

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

### Safety Data Sheet

Issue date: 4/19/2024 Version: 1.0

A Meridian Adhesives Group Company

### **SECTION 1: Identification** 1.1. Identification Product form : Mixture Product name : EPO-TEK® 375 PART A 1.2. Recommended use and restrictions on use Recommended use : Adhesives Restrictions on use : Not to be used for any purpose other than the one the product was designed for 1.3. Supplier Epoxy Technology, Inc. 14 Fortune Drive Billerica, MA 01821 USA T 978-667-3805 - F 978-663-9782 www.epotek.com 1.4. Emergency telephone number Emergency number : VelocityEHS: +1 (800) 255-3924, +1 (813) 248-0585 SECTION 2: Hazard(s) identification 2.1. Classification of the substance or mixture **GHS US classification** Skin corrosion/irritation Category 2 H315 Causes skin irritation Serious eye damage/eye irritation Category 2 H319 Causes serious eye irritation Skin sensitization, Category 1 H317 May cause an allergic skin reaction Hazardous to the aquatic environment - Chronic Hazard Category 2 Toxic to aquatic life with long lasting effects H411 Full text of H statements : see section 16 2.2. GHS Label elements, including precautionary statements **GHS US labeling** Hazard pictograms (GHS US) Signal word (GHS US) : Warning Hazard statements (GHS US) : H315 - Causes skin irritation

Precautionary statements (GHS US)

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US - en

P273 - Avoid release to the environment.

H317 - May cause an allergic skin reaction H319 - Causes serious eye irritation

H411 - Toxic to aquatic life with long lasting effects

P302+P352 - If on skin: Wash with plenty of water.

contact lenses, if present and easy to do. Continue rinsing.

: P261 - Avoid breathing dust/fume/gas/mist/vapors/spray.

P264 - Wash hands, forearms and face thoroughly after handling.

P272 - Contaminated work clothing must not be allowed out of the workplace.

P280 - Wear protective gloves/protective clothing/eye protection/face protection.

P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove

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P321 - Specific treatment (see supplemental first aid instruction on this label).
P332+P313 - If skin irritation occurs: Get medical advice/attention.
P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.
P337+P313 - If eye irritation persists: Get medical advice/attention.
P362+P364 - Take off contaminated clothing and wash it before reuse.
P363 - Wash contaminated clothing before reuse.
P391 - Collect spillage.
P501 - Dispose of contents/container to hazardous or special waste collection point, in
accordance with local, regional, national and/or international regulation.

### 2.3. Other hazards which do not result in classification

Other hazards which do not result in classification

: Harmful dust may be released during cutting, milling or grinding process.

### 2.4. Unknown acute toxicity (GHS US)

No additional information available

### **SECTION 3: Composition/Information on ingredients**

### 3.1. Substances

#### Not applicable

### 3.2. Mixtures

Name	Product identifier	%	GHS US classification
Epoxy phenol novolac resin	CAS-No.: 28064-14-4	≥60	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1A, H317 Aquatic Chronic 2, H411
Bisphenol A diglycidyl ether resin	CAS-No.: 25068-38-6	< 10	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317 Aquatic Chronic 2, H411

Comments

: Components not listed are either non-hazardous or are below reportable limits.

\*Chemical name, CAS number and/or exact concentration have been withheld as a trade secret

Full text of hazard classes and H-statements : see section 16

SECTION 4: First-aid measures		
4.1. Description of first aid measures		
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing.	
First-aid measures after skin contact	: Wash skin with plenty of water. Take off contaminated clothing. If skin irritation or rash occurs: Get medical advice/attention.	
First-aid measures after eye contact	: 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/attention.	
First-aid measures after ingestion	: Call a poison center/doctor/physician if you feel unwell.	
4.2. Most important symptoms and effects (acute and delayed)		
Symptoms/effects after skin contact Symptoms/effects after eye contact	<ul><li>Irritation. May cause an allergic skin reaction.</li><li>Eye irritation.</li></ul>	

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### 4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

SECTION 5: Fire-fighting measures		
5.1. Suitable (and unsuitable) extinguishing	media	
Suitable extinguishing media	: Water spray. Dry powder. Foam. Carbon dioxide.	
5.2. Specific hazards arising from the chemi	ical	
Hazardous decomposition products in case of fire	: Toxic fumes may be released.	
5.3. Special protective equipment and preca	nutions for fire-fighters	
Protection during firefighting	: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.	

SECTION 6: Accidental release measures			
6.1. Personal precautions, protective equipment	ent and emergency procedures		
6.1.1. For non-emergency personnel			
Emergency procedures :	Ventilate spillage area. Avoid contact with skin and eyes. Avoid breathing dust/fume/gas/mist/vapors/spray.		
6.1.2. For emergency responders			
Protective equipment :	Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".		
6.2. Environmental precautions			
Avoid release to the environment.			
6.3. Methods and material for containment and cleaning up			
For containment:Methods for cleaning up:Other information:	Collect spillage. Take up liquid spill into absorbent material. Dispose of materials or solid residues at an authorized site.		

