kg	-
formaldehyde, polymer with (chloromethyl)oxirane and phenol	LD50 Dermal	Rabbit	>2000 mg/kg	-
	LD50 Oral	Rat	>2000 mg/kg	-
1,6-hexanediol diglycidylether	LD50 Dermal	Rat	>2000 mg/kg	-
	LD50 Oral	Rat	2190 mg/kg	-
oxirane, mono[(C12-14-alkyloxy) methyl] derivs.	LD50 Dermal	Rat	>4500 mg/kg	-
	LD50 Oral	Rat	>5000 mg/kg	-
bis(isopropyl)naphthalene	LD50 Dermal	Rat	>4000 mg/kg	-
	LD50 Oral	Rat	>4000 mg/kg	-

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure
bisphenol A-(epichlorhydrin) epoxy resin MW =< 700	Eyes - Mild irritant	Rabbit	-	-
	Skin - Mild irritant	Rabbit	-	-
titanium dioxide	Skin - Mild irritant	Human	-	72 hours 300 Micrograms Intermittent
formaldehyde, polymer with (chloromethyl)oxirane and phenol	Skin - Mild irritant	Rabbit	-	24 hours 500 microliters
1,6-hexanediol diglycidylether	Eyes - Irritant	Rabbit	-	-
	Skin - Irritant	Rabbit	-	-
oxirane, mono[(C12-14-alkyloxy) methyl] derivs.	Eyes - Mild irritant	Rabbit	-	-
	Skin - Moderate irritant	Rabbit	-	-

Sensitizer

Product/ingredient name	Route of exposure	Species	Result
bisphenol A-(epichlorhydrin) epoxy resin MW =< 700	skin	Guinea pig	Sensitizing
1,6-hexanediol diglycidylether	skin	Guinea pig	Sensitizing
oxirane, mono[(C12-14-alkyloxy) methyl] derivs.	skin	Guinea pig	Sensitizing

Specific target organ toxicity (single exposure)

Product/ingredient name	Category	Route of exposure	Target organs
Not available.			

Specific target organ toxicity (repeated exposure)

Product/ingredient name	Category	Route of exposure	Target organs
bisphenol A-(epichlorhydrin) epoxy resin MW =< 700	Category 2	-	-

Aspiration hazard

Product/ingredient name	Result
bis(isopropyl)naphthalene	

Information on the likely routes of exposure

Routes of entry anticipated: Oral, Dermal, Inhalation.

Potential chronic health effects

Sensitization : Contains bisphenol A-(epichlorhydrin) epoxy resin MW =< 700, formaldehyde, polymer with (chloromethyl)oxirane and phenol, 1,6-hexanediol diglycidylether, oxirane, mono[(C12-14-alkyloxy) methyl] derivs.. May produce an allergic reaction.

SECTION 11: Toxicological information

Other information : No additional known significant effects or critical hazards.

SECTION 12: Ecological information

12.1 Toxicity

Do not allow to enter drains or watercourses. Toxic to aquatic life with long lasting effects.

Product/ingredient name	Result	Species	Exposure
bisphenol A-(epichlorhydrin) epoxy resin MW =< 700	Acute EC50 11 mg/l	-	72 hours
	Acute EC50 1.8 mg/l		48 hours
	Acute LC50 2 mg/l		96 hours
titanium dioxide	Acute LC50 >100 mg/l	-	48 hours
	Acute LC50 >100 mg/l		96 hours
formaldehyde, polymer with (chloromethyl)oxirane and phenol	Acute EC50 2.54 mg/l	-	96 hours
	Acute LC50 1.8 mg/l		72 hours
	Acute LC50 2.55 mg/l		48 hours
1,6-hexanediol diglycidylether	Acute EC50 23.1 mg/l	-	48 hours
	Acute LC50 47 mg/l		48 hours
	Acute LC50 30 mg/l		96 hours
oxirane, mono[(C12-14-alkyloxy) methyl] derivs.	Acute IC50 843.75 mg/l	-	72 hours
	Acute LC50 5000 mg/l		96 hours
bis(isopropyl)naphthalene	Acute LC50 1.7 mg/l	-	48 hours
	Acute NOEC 0.013 mg/l		21 days

