

## Material Name: Damage Detection Agent

SDS ID: 3100-016

# Section 1 - PRODUCT AND COMPANY IDENTIFICATION

Material Name Damage Detection Agent Synonyms CB Damage Detection Agent Product Use Aerosol spray to detect damaged micro-capsules on carbonless copy paper. Restrictions on Use None known.

#### Details of the supplier of the safety data sheet

Pixelle Specialty Solutions LLC 232 East 8<sup>th</sup> Street Chillicothe, Ohio 45601

Phone: 740-772-3111 Emergency Phone #: 800-424-9300 CHEMTREC®

#### **General Comments**

NOTE: Emergency telephone numbers are to be used only in the event of chemical emergencies involving a spill, leak, fire, exposure, or accident involving chemicals. All non-emergency questions should be directed to customer service.

# **Section 2 - HAZARDS IDENTIFICATION**

Classification in accordance with paragraph (d) of 29 CFR 1910.1200. Flammable Aerosols - Category 1 Aspiration Hazard - Category 1 Acute Toxicity - Inhalation - Vapor - Category 4 Skin Corrosion/Irritation - Category 2 Serious Eye Damage/Eye Irritation - Category 2 Reproductive Toxicity - Category 2 Specific Target Organ Toxicity - Single Exposure - Category 1 ( Central Nervous System ) Specific Target Organ Toxicity - Single Exposure - Category 3 ( central nervous system , respiratory tract ) Specific Target Organ Toxicity - Repeated Exposure - Category 2 Hazardous to the Aquatic Environment - Acute - Category 2 Hazardous to the Aquatic Environment - Chronic - Category 2 GHS Label Elements Symbol(s)





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**Signal Word** Danger Hazard Statement(s) Extremely flammable aerosol. May be fatal if swallowed and enters airways. Harmful if inhaled. Causes skin irritation. Causes serious eye irritation. Suspected of damaging fertility or the unborn child. Causes damage to organs. May cause respiratory irritation. May cause drowsiness or dizziness. May cause damage to organs through prolonged or repeated exposure. Toxic to aquatic life with long lasting effects. **Precautionary Statement(s)** Prevention Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from heat/sparks/open flame/hot surfaces - No smoking. Pressurized container: Do not pierce or burn, even after use. Do not spray on an open flame or other ignition sources. Use only outdoors or in a well-ventilated area. Wear protective gloves/protective clothing/eye protection/face protection. Do not breathe dust/fume/gas/mist/vapours/spray. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Avoid release to the environment. Response If exposed: Call a POISON CENTER or doctor/physician. IF INHALED: Remove person to fresh air and keep comfortable for breathing. 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/attention. IF ON SKIN: Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash before reuse. IF SWALLOWED: Immediately call a POISON CENTER/doctor. Do NOT induce vomiting. Specific treatment (see label). Collect spillage. Storage Store in a well-ventilated place. Keep container tightly closed. Store locked up. Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F. Disposal Dispose of contents/container in accordance with local/regional/national/international regulations.



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#### Statement(s) of Unknown Acute Toxicity

0% of the mixture consists of ingredient(s) of unknown acute toxicity.

# Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS

CAS	Component Name	Percent
108-88-3	Toluene	65-75
74-98-6	Propane	10-20
106-97-8	Butane	10-20
Trade Secret	Phenolic Resin	1-5

The chemical identity and/or percentage of composition is being withheld as a trade secret.

# Section 4 - FIRST AID MEASURES

#### Inhalation

IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor if you feel unwell.

#### Skin

IF ON SKIN: Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash before reuse.

#### Eyes

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/attention.

#### Ingestion

IF SWALLOWED: Immediately call a POISON CENTER/doctor. Do NOT induce vomiting.

#### Most Important Symptoms/Effects

#### Acute

May be fatal if swallowed and enters airways. Harmful if inhaled. Causes skin irritation, eye irritation, central nervous system damage. May cause respiratory tract irritation and central nervous system depression.

### Delayed

Suspected of damaging fertility or the unborn child. Causes damage to organs through prolonged or repeated exposure. May cause damage to organs through prolonged or repeated exposure.

#### Antidote

Treat symptomatically and supportively.