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and store	age
7.1. Precautions for safe handling	
Precautions for safe handling	: Ensure good ventilation of the work station. Avoid contact with skin and eyes. Wear personal protective equipment. Avoid breathing dust/fume/gas/mist/vapors/spray.
Hygiene measures	: Wash contaminated clothing before reuse. Contaminated work clothing should not be allowed out of the workplace. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.
7.2. Conditions for safe storage, in	ncluding any incompatibilities

Storage conditions

: Store in a well-ventilated place. Keep cool.

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SECTION 8: Exposure controls/personal protection
8.1. Control parameters
EPO-TEK® 375 PART A
No additional information available
Epoxy phenol novolac resin (28064-14-4)
No additional information available
Bisphenol A diglycidyl ether resin (25068-38-6)
No additional information available
8.2. Appropriate engineering controls
Appropriate engineering controls: Ensure good ventilation of the work station.Environmental exposure controls: Avoid release to the environment.
8.3. Individual protection measures/Personal protective equipment
Hand protection:
Wear suitable gloves resistant to chemical penetration. Neoprene or nitrile rubber gloves. Butyl-rubber protective gloves. Choosing the proper glove is a decision that depends not only on the type of material, but also on other quality features, which differ for each manufacturer. Refer to manufacturer's information. Gloves must be replaced after each use and whenever signs of wear or perforation appear
Eye protection:
Safety glasses
Skin and body protection:
Wear suitable protective clothing
Respiratory protection:
In case of insufficient ventilation, wear suitable respiratory equipment
Personal protective equipment symbol(s):

# SECTION 9: Physical and chemical properties

	9	.1. Information on	basic physical	and chemical	propertie
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Physical state	: Liquid
Color	: Clear
Odor	: Mild odour
Odor threshold	: No data available
рН	: No data available
Melting point	: No data available
Freezing point	: No data available
Boiling point	: No data available
Flash point	: No data available
Relative evaporation rate (butyl acetate=1)	: No data available

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Flowmobility (colid. coo)	
Flammability (solid, gas)	: Not applicable.
Vapor pressure	: No data available
Relative vapor density at 20°C	: No data available
Relative density	: No data available
Solubility	: No data available
Partition coefficient n-octanol/water (Log Pow)	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosion limits	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available

### 9.2. Other information

No additional information available

### **SECTION 10: Stability and reactivity**

### 10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

#### **10.2. Chemical stability**

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

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

SECTION 11: Toxicological information		
11.1. Information on toxicological effects		
Acute toxicity (oral) Acute toxicity (dermal) Acute toxicity (inhalation)	<ul> <li>Not classified</li> <li>Not classified</li> <li>Not classified</li> </ul>	
Bisphenol A diglycidyl ether resin (25068-38-6)		
LD50 oral	11400 mg/kg	
LD50 dermal rat	> 2000 mg/kg body weight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity), Guideline: EU Method B.3 (Acute Toxicity (Dermal))	
ATE US (oral)	11400 mg/kg body weight	
Skin corrosion/irritation	: Causes skin irritation.	

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Bisphenol A diglycidyl ether resin (25068	3-38-6)
рН	No data available in the literature
Serious eye damage/irritation	: Causes serious eye irritation.
Bisphenol A diglycidyl ether resin (25068	3-38-6)
рН	No data available in the literature
Respiratory or skin sensitization	: May cause an allergic skin reaction.
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Bisphenol A diglycidyl ether resin (25068	3-38-6)
NOAEL (chronic,oral,animal/male,2 years)	15 mg/kg body weight Animal: rat, Animal sex: male, Guideline: OECD Guideline 453 (Combined Chronic Toxicity / Carcinogenicity Studies), Guideline: EPA OPPTS 870.4300 (Combined Chronic Toxicity / Carcinogenicity), Guideline: other:MITI, Japanese ministry of international trade and industry, February 1998, Remarks on results: other:Effect type: toxicity (migrated information)
NOAEL (chronic,oral,animal/female,2 years)	100 mg/kg body weight Animal: rat, Animal sex: female, Guideline: OECD Guideline 453 (Combined Chronic Toxicity / Carcinogenicity Studies), Guideline: EPA OPPTS 870.4300 (Combined Chronic Toxicity / Carcinogenicity), Guideline: other:MITI, Japanese ministry of international trade and industry, February 1998, Remarks on results: other:Effect type: toxicity (migrated information)
Reproductive toxicity	Not classified
STOT-single exposure	: Not classified
STOT-repeated exposure	: Not classified
Bisphenol A diglycidyl ether resin (25068	3-38-6)
NOAEL (oral,rat,90 days)	50 mg/kg body weight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents), Guideline: EPA OPPTS 870.3100 (90-Day Oral Toxicity in Rodents) Guideline: EU Method B.26 (Sub-Chronic Oral Toxicity Test: Repeated Dose 90-Day Oral Toxicity Study in Rodents), Guideline: other:japanese MITI guidelines for toxicity testing of chemicals
Aspiration hazard	Not classified
Viscosity, kinematic	: No data available
Bisphenol A diglycidyl ether resin (25068	3-38-6)
Viscosity, kinematic	No data available in the literature
Symptoms/effects after skin contact Symptoms/effects after eye contact	: Irritation. May cause an allergic skin reaction. : Eye irritation.

### **SECTION 12: Ecological information**

12.1. Toxicity

Ecology - general

: Toxic to aquatic life with long lasting effects.