12.2 Persistence and degradability

Product/ingredient name	Test	Result	Dose	Inoculum
bisphenol A-(epichlorhydrin) epoxy resin MW =< 700	OECD 302B Inherent Biodegradability: Zahn-Wellens/EMPA Test	12 % - Not readily - 28 days	-	-
formaldehyde, polymer with (chloromethyl)oxirane and phenol	OECD 301B Ready Biodegradability - CO_2 Evolution Test	16 % - Not readily - 28 days	-	-
1,6-hexanediol diglycidylether	OECD 301D Ready Biodegradability - Closed Bottle Test	47 % - Inherent - 28 days	2 mg/l	-
oxirane, mono[(C12-14-alkyloxy) methyl] derivs.	-	87 % - Readily - 28 days	-	-

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
bisphenol A-(epichlorhydrin) epoxy resin MW =< 700	-	-	Not readily
formaldehyde, polymer with (chloromethyl)oxirane and phenol	-	-	Not readily
1,6-hexanediol diglycidylether	-	-	Inherent
oxirane, mono[(C12-14-alkyloxy) methyl] derivs.	-	-	Readily

12.3 Bioaccumulative potential

Product/ingredient name	$LogP_{ow}$	BCF	Potential
bisphenol A-(epichlorhydrin) epoxy resin MW =< 700	2.64 - 3.78	31	low
formaldehyde, polymer with (chloromethyl)oxirane and phenol	2.7	150	low
1,6-hexanediol diglycidylether	0.822	3.57	low
oxirane, mono[(C12-14-alkyloxy)methyl] derivs.	3.77	160 - 263	low
bis(isopropyl)naphthalene	6.081	1800 - 6400	high

12.4 Mobility in soil

Soil/water partition coefficient (K_{OC}) : No known data avaliable in our database.

Mobility : No known data avaliable in our database.

Other adverse effects

SECTION 12: Ecological information

No known significant effects or critical hazards.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

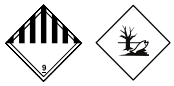
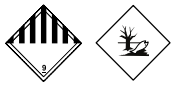
The generation of waste should be avoided or minimized wherever possible. Residues of the product is listed as hazardous waste. Dispose of according to all state and local applicable regulations. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction.

Packaging

The generation of waste should be avoided or minimized wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

SECTION 14: Transport information

Transport may take place according to national regulation NZS for transport by road and train, IMDG for transport by sea, IATA for transport by air.

	14.1 UN no.	14.2 Proper shipping name	14.3 Transport hazard class(es)		14.4 PG*	14.5 Env*	Additional information
NZS Class	UN3082	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (bisphenol A-(epichlorhydrin) epoxy resin MW =< 700)	9		III	Yes.	**Hazchem code** ●3Z
IMDG Class	UN3082	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.. (bisphenol A-(epichlorhydrin) epoxy resin MW =< 700)	9		III	Yes.	This product is not regulated as a dangerous good when transported in sizes of ≤5 L or ≤5 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 Class	UN3082	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (bisphenol A-(epichlorhydrin) epoxy resin MW =< 700)	9		III	Yes.	This product is not regulated as a dangerous good when transported in sizes of ≤5 L or ≤5 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.

PG* : Packing group
Env.* : Environmental hazards

14.6 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.

14.7 Transport in bulk according to IMO instruments

Not applicable.

SECTION 15: Regulatory information

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

This material is classified as hazardous according to criteria in the Hazardous Substances (Hazard Classification) Notice 2020.

This material is classified as DANGEROUS GOODS according to criteria in New Zealand Standard 5433:2012 Transport of Dangerous Goods on Land.

HSNO Classification

SKIN IRRITATION - Category 2
EYE IRRITATION - Category 2
SKIN SENSITIZATION - Category 1
SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2
AQUATIC HAZARD (LONG-TERM) - Category 2

Safety, health and environmental regulations specific for the product :

No known specific national and/or regional regulations applicable to this product (including its ingredients).

HSNO Group Standard : HSR002670

HSNO Group Standard assinged are based upon the GHS Classification.

SECTION 16: Other information

Indicates information that has changed from previously issued version.

Classification	Justification
SKIN IRRITATION - Category 2	Calculation method
EYE IRRITATION - Category 2	Calculation method
SKIN SENSITIZATION - Category 1	Calculation method
SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2	Calculation method
AQUATIC HAZARD (LONG-TERM) - Category 2	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.