**Section 5 - FIRE FIGHTING MEASURES** 

#### Extinguishing Media Suitable Extinguishing Media

Use alcohol foam, carbon dioxide or dry chemical.



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#### Unsuitable Extinguishing Media

Water may be an ineffective extinguishing medium but should be used to cool fire-exposed containers.

#### Special Hazards Arising from the Chemical

Extremely flammable aerosol. Do not spray on naked flames or any incandescent material. Keep away from heat/sparks/open flame/hot surfaces - No smoking. Avoid contact with temperatures above 120 C. Contents of can are extremely flammable and under pressure. Avoid direct sunlight. Pressurized container: may burst if heated. Vapors are heavier than air and can collect in low areas; vapors can travel to an ignition source and flash back.

#### **Hazardous Combustion Products**

Hazardous decomposition products include black smoke and toxic fumes of carbon dioxide and carbon monoxide. Advice for firefighters

Wear full protective fire fighting gear including self contained breathing apparatus (SCBA) for protection against possible exposure.

#### **Fire Fighting Measures**

Keep unnecessary people away, isolate hazard area and deny entry. Move container from fire area if it can be done without risk. Cool containers with water spray until well after the fire is out. Avoid inhalation of material or combustion by-products.

# Section 6 - ACCIDENTAL RELEASE MEASURES

#### **Personal Precautions, Protective Equipment and Emergency Procedures**

Wear personal protective clothing and equipment, see Section 8.

# Methods and Materials for Containment and Cleaning Up

Keep unnecessary personnel away. Stop leak if possible without personal risk. Remove all sources of ignition. Do not touch or walk through spilled material. Use water spray to reduce vapors or divert vapor cloud drift. Ventilate the area. Absorb with sand or other non-combustible material. Collect spilled material in appropriate container for disposal. Dike for later disposal.

#### **Environmental Precautions**

Avoid release to the environment.

# Section 7 - HANDLING AND STORAGE

#### **Precautions for Safe Handling**

Keep away from heat, sparks, open flame, and hot surfaces - No smoking. Do not spray on an open flame or other ignition source. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe vapor or mist. Use only outdoors or in a well-ventilated area. Avoid contact with skin and eyes. Avoid contact during pregnancy/while nursing. Do not eat, drink, or smoke when using this product. Wear protective gloves/clothing and eye/face protection. Wash thoroughly after handling. Avoid release to the environment.

#### Conditions for Safe Storage, Including any Incompatibilities

Store in a well-ventilated place. Keep container tightly closed.

Store locked up.

Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.

Store away from heat and direct sunlight. Do not handle or store near an open flame, heat or other sources of ignition.

#### **Incompatible Materials**

Avoid strong oxidizing materials, halogens, combustible materials, acids, metal salts.



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# Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

Component Ex	posure Limits
Toluene	108-88-3
ACGIH:	20 ppm TWA
NIOSH:	100 ppm TWA ; 375 mg/m3 TWA
	150 ppm STEL ; 560 mg/m3 STEL
	500 ppm IDLH
Europe:	50 ppm TWA ; 192 mg/m3 TWA
	Possibility of significant uptake through the skin
	100 ppm STEL ; 384 mg/m3 STEL
OSHA (US):	200 ppm TWA
	300 ppm Ceiling
Mexico:	50 ppm TWA VLE-PPT ; 188 mg/m3 TWA VLE-PPT
	Skin - potential for cutaneous absorption
Propane	74-98-6
ACGIH:	(See Appendix F: Minimal Oxygen Content )
NIOSH:	1000 ppm TWA ; 1800 mg/m3 TWA
	2100 ppm IDLH (10% LEL )
OSHA (US):	1000 ppm TWA ; 1800 mg/m3 TWA
Butane	106-97-8
ACGIH:	1000 ppm STEL
NIOSH:	800 ppm TWA ; 1900 mg/m3 TWA
Mexico:	800 ppm TWA VLE-PPT ; 1900 mg/m3 TWA VLE-PPT
	angl Exposure (08/24/EC) - Binding Biological Limit Valu

EU - Occupational Exposure (98/24/EC) - Binding Biological Limit Values and Health Surveillance Measures There are no biological limit values for any of this product's components. ACGIH - Threshold Limit Values - Biological Exposure Indices (BEI)

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Toluene (108-88-3)

0.02 mg/L Medium: blood Time: prior to last shift of workweek Parameter: Toluene ; 0.03 mg/L Medium: urine Time: end of shift Parameter: Toluene ; 0.3 mg/g creatinine Medium: urine Time: end of shift Parameter: o-Cresol with hydrolysis (background )

### Individual Protection Measures, such as Personal Protective Equipment

#### Eye/face protection

Wear safety glasses with side shields or goggles.