Bisphenol A diglycidyl ether resin (25068-38-6)		
LC50 - Fish [1]	1.3 mg/l (96 h, Pisces, Literature study)	
EC50 - Crustacea [1]	2 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, Nominal concentration)	
EC50 72h - Algae [1]	9.4 mg/l (EPA 660/3 - 75/009, Selenastrum capricornutum, Static system, Fresh water, Experimental value, Biomass)	
EC50 72h - Algae [2]	> 11 mg/l Test organisms (species): Scenedesmus capricornutum	

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Bisphenol A diglycidyl ether resin (25068-38-6)			
LOEC (chronic)	1 mg/l Test organisms (species): Daphnia magna Duration: '21 d'		
NOEC (chronic)	0.3 mg/I Test organisms (species): Daphnia magna Duration: '21 d'		
12.2. Persistence and degradability			
Epoxy phenol novolac resin (28064-14-4)			
Persistence and degradability	Biodegradability in soil: no data available.		
Bisphenol A diglycidyl ether resin (25068-38-6)			
Not rapidly degradable			
Persistence and degradability	Not readily biodegradable in water.		
12.3. Bioaccumulative potential			
Epoxy phenol novolac resin (28064-14-4)			
Bioaccumulative potential	No bioaccumulation data available.		
Bisphenol A diglycidyl ether resin (25068-38-6)			
Partition coefficient n-octanol/water (Log Pow)	3 (Estimated value, 25 °C)		
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).		
12.4. Mobility in soil			
Bisphenol A diglycidyl ether resin (25068-38-6)			
Surface tension	59 mN/m (20 °C, 0.09 g/l)		
Ecology - soil	No (test)data on mobility of the substance available.		

**12.5. Other adverse effects** 

No additional information available

SECTION 13: Disposal considerat	ions
13.1. Disposal methods	
Waste treatment methods	: Dispose of contents/container in accordance with licensed collector's sorting instructions.

### **SECTION 14: Transport information**

#### In accordance with DOT / TDG / IMDG / IATA

DOT	TDG	IMDG	ΙΑΤΑ
14.1. UN number	·	· · · · · ·	
Not applicable	UN3082	3082	3082
14.2. Proper Shipping Name		·	
Hazardous waste, liquid, n.o.s. (Epoxy Phenol Novolac)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Epoxy Phenol Novolac)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Epoxy Phenol Novolac)	Environmentally hazardous substance, liquid, n.o.s. (Epoxy Phenol Novolac)

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DOT	TDG	IMDG	ΙΑΤΑ	
14.3. Transport hazard class(es)				
9	9	9	9	
14.4. Packing group	-			
III	Ш	III	III	
14.5. Environmental hazards				
Dangerous for the environment: Yes	Dangerous for the environment: Yes	Dangerous for the environment: Yes Marine pollutant: Yes	Dangerous for the environment: Yes	
No supplementary information availab	ble			
14.6. Special precautions for us	ser			
14.6. Special precautions for user         DOT UN-No.(DOT)       : NA3082         DOT Special Provisions (49 CFR 172.102)       : IB3 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Compo (31HZ1 and 31HA2, 31HB2, 31HB2, 31HD2, and 31HH2). Additional Requirement: Only II with a vapor pressure less than or equal to 110 kPa at 50 C (1.1 bar at 122 F), or 130 kPa C (1.3 bar at 131 F) are authorized, except for UN2672 (also see Special Provision IP8 in 2 for UN2672).         T2 - 1.5 178.274(d)(2) Normal			Additional Requirement: Only liquids C (1.1 bar at 122 F), or 130 kPa at 55 so see Special Provision IP8 in Table degree of filling determined by the ne maximum mean bulk temperature us of the liquid during filling.	
<b>TDG</b> UN-No. (TDG)	o. (TDG) : UN3082			

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TDG Special Provisions	: 16 - (1) The technical name of at least one of the most dangerous substances that predominantly
	contributes to the danger or dangers posed by the dangerous goods must be shown, in parentheses, on the shipping document following the shipping name in accordance with clause 3.5(1)(c)(ii)(A). The technical name must also be shown, in parentheses, on a small means of containment or on a tag following the shipping name in accordance with subsections 4.11(2) and (3).
	(2) Despite subsection (1), the technical name for the following dangerous goods is not required to be shown on a shipping document or on a small means of containment when Canadian law for domestic transport or an international convention for international transport prohibits the disclosure of the technical name:
	(a) UN1544, ALKALOID SALTS, SOLID, N.O.S. or ALKALOIDS, SOLID, N.O.S; (b) UN1851, MEDICINE, LIQUID, TOXIC, N.O.S;
	(c) UN3140, ALKALOID SALTS, LIQUID, N.O.S. or ALKALOIDS, LIQUID, N.O.S; (d) UN3248, MEDICINE, LIQUID, FLAMMABLE, TOXIC, N.O.S; or (a) UN3240, MEDICINE, SOUD, TOXIC, N.O.S.
	<ul> <li>(e) UN3249, MEDICINE, SOLID, TOXIC, N.O.S.</li> <li>(3) Despite subsection (1), the technical name for the following dangerous goods is not required to be shown on a small means of containment:</li> </ul>
	<ul> <li>(a) UN2814, INFECTIOUS SUBSTANCE, AFFECTING HUMANS; or</li> <li>(b) UN2900, INFECTIOUS SUBSTANCE, AFFECTING ANIMALS,99 - (1) Mixtures of solids that are not dangerous goods and liquids or solids that are UN3077, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S, or UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S, may be offered for transport, handled or transported as UN3077 if there is no visible liquid when the dangerous goods are loaded into a means of containment and during transport.</li> </ul>
	(2) These Regulations, except for Parts 1 and 2, do not apply to the offering for transport, handling or transport of less than 450 kg of UN3077, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S, or less than 450 L of UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S, on a road vehicle or a railway vehicle. The dangerous goods must be contained in one or more small means of containment designed, constructed, filled, closed, secured and maintained so that under normal conditions of transport, including handling, there will be no release of the dangerous goods that could endanger public safety.
Explosive Limit and Limited Quantity Index Excepted quantities (TDG)	: 5L : E1
IMDG	
Special provision (IMDG)	: 274, 335, 969
Limited quantities (IMDG)	: 5L
Excepted quantities (IMDG)	: E1
Packing instructions (IMDG)	: LP01, P001
Packing provisions (IMDG)	: PP1
IBC packing instructions (IMDG)	: IBC03
Tank instructions (IMDG)	: T4
Tank special provisions (IMDG)	
EmS-No. (Fire)	: F-A - FIRE SCHEDULE Alfa - GENERAL FIRE SCHEDULE : S-F - SPILLAGE SCHEDULE Foxtrot - WATER-SOLUBLE MARINE POLLUTANTS
EmS-No. (Spillage)	
Stowage category (IMDG)	: A
IATA PCA Excepted quantities (IATA)	: E1
PCA Limited quantities (IATA)	: Y964
PCA limited quantity max net quantity (IATA)	: 30kgG
PCA packing instructions (IATA)	: 964
PCA max net quantity (IATA)	: 450L
CAO packing instructions (IATA)	: 964
CAO max net quantity (IATA)	: 450L
Special provision (IATA)	: A97, A158, A197, A215
ERG code (IATA)	: 9L

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### 14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

### **SECTION 15: Regulatory information**

#### **15.1. US Federal regulations**

All components of this product are present and listed as Active on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

#### **15.2. International regulations**

#### CANADA

Epoxy phenol novolac resin (28064-14-4)

Listed on the Canadian DSL (Domestic Substances List)

#### **Bisphenol A diglycidyl ether resin (25068-38-6)**

Listed on the Canadian DSL (Domestic Substances List)

#### **EU-Regulations**

No additional information available

#### **National regulations**

No additional information available

#### 15.3. US State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

### **SECTION 16: Other information**

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Full text of H-phra	Full text of H-phrases	
H315 Causes skin irritation		
H317	May cause an allergic skin reaction	
H319	Causes serious eye irritation	
H411	Toxic to aquatic life with long lasting effects	

Safety Data Sheet (SDS), USA

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.



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A Meridian Adhesives Group Company

#### **SECTION 1: Identification** 1.1. Identification Product form : Mixture Product name : EPO-TEK® 375 PART B 1.2. Recommended use and restrictions on use Recommended use : Adhesives Restrictions on use : Not to be used for any purpose other than the one the product was designed for 1.3. Supplier Epoxy Technology, Inc. 14 Fortune Drive Billerica, MA 01821 USA T 978-667-3805 - F 978-663-9782 www.epotek.com 1.4. Emergency telephone number Emergency number : VelocityEHS: +1 (800) 255-3924, +1 (813) 248-0585 SECTION 2: Hazard(s) identification 2.1. Classification of the substance or mixture **GHS US classification** Acute toxicity (oral) Category 3 H301 Toxic if swallowed Skin corrosion/irritation Category 1B H314 Causes severe skin burns and eye damage Serious eye damage/eye irritation Category 1 H318 Causes serious eye damage Skin sensitization, Category 1 May cause an allergic skin reaction H317 Carcinogenicity Category 2 H351 Suspected of causing cancer Specific target organ toxicity - Single exposure, Category 3, H335 May cause respiratory irritation Respiratory tract irritation Full text of H statements : see section 16 2.2. GHS Label elements, including precautionary statements **GHS US labeling** Hazard pictograms (GHS US)

Signal word (GHS US) Hazard statements (GHS US)

Precautionary statements (GHS US)

Danger
H301 - Toxic if swallowed
H314 - Causes severe skin burns and eye damage
1217 Nov course on allergia skin reaction

- H317 May cause an allergic skin reaction
- H318 Causes serious eye damage

:

- H335 May cause respiratory irritation
- H351 Suspected of causing cancer
- P201 Obtain special instructions before use.
   P202 Do not handle until all safety precautions have been read and understood.
   P260 Do not breathe dust/fume/gas/mist/vapors/spray.