#### **Skin Protection**

Wear protective clothing to minimize skin contact.

#### **Respiratory Protection**

If airborne contaminant levels may exceed recommended exposure limits, NIOSH approved respiratory protection appropriate for employee exposure levels is recommended.

#### **Glove Recommendations**

Where skin contact is likely, wear chemical-resistant protective gloves; use of polyvinyl alcohol (PVA) or equivalent gloves is not recommended. Customer is responsible for determining suitability of gloves for the work environment and other solvents or chemicals to which the employee may normally be exposed. Replace gloves at first signs of deterioration (hardening, cracking, softening or swelling).

Appearance	Clear, colorless liquid	Physical State	liquid	
Odor	solvent odor	Color	colorless	
Odor Threshold	Not available	рН	Not available	
Melting Point	Not available	Boiling Point	<-17 °C (<0 °F )	
<b>Boiling Point Range</b>	Not available	Freezing point	Not available	
Evaporation Rate	Not available	Flammability (solid, gas)	Not available	
Autoignition Temperature	Not available	Flash Point	<-17 °C Tag Closed Cup (<0 °F )	
Lower Explosive Limit	1 (Propellant )	Decomposition temperature	Not available	
Upper Explosive Limit	9.5 (Propellant)	Vapor Pressure	760 mmHg	
Vapor Density (air=1)	>1	Specific Gravity (water=1)	0.74	
Water Solubility	Not available	Partition coefficient: n- octanol/water	Not available	
Viscosity	Not available	Solubility (Other)	Not available	

# Section 9 - PHYSICAL AND CHEMICAL PROPERTIES



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Density	Not available	Physical Form	aerosol
VOC	99 wt%	Volatility by Volume	100 % @ 70 °F
Volatility by Weight	99.4%	Molecular Weight	Not available
OSHA Flammability Class	Flammable		

# Section 10 - STABILITY AND REACTIVITY

#### Reactivity

No reactivity hazard is expected.

#### **Chemical Stability**

Stable at normal temperatures and pressure.

#### **Possibility of Hazardous Reactions**

Hazardous polymerization has not been reported to occur under normal temperatures and pressures.

#### **Conditions to Avoid**

Avoid exposure to very high temperatures, heat, shock, pressure or contact with incompatible materials. Containers may rupture or explode if exposed to heat.

#### **Incompatible Materials**

Avoid strong oxidizing materials, halogens, combustible materials, acids, metal salts.

#### Hazardous decomposition products

Hazardous decomposition products include black smoke and toxic fumes of carbon dioxide and carbon monoxide.

# Section 11 - TOXICOLOGICAL INFORMATION

# Information on Likely Routes of Exposure

#### Inhalation

Harmful if inhaled, irritation, nausea, headache, drowsiness, dizziness, Disorientation, sleep disturbances, loss of coordination, dilated pupils, kidney damage, liver damage, nosebleed, vomiting, stomach pain, loss of appetite, chest pain, irregular heartbeat, difficulty speaking, hallucinations, mood swings, pain in extremities, tremors, visual disturbances, menstrual disorders, internal bleeding, blood disorders, nerve damage, brain damage, coma

#### **Skin Contact**

Causes skin irritation.

#### **Eye Contact**

Irritation, blurred vision

#### Ingestion

May be fatal if swallowed and enters airways, irritation, nausea, stomach pain, headache, drowsiness, dizziness, Disorientation, sleep disturbances, loss of coordination, dilated pupils, kidney damage, liver damage, Reproductive Effects

#### Acute and Chronic Toxicity

Toluene may be slowly absorbed through the skin. Exposure of toluene at 100-200 ppm levels may cause a change in motor activity, psychophysiological tests, hallucinations, blood changes, antipsychotic behavior and central nervous system effects. Prolonged or repeated exposure to toluene liquid may cause skin dryness or dermatitis. Overexposure to toluene may also cause loss of vision and hearing, respiratory problems, enlarged liver, cardiac



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sensitization, and seizures. Accumulation of vapors of butane and propane may cause asphyxiation without warning, producing dizziness and sleepiness. In an eye irritation study with rabbits, phenolic resin was not found to be a primary eye irritant. In a skin irritation study with rabbits, phenolic resin was not found to be a primary skin irritation index of 0.04). Phenolic resin did not cause dermal sensitization in guinea pigs in a closed patch test.