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	<ul> <li>P261 - Avoid breathing dust/fume/gas/mist/vapors/spray.</li> <li>P264 - Wash hands, forearms and face thoroughly after handling.</li> <li>P270 - Do not eat, drink or smoke when using this product.</li> <li>P271 - Use only outdoors or in a well-ventilated area.</li> <li>P272 - Contaminated work clothing must not be allowed out of the workplace.</li> <li>P280 - Wear protective gloves/protective clothing/eye protection/face protection.</li> <li>P301+P310 - If swallowed: Immediately call a poison center or doctor.</li> <li>P301+P330+P331 - If swallowed: rinse mouth. Do NOT induce vomiting.</li> <li>P302+P352 - If on skin: Wash with plenty of water.</li> <li>P303+P361+P353 - If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.</li> <li>P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing.</li> <li>P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.</li> <li>P308+P313 - If exposed or concerned: Get medical advice/attention.</li> <li>P310 - Immediately call a poison center or doctor.</li> <li>P312 - Call a poison center or doctor if you feel unwell.</li> <li>P321 - Specific treatment (see supplemental first aid instruction on this label).</li> <li>P338+P313 - If skin irritation or rash occurs: Get medical advice/attention.</li> <li>P363 - Wash contaminated clothing before reuse.</li> <li>P403+P233 - Store in a well-ventilated place. Keep container tightly closed.</li> <li>P405 - Store locked up.</li> <li>P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.</li> </ul>
2.3. Other hazards which do not result in cla	Issification

Other hazards which do not result in classification : Harmful dust may be released during cutting, milling or grinding process.

2.4. Unknown acute toxicity (GHS US)

No additional information available

### **SECTION 3: Composition/Information on ingredients**

#### 3.1. Substances

### Not applicable

### 3.2. Mixtures

Name	Product identifier	%	GHS US classification
Substituted imidazole	CAS-No.: 931-36-2	≥60	Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1B, H317
Substituted imidazole	CAS-No.: 23996-25-0	< 30	Acute Tox. 3 (Oral), H301 Skin Irrit. 2, H315 Eye Dam. 1, H318 STOT SE 3, H335
Substituted imidazole	CAS-No.: 822-36-6	5 – 10	Acute Tox. 4 (Oral), H302 Acute Tox. 3 (Dermal), H311 Skin Corr. 1B, H314 Eye Dam. 1, H318 Carc. 2, H351

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Name	Product identifier	%	GHS US classification
Substituted anhydride	CAS-No.: 616-47-7		Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Dermal), H312 Skin Corr. 1B, H314

Comments

: Components not listed are either non-hazardous or are below reportable limits.

\*Chemical name, CAS number and/or exact concentration have been withheld as a trade secret Full text of hazard classes and H-statements : see section 16

### **SECTION 4: First-aid measures**

4.1. Description of first aid measures	
First-aid measures general	: Call a physician immediately.
First-aid measures after inhalation	<ul> <li>Remove person to fresh air and keep comfortable for breathing. Call a poison center/doctor/physician if you feel unwell.</li> </ul>
First-aid measures after skin contact	: Rinse skin with water/shower. Remove/Take off immediately all contaminated clothing. Call a physician immediately.
First-aid measures after eye contact	: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician immediately.
First-aid measures after ingestion	: Rinse mouth. Call a physician immediately. Do not induce vomiting.
4.2. Most important symptoms and effe	ects (acute and delayed)
Symptoms/effects after inhalation	: May cause respiratory irritation.
Symptoms/effects after skin contact	: Burns. May cause an allergic skin reaction.
Symptoms/effects after eye contact	: Serious damage to eyes.
Symptoms/effects after ingestion	: Burns.

4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

SECTION 5: Fire-fighting measures	
5.1. Suitable (and unsuitable) extinguishing	g media
Suitable extinguishing media	: Water spray. Dry powder. Foam. Carbon dioxide.
5.2. Specific hazards arising from the chen	nical
Hazardous decomposition products in case of fire	: Toxic fumes may be released.
5.3. Special protective equipment and prec	autions for fire-fighters
Protection during firefighting	: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures	
6.1. Personal precautions, protect	tive equipment and emergency procedures
6.1.1. For non-emergency personnel	
Emergency procedures	: Ventilate spillage area. Avoid contact with skin and eyes. Do not breathe dust/fume/gas/mist/vapors/spray.

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6.1.2. For emergency responders	
Protective equipment	: Do not attempt to take action without suitable protective equipment. For further information refe to section 8: "Exposure controls/personal protection".
6.2. Environmental precautions	
Avoid release to the environment.	
6.3. Methods and material for co	ontainment and cleaning up
Methods for cleaning up	: Take up liquid spill into absorbent material. Notify authorities if product enters sewers or public waters.
Other information	: Dispose of materials or solid residues at an authorized site.
6.4. Reference to other sections	
For further information refer to section	13.

SECTION 7: Handling and storage	
7.1. Precautions for safe handling	
Precautions for safe handling Hygiene measures	<ul> <li>Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear personal protective equipment. Use only outdoors or in a well-ventilated area. Avoid contact with skin and eyes. Do not breathe dust/fume/gas/mist/vapors/spray.</li> <li>Wash contaminated clothing before reuse. Contaminated work clothing should not be allowed</li> </ul>
7.2. Conditions for safe storage, includir	out of the workplace. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

Storage conditions

: Store locked up. Store in a well-ventilated place. Keep container tightly closed. Keep cool.

### SECTION 8: Exposure controls/personal protection

8.1. Control parameters	
EPO-TEK® 375 PART B	
No additional information available	
Substituted anhydride (616-47-7)	
No additional information available	
Substituted imidazole (822-36-6)	
No additional information available	
Substituted imidazole (931-36-2)	
No additional information available	
Substituted imidazole (23996-25-0)	
No additional information available	
8.2. Appropriate engineering controls	
Appropriate engineering controls Environmental exposure controls	<ul><li>Ensure good ventilation of the work station.</li><li>Avoid release to the environment.</li></ul>

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#### 8.3. Individual protection measures/Personal protective equipment

#### Hand protection:

Wear suitable gloves resistant to chemical penetration. Neoprene or nitrile rubber gloves. Butyl-rubber protective gloves. Choosing the proper glove is a decision that depends not only on the type of material, but also on other quality features, which differ for each manufacturer. Refer to manufacturer's information. Gloves must be replaced after each use and whenever signs of wear or perforation appear

#### Eye protection:

Safety glasses

#### Skin and body protection:

Wear suitable protective clothing

#### Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

#### Personal protective equipment symbol(s):



### **SECTION 9: Physical and chemical properties**

### 9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Color	: Amber
Odor	: Mild odour
Odor threshold	: No data available
рН	: No data available
Melting point	: No data available
Freezing point	: No data available
Boiling point	: No data available
Flash point	: No data available
Relative evaporation rate (butyl acetate=1)	: No data available
Flammability (solid, gas)	: Not applicable.
Vapor pressure	: No data available
Relative vapor density at 20°C	: No data available
Relative density	: No data available
Solubility	: No data available
Partition coefficient n-octanol/water (Log Pow)	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosion limits	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available

### 9.2. Other information

No additional information available

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### **SECTION 10: Stability and reactivity**

### 10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

**10.2. Chemical stability** 

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

**10.4. Conditions to avoid** 

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

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

### **SECTION 11: Toxicological information**

11.1. Information on toxicological effects		
Acute toxicity (dermal)	Toxic if swallowed. Not classified Not classified	
EPO-TEK® 375 PART B		
ATE US (oral)	253.764 mg/kg body weight	
Substituted anhydride (616-47-7)		
LD50 oral rat	≈ 1144 mg/kg body weight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity), Remarks on results: other:	
LD50 dermal rabbit	400 – 640 mg/kg body weight Animal: rabbit, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)	
ATE US (oral)	500 mg/kg body weight	
ATE US (dermal)	400 mg/kg body weight	
Substituted imidazole (822-36-6)		
LD50 oral rat	350 mg/kg Source: IUCLID	
LD50 oral	173 mg/kg	
LD50 dermal rabbit	440 mg/kg Source: IUCLID	
ATE US (oral)	173 mg/kg body weight	
ATE US (dermal)	440 mg/kg body weight	
Substituted imidazole (931-36-2)		
LD50 oral rat	731 mg/kg (Equivalent or similar to OECD 401, Rat, Male / female, Experimental value, Oral)	

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Substituted imidazole (931-36-2)	
LD50 dermal rabbit	> 400 mg/kg (Equivalent or similar to OECD 402, 24 h, Rabbit, Male / female, Experimental value, Dermal)
LC50 Inhalation - Rat	> 0.03 mg/l (Equivalent or similar to OECD 403, 8 h, Rat, Male / female, Experimental value, (maximum achievable concentration), Inhalation (vapours))
ATE US (oral)	731 mg/kg body weight
Substituted imidazole (23996-25-0)	
ATE US (oral)	100 mg/kg body weight
Skin corrosion/irritation :	Causes severe skin burns.
Substituted anhydride (616-47-7)	
рН	11.3 (10 %)
Substituted imidazole (822-36-6)	
рН	10.6 (10 %)
Substituted imidazole (931-36-2)	
рН	10.9 (21 %)
Serious eye damage/irritation :	Causes serious eye damage.
Substituted anhydride (616-47-7)	
рН	11.3 (10 %)
Substituted imidazole (822-36-6)	
рН	10.6 (10 %)
Substituted imidazole (931-36-2)	
рН	10.9 (21 %)
	May cause an allergic skin reaction.
Germ cell mutagenicity :	Not classified
Carcinogenicity : Substituted imidazole (822-36-6)	Suspected of causing cancer.
	2B - Possibly carcinogenic to humans
IARC group Reproductive toxicity :	Not classified
	May cause respiratory irritation.
Substituted imidazole (23996-25-0)	
STOT-single exposure	May cause respiratory irritation.
STOT-repeated exposure :	Not classified
Substituted anhydride (616-47-7)	
NOAEL (oral,rat,90 days)	90 mg/kg body weight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents), Guideline: EPA OPPTS 870.3100 (90-Day Oral Toxicity in Rodents)
Substituted imidazole (931-36-2)	
NOAEL (oral,rat,90 days)	150 mg/kg body weight Animal: rat, Guideline: OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test), Guideline: other:EPA OPPTS 870.3650 (Combined Repeated Dose Toxicity Study with the Reproduction/Developmental Toxicity Screening Test)
Aspiration hazard :	Not classified

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Viscosity, kinematic	: No data available
Substituted imidazole (931-36-2)	
Viscosity, kinematic	1435.897 mm <sup>2</sup> /s
Symptoms/effects after inhalation	: May cause respiratory irritation.
Symptoms/effects after skin contact	: Burns. May cause an allergic skin reaction.
Symptoms/effects after eye contact	: Serious damage to eyes.
Symptoms/effects after ingestion	: Burns.