#### **Component Analysis - LD50/LC50**

The components of this material have been reviewed in various sources and the following selected endpoints are published:

#### Toluene (108-88-3)

Oral LD50 Rat 2600 mg/kg Dermal LD50 Rabbit 12000 mg/kg Inhalation LC50 Rat 12.5 mg/L 4 h

#### Propane (74-98-6)

Inhalation LC50 Rat 658 mg/L 4 h

### Butane (106-97-8)

Inhalation LC50 Rat 658 g/m3 4 h

### **Product Toxicity Data**

# Acute Toxicity Estimate

Dermal	> 2000 mg/kg
Inhalation - Vapor	16.6666 mg/L
Oral	> 2000 mg/kg

## Immediate Effects

May be fatal if swallowed and enters airways. Harmful if inhaled. Causes skin and eye irritation. May cause respiratory irritation. May cause drowsiness and dizziness

#### **Delayed Effects**

Suspected of damaging fertility or the unborn child. Causes damage to organs through prolonged or repeated exposure.

#### **Irritation/Corrosivity Data**

Causes skin and eye irritation. May cause respiratory tract irritation

**Respiratory Sensitization** 

No data available.

#### **Dermal Sensitization**

No data available.

#### **Component Carcinogenicity**

Toluene	108-88-3
ACGIH:	A4 - Not Classifiable as a Human Carcinogen
IARC:	Monograph 71 [1999] ; Monograph 47 [1989] (Group 3 (not classifiable))



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Germ Cell Mutagenicity

No information available for the product. Toluene was not mutagenic in the Ames Salmonella/microsome assay. The results of chromosomal assays have been mixed. In vitro sister chromatid exchange and chromosome aberrations using human lymphocytes have been both positive and negative **Tumorigenic Data** No data available **Reproductive Toxicity** Available data characterizes components of this product as reproductive hazards. **Specific Target Organ Toxicity - Single Exposure** Central nervous system, respiratory system **Specific Target Organ Toxicity - Repeated Exposure** Kidneys, central nervous system **Aspiration hazard** May be fatal if swallowed and enters airways. **Medical Conditions Aggravated by Exposure** No data available for the mixture.

# Section 12 - ECOLOGICAL INFORMATION

#### Ecotoxicity

Toxic to aquatic life with long lasting effects. **Component Analysis - Aquatic Toxicity** 

Toluene	108-88-3
Fish:	LC50 96 h Pimephales promelas 15.22 - 19.05 mg/L [flow-through ] (1 day old ); LC50 96 h Pimephales promelas 12.6 mg/L [static ]; LC50 96 h Oncorhynchus mykiss 5.89 - 7.81 mg/L [flow-through ]; LC50 96 h Oncorhynchus mykiss 14.1 - 17.16 mg/L [static ]; LC50 96 h Oncorhynchus mykiss 5.8 mg/L [semi-static ]; LC50 96 h Lepomis macrochirus 11 - 15 mg/L [static ]; LC50 96 h Oryzias latipes 54 mg/L [static ]; LC50 96 h Poecilia reticulata 28.2 mg/L [semi-static ]; LC50 96 h Poecilia reticulata 50.87 - 70.34 mg/L [static ]
Algae:	EC50 96 h Pseudokirchneriella subcapitata >433 mg/L IUCLID ; EC50 72 h Pseudokirchneriella subcapitata 12.5 mg/L [static ] EPA
Invertebrate:	EC50 48 h Daphnia magna 5.46 - 9.83 mg/L [Static ] EPA ; EC50 48 h Daphnia magna 11.5 mg/L IUCLID

#### Persistence and Degradability

No information available for the product.

#### **Bioaccumulative Potential**

No information available for the product.

#### Mobility

No information available for the product.

#### **Other Toxicity**

No data available for the mixture.



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# Section 13 - DISPOSAL CONSIDERATIONS

#### **Disposal Methods**

DO NOT puncture or incinerate. Wastes must be tested using methods described in 40 CFR 261 to determine if it meets applicable requirements of hazardous wastes.

#### **Component Waste Numbers**

The U.S. EPA has not published waste numbers for this product's components

Section 14 - TRANSPORT INFORMATION

US DOT Information: Shipping Name: AEROSOLS, FLAMMABLE Hazard Class: 2.1 UN/NA #: UN1950 Required Label(s): 2.1 Additional information: Marine pollutant

IATA Information: Shipping Name: AEROSOLS, FLAMMABLE Hazard Class: 2.1 UN#: UN1950 Required Label(s): 2.1 Additional information: Marine pollutant

IMDG Information: Shipping Name: AEROSOLS Hazard Class: 2 UN#: UN1950 Required Label(s): 2 Additional information: Marine pollutant

TDG Information: Shipping Name: AEROSOLS, FLAMMABLE Hazard Class: 2.1 UN#: UN1950 Required Label(s): 2.1 Additional information: Marine pollutant

**Section 15 - REGULATORY INFORMATION** 

#### **U.S. Federal Regulations**

This material contains one or more of the following chemicals required to be identified under SARA Section 302 (40 CFR 355 Appendix A), SARA Section 313 (40 CFR 372.65), CERCLA (40 CFR 302.4), TSCA 12(b), and/or require an OSHA process safety plan.



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Toluene	108-88-3
SARA 313:	1 % de minimis concentration
CERCLA:	1000 lb final RQ ; 454 kg final RQ

# SARA Section 311/312 (40 CFR 370 Subparts B and C) 2016 reporting categories

Acute Health: Yes Chronic Health: Yes Fire: Yes Pressure: Yes Reactivity: No

SARA Section 311/312 (40 CFR 370 Subparts B and C) 2017 reporting categories

Flammable; Acute toxicity; Reproductive Toxicity; Skin Corrosion/Irritation; Serious Eye Damage/Eye Irritation; Specific Target Organ Toxicity; Aspiration Hazard

# **U.S. State Regulations**

The following components appear on one or more of the following state hazardous substances lists:

Component	CAS	CA	MA	MN	NJ	PA	
Toluene	108-88-3	Yes	Yes	Yes	Yes	Yes	
Propane	74-98-6	No	Yes	Yes	Yes	Yes	
Butane	106-97-8	Yes	Yes	Yes	Yes	Yes	

# The following statement(s) are provided under the California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65):

WARNING! This product contains a chemical known to the state of California to cause reproductive/developmental effects

Toluene	108-88-3
Repro/Dev. Tox	developmental toxicity, 1/1/1991

#### **Canada Regulations**

#### Canadian WHMIS Ingredient Disclosure List (IDL)

Components of this material have been checked against the Canadian WHMIS Ingredients Disclosure List. The List is composed of chemicals which must be identified on MSDSs if they are included in products which meet WHMIS criteria specified in the Controlled Products Regulations and are present above the threshold limits listed on the IDL

Toluene	108-88-3
	1 %
Destance	10(0=0
Butane	106-97-8

#### **WHMIS Classification**

Class B: Flammable and Combustible Material, Division 5: Flammable Aerosols, Class D: Poisonous and Infectious Material, Division 2: Materials Causing Other Toxic Effects, Subdivision A: Very Toxic Materials



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### **Component Analysis - Inventory**

Toluene (108-88-3)

US	CA	EU	AU	РН	JP - ENCS	JP - ISHL	KECI -		KR - REACH CCA	CN	NZ	MX	TW
Yes	DSL	EIN	Yes	Yes	Yes	No	Yes	No	No	Yes	Yes	Yes	Yes

# Propane (74-98-6)

US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR KECI - Annex 1		KR - REACH CCA	CN	NZ	MX	TW
Yes	DSL	EIN	Yes	Yes	Yes	No	Yes	No	No	Yes	Yes	Yes	Yes