## **SECTION 12: Ecological information**

12.1. Toxicity		
Ecology - general	: Before neutralisation, the product may represent a danger to aquatic organisms.	
Substituted anhydride (616-47-7)		
LC50 - Fish [1]	100 – 215 mg/l Test organisms (species): Leuciscus idus	
EC50 - Crustacea [1]	267.94 mg/l Test organisms (species): Daphnia magna	
EC50 72h - Algae [1]	180 mg/l (Algae)	
EC50 96h - Algae [1]	12.637 mg/l Source: Ecological Structure Activity Relationships	
Substituted imidazole (822-36-6)		
LC50 - Fish [1]	0.34 mg/l Source: IUCLID	
EC50 - Crustacea [1]	180 mg/l Source: IUCLID	
EC50 72h - Algae [1]	2 mg/l Source: IUCLID	
Substituted imidazole (931-36-2)		
LC50 - Fish [1]	68.1 mg/l (DIN 38412-15, 96 h, Leuciscus idus, Static system, Fresh water, Experimental value)	
EC50 - Crustacea [1]	297.3 mg/l (EU Method C.2, 48 h, Daphnia magna, Static system, Fresh water, Experimental value)	
EC50 72h - Algae [1]	124.8 mg/l (DIN 38412-9, Desmodesmus subspicatus, Static system, Fresh water, Experimental value, Growth rate)	
EC50 72h - Algae [2]	72 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)	
EC50 96h - Algae [1]	6.057 mg/l Source: Ecological Structure Activity Relationships	

### 12.2. Persistence and degradability

Substituted anhydride (616-47-7)	
Not rapidly degradable	
Persistence and degradability	Not readily biodegradable in water.
Substituted imidazole (822-36-6)	
Not rapidly degradable	
Persistence and degradability	Inherently biodegradable.
Biochemical oxygen demand (BOD)	0.000002 g $O_2$ /g substance
Chemical oxygen demand (COD)	0.0015 g O <sub>2</sub> /g substance

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Substituted imidazole (931-36-2)		
Not rapidly degradable		
Persistence and degradability	Readily biodegradable in water.	
Substituted imidazole (23996-25-0)		
Not rapidly degradable		
12.3. Bioaccumulative potential		
Substituted anhydride (616-47-7)		
Partition coefficient n-octanol/water (Log Pow)	-0.06 Source: ChemIDplus	
Substituted imidazole (822-36-6)		
Partition coefficient n-octanol/water (Log Pow)	0.35 (Experimental value)	
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).	
Substituted imidazole (931-36-2)		
Partition coefficient n-octanol/water (Log Pow)	1.13 (Experimental value, OECD 107: Partition Coefficient (n-octanol/water): Shake Flask Method, 25 °C)	
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).	
12.4. Mobility in soil	·	
Substituted anhydride (616-47-7)		

Substituted annydride (616-47-7)		
Mobility in soil	15.75 Source: Quantitative Structure Activity Relation	
Substituted imidazole (822-36-6)		
Mobility in soil	28.23 Source: EPI SUITE	
Ecology - soil	No (test)data on mobility of the substance available.	
Substituted imidazole (931-36-2)		
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	3.71 (log Koc, Calculated value, pH = 7)	
Ecology - soil	Low potential for mobility in soil.	

12.5. Other adverse effects

No additional information available

### SECTION 13: Disposal considerations

13.1. Disposal methods

Waste treatment methods

: Dispose of contents/container in accordance with licensed collector's sorting instructions.

### **SECTION 14: Transport information**

In accordance with DOT / TDG / IMDG / IATA

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DOT	TDG	IMDG	ΙΑΤΑ		
14.1. UN number		I			
2922	UN2922	2922	2922		
14.2. Proper Shipping Name		1			
Corrosive liquids, toxic, n.o.s. (Substituted imidazole)	CORROSIVE LIQUID, TOXIC, N.O.S. (Substituted imidazole)	CORROSIVE LIQUID, TOXIC, N.O.S. (Substituted imidazole)	Corrosive liquid, toxic, n.o.s. (Substituted imidazole)		
14.3. Transport hazard class(es	3)				
8 (6.1)	8 (6.1)	8 (6.1)	8 (6.1)		
CORROSIVE 8					
14.4. Packing group					
II	II	II	III		
14.5. Environmental hazards	I	Ι			
Dangerous for the environment: No	Dangerous for the environment: No	Dangerous for the environment: No Marine pollutant: No	Dangerous for the environment: No		
No supplementary information availab	ble				
DOT       UN-No.(DOT)       : UN2922         DOT Special Provisions (49 CFR 172.102)       : B3 - MC 300, MC 301, MC 302, MC 303, MC 305, and MC 306 and DOT 406 cargo tanks DOT 57 portable tanks are not authorized.         IB2 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Compo (31HZ1). Additional Requirement: Only liquids with a vapor pressure less than or equal to kPa at 50 C (1.1 bar at 122 F), or 130 kPa at 55 C (1.3 bar at 131 F) are authorized.         T7 - 4 178.274(d)(2) Normal					
DOT Packaging Exceptions (49 CFR 1 DOT Packaging Non Bulk (49 CFR 17: DOT Packaging Bulk (49 CFR 173.xxx DOT Quantity Limitations Passenger a CFR 173.27) DOT Quantity Limitations Cargo aircra CFR 175.75) DOT Vessel Stowage Location	73.xxx)       :       154         3.xxx)       :       202         :)       :       243         ircraft/rail (49       :       1 L         ft only (49       :       30 L         :       B - (i) The material n passenger vessel ca passengers, or one passengers	: 202 : 243 : 1 L			
DOT Vessel Stowage Other	section is exceeded.	section is exceeded. 40 - Stow "clear of living quarters"			