# Butane (106-97-8)

US	CA	EU	AU	РН	JP - ENCS	JP - ISHL	KECI -		KR - REACH CCA	CN	NZ	MX	TW
Yes	DSL	EIN	Yes	Yes	Yes	No	Yes	No	No	Yes	Yes	Yes	Yes

#### Phenolic Resin (Trade Secret)

US	CA	EU	AU	РН	JP - ENCS	JP - ISHL	KR KECI - Annex 1	KR KECI - Annex 2	KR - REACH CCA	CN	NZ	MX	TW
No	No	No	No	No	No	No	No	No	No	No	No	No	No

# **Section 16 - OTHER INFORMATION**

#### **HMIS Rating**

Health: 2\* Fire: 4 Reactivity: 0 Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe \* = Chronic hazard **NFPA Ratings** Health: 2 Fire: 4 Reactivity: 0 Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

#### **Summary of Changes**

Updated: 11/01/2018



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#### Key / Legend

ACGIH - American Conference of Governmental Industrial Hygienists; ADR - European Road Transport; AU -Australia; BOD - Biochemical Oxygen Demand; C - Celsius; CA - Canada; CA/MA/MN/NJ/PA -California/Massachusetts/Minnesota/New Jersey/Pennsylvania\*; CAS - Chemical Abstracts Service; CFR - Code of Federal Regulations (US); CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CLP - Classification, Labelling, and Packaging; CN - China; CPR - Controlled Products Regulations; DFG -Deutsche Forschungsgemeinschaft; DOT - Department of Transportation; DSD - Dangerous Substance Directive; DSL - Domestic Substances List; EC - European Commission; EEC - European Economic Community; EIN -European Inventory of (Existing Commercial Chemical Substances); EINECS - European Inventory of Existing Commercial Chemical Substances; ENCS - Japan Existing and New Chemical Substance Inventory; EPA -Environmental Protection Agency; EU - European Union; F - Fahrenheit; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; ICAO - International Civil Aviation Organization; IDL -Ingredient Disclosure List; IDLH - Immediately Dangerous to Life and Health; IMDG - International Maritime Dangerous Goods; ISHL - Japan Industrial Safety and Health Law; IUCLID - International Uniform Chemical Information Database; JP - Japan; Kow - Octanol/water partition coefficient; KR KECI Annex 1 - Korea Existing Chemicals Inventory (KECI) / Korea Existing Chemicals List (KECL); KR KECI Annex 2 - Korea Existing Chemicals Inventory (KECI) / Korea Existing Chemicals List (KECL), KR - Korea; LD50/LC50 - Lethal Dose/ Lethal Concentration; LEL - Lower Explosive Limit; LLV - Level Limit Value; LOLI - List Of LIsts<sup>TM</sup> -ChemADVISOR's Regulatory Database; MAK - Maximum Concentration Value in the Workplace; MEL -Maximum Exposure Limits; MX - Mexico; NDSL - Non-Domestic Substance List (Canada); NFPA - National Fire Protection Agency; NIOSH - National Institute for Occupational Safety and Health; NJTSR - New Jersey Trade Secret Registry; NTP - National Toxicology Program; NZ - New Zealand; OSHA - Occupational Safety and Health Administration; PEL- Permissible Exposure Limit; PH - Philippines; RCRA - Resource Conservation and Recovery Act; REACH- Registration, Evaluation, Authorisation, and restriction of Chemicals; RID - European Rail Transport; SARA - Superfund Amendments and Reauthorization Act; STEL - Short-term Exposure Limit; TCCA - Korea Toxic Chemicals Control Act; TDG - Transportation of Dangerous Goods; TLV - Threshold Limit Value; TSCA -Toxic Substances Control Act; TW - Taiwan; TWA - Time Weighted Average; UEL - Upper Explosive Limit; UN/NA - United Nations /North American; US - United States; VLE - Exposure Limit Value (Mexico); WHMIS -Workplace Hazardous Materials Information System (Canada).

# **Other Information**

#### Disclaimer:

Supplier gives no warranty whatsoever, including the warranties of merchantability or of fitness for a particular purpose. Any product purchased is sold on the assumption the purchaser shall determine the quality and suitability of the product. Supplier expressly disclaims any and all liability for incidental, consequential or any other damages arising out of the use or misuse of this product. No information provided shall be deemed to be a recommendation to use any product in conflict with any existing patent rights.

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