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TDG	
UN-No. (TDG)	: UN2922
TDG Special Provisions	: 16 - (1) The technical name of at least one of the most dangerous substances that predominantly
	contributes to the danger or dangers posed by the dangerous goods must be shown, in
	parentheses, on the shipping document following the shipping name in accordance with clause
	3.5(1)(c)(ii)(A). The technical name must also be shown, in parentheses, on a small means of
	containment or on a tag following the shipping name in accordance with subsections 4.11(2) and
	(3).
	(2) Despite subsection (1), the technical name for the following dangerous goods is not required
	to be shown on a shipping document or on a small means of containment when Canadian law for
	domestic transport or an international convention for international transport prohibits the
	disclosure of the technical name:
	(a) UN1544, ALKALOID SALTS, SOLID, N.O.S. or ALKALOIDS, SOLID, N.O.S;
	(b) UN1851, MEDICINE, LIQUID, TOXIC, N.O.S;
	(c) UN3140, ALKALOID SALTS, LIQUID, N.O.S. or ALKALOIDS, LIQUID, N.O.S;
	(d) UN3248, MEDICINE, LIQUID, FLAMMABLE, TOXIC, N.O.S; or
	(e) UN3249, MEDICINE, SOLID, TOXIC, N.O.S.
	(3) Despite subsection (1), the technical name for the following dangerous goods is not required
	to be shown on a small means of containment:
	(a) UN2814, INFECTIOUS SUBSTANCE, AFFECTING HUMANS; or
	(b) UN2900, INFECTIOUS SUBSTANCE, AFFECTING ANIMALS.
Explosive Limit and Limited Quantity Index	: 1L
Excepted quantities (TDG)	: E2
Passenger Carrying Road Vehicle or Passenger	: 1L
Carrying Railway Vehicle Index	
Emergency Response Guide (ERG) Number	: 154
IMDG	
Special provision (IMDG)	: 274
Limited quantities (IMDG)	: 1L
Excepted quantities (IMDG)	: E2
Packing instructions (IMDG)	: P001
IBC packing instructions (IMDG)	: IBC02
Tank instructions (IMDG)	: T7
Tank special provisions (IMDG)	: TP2
EmS-No. (Fire)	: F-A - FIRE SCHEDULE Alfa - GENERAL FIRE SCHEDULE
EmS-No. (Spillage)	: S-B - SPILLAGE SCHEDULE Bravo - CORROSIVE SUBSTANCES
Stowage category (IMDG)	: B
Stowage and handling (IMDG)	: SW2
Properties and observations (IMDG)	: Causes burns to skin, eyes and mucous membranes. Toxic if swallowed, by skin contact or by
	inhalation.
1474	
IATA PCA Excepted guantities (IATA)	: E1
PCA Limited quantities (IATA)	: Y841
PCA limited quantity max net quantity (IATA)	: 1L
PCA packing instructions (IATA)	: 852
PCA max net quantity (IATA)	: 5L
CAO packing instructions (IATA)	: 856
CAO max net quantity (IATA)	: 60L
Special provision (IATA)	: A3, A4, A803
ERG code (IATA)	: 8P

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

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### **SECTION 15: Regulatory information**

#### 15.1. US Federal regulations

All components of this product are present and listed as Active on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

**15.2. International regulations** 

CANADA

Substituted anhydride (616-47-7)

Listed on the Canadian DSL (Domestic Substances List)

Substituted imidazole (822-36-6)

Listed on the Canadian NDSL (Non-Domestic Substances List)

Substituted imidazole (931-36-2)

Listed on the Canadian DSL (Domestic Substances List)

Substituted imidazole (23996-25-0)

Listed on the Canadian DSL (Domestic Substances List)

#### **EU-Regulations**

No additional information available

**National regulations** 

Substituted anhydride (616-47-7)

Listed on INSQ (Mexican National Inventory of Chemical Substances)

Substituted imidazole (822-36-6)

Listed on IARC (International Agency for Research on Cancer)

15.3. US State regulations

This product can expose you to 4-Methylimidazole, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

### **SECTION 16: Other information**

Full text of H-phrases	
H301	Toxic if swallowed
H302	Harmful if swallowed
H311	Toxic in contact with skin
H312	Harmful in contact with skin
H314	Causes severe skin burns and eye damage
H315	Causes skin irritation

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Full text of H-phrases		
H317	May cause an allergic skin reaction	
H318	Causes serious eye damage	
H335	May cause respiratory irritation	
H351	Suspected of causing cancer	

Safety Data Sheet (SDS), USA

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.