

## Safety Data Sheet

Date Issued: 10/14/14  
Document Number: SDSAH26LR  
Date Revised:  
Revision Number: 0

### 1. PRODUCT IDENTIFICATION

**Trade Name (as labeled):** DENTSPLY AH 26 Liquid Resin  
**Chemical Name/Classification:** BISPHENOL A/ EPICHLOROHYDRIN RESIN  
**Product Identifier (Part/Item Number):** 667002  
**U.N. Number:** 3082  
**U.N. Dangerous Goods Classification:** 9  
**Recommended Use:** Root canal filling material  
**Restrictions on Use:** For use by Dental Professionals only  
**Distributed by:** DENTSPLY Maillefer  
**Distributors Address:** 608 Rolling Hills Dr., Johnson City, TN 37604  
**Distributor Telephone Number:** 1-800-992-7767 (Product Information)  
**Emergency Contact Telephone Number:** Chemtrec (800) -262-8200  
**Email address:** [Chemtrec@chemtrec.com](mailto:Chemtrec@chemtrec.com)

### 2. HAZARD(s) IDENTIFICATION

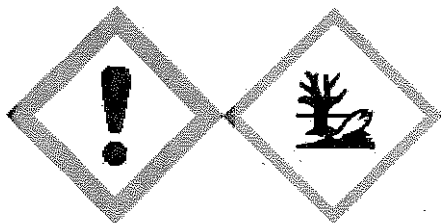
#### Hazard/Danger Classification:

Health	Environmental	Physical
R36/38, R43, S23, S25, S26, S37, S39, S46	R51/53, S29, S35, S40, S56, S57, S61	NA

#### Associated Hazards:

Hazard Statements	Precautionary Statements
H315, H320, H411	P260, P273, P332+313

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EU Classification: Xi, N

EU Risk (R) and Safety (S) Phrases: R36/38, R43, R51/53; S23, S25, S26, S37, S39, S46, S29, S35, S40, S56, S57, S61

Refer to Section 16 for the full text of the EU Classifications and R Phrases.

## 3. COMPOSITION AND INFORMATION ON INGREDIENTS

Hazardous Components	C.A.S. # EC#	IUPAC Name	Substance Classification	WT %
BISPHENOL A/ EPICHLOROHYDRIN RESIN	25068-38-6 500-033-5	bisphenol A/ epichlorohydrin resin	Xi; R36/38, R4- N; R51-53	50-100%

Refer to Section 16 for the full text of the GHS and H phrases and EU Classifications and R Phrases.

## 4. FIRST-AID MEASURES




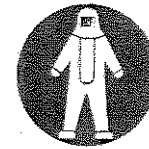
Routes of Exposure	First Aid Instructions
Eye	Wash out immediately with fresh running water. Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids. Seek medical attention without delay; if pain persists or recurs seek medical attention. Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.
Skin	Immediately remove all contaminated clothing, including footwear. Flush skin and hair with running water (and soap if available). Seek medical attention in event of irritation.
Inhalation	If dust is inhaled, remove from contaminated area. Encourage patient to blow nose to ensure clear breathing passages. Ask patient to rinse mouth with water but to not drink water. Seek immediate medical attention.
Ingestion	Immediately give a glass of water. First aid is not generally required. If in doubt, contact a Poisons Information Centre or a doctor.
Most important symptoms of exposure	Not Specified
Other	NA
Note to Physicians (Treatment, Testing, and Monitoring) Treat symptomatically	

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## 5. FIRE-FIGHTING MEASURES

<b>Suitable Extinguishing Media:</b>	Foam, Dry chemical powder, BCF (where regulations permit), Carbon dioxide.
<b>Fire Fighting Procedures:</b>	Alert Fire Brigade and tell them location and nature of hazard. Wear full body protective clothing with breathing apparatus. Prevent, by any means available, spillage from entering drains or water course. Use water delivered as a fine spray to control fire and cool adjacent area
<b>Specific Hazards Arising from the Chemical:</b>	Combustible. Slight fire hazard when exposed to heat or flame. Heating may cause expansion or decomposition leading to violent rupture of containers. On combustion, may emit toxic fumes of carbon monoxide (CO).
<b>Precautions for Fire Fighters:</b>	Avoid contamination with oxidizing agents i.e. nitrates, oxidizing acids, chlorine bleaches, pool chlorine etc. as ignition may result

### Recommended Protective Equipment for Fire Fighters:

EYES/FACE	SKIN	RESPIRATORY	THERMAL
			





## 6. ACCIDENTAL RELEASE MEASURES

**Personal Precautions, PPE and Emergency Procedures:** Not Specified

**Environmental Precautions:** Clean up all spills immediately. Avoid breathing vapors and contact with skin and eyes. Control personal contact with the substance, by using protective equipment.

**Methods and Materials for Containment and Clean-up:** Moderate hazard. Clear area of personnel and move upwind. Alert Fire Brigade and tell them location and nature of hazard.

### Recommended Personal Protective Equipment for Containment and Clean-up:

EYES/FACE	SKIN	RESPIRATORY	THERMAL
			

## 7. HANDLING AND STORAGE

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**Precautions for Safe Handling:** Avoid all personal contact, including inhalation; Wear protective clothing when risk of exposure occurs; Use in a well-ventilated area; Prevent concentration in hollows and sumps.

**Conditions for Safe Storage:** Store in original containers; Keep containers securely sealed; Store in a cool, dry, well-ventilated area; Store away from incompatible materials and foodstuff containers. Metal can or drum  
Packaging as recommended by manufacturer. Check all containers are clearly labelled and free from leaks.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Occupational Exposure Limits:** Not Available

**Biological Exposure Limits:** Not Specified

### **Appropriate Engineering Controls:**

Engineering controls are used to remove a hazard or place a barrier between the worker and the hazard. Well-designed engineering controls can be highly effective in protecting workers and will typically be independent of worker interactions to provide this high level of protection. The basic types of engineering controls are: Process controls which involve changing the way a job activity or process is done to reduce the risk. Enclosure and/or isolation of emission source which keeps a selected hazard "physically" away from the worker and ventilation that strategically "adds" and "removes" air in the work environment.

### **Individual Protection Measures (PPE)**

**Specific Eye/face Protection:** Safety glasses with side shields. Chemical goggles. Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. A written policy document, describing the wearing of lenses or restrictions on use, should be created for each workplace or task.




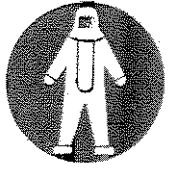
**Specific Skin Protection:** When handling liquid-grade epoxy resins wear chemically protective gloves (e.g. nitrile or nitrile-butadiene rubber), boots and aprons. DO NOT use cotton or leather (which absorb and concentrate the resin), polyvinyl chloride, rubber or polyethylene gloves (which absorb the resin). DO NOT use barrier creams containing emulsified fats and oils as these may absorb the resin; silicone-based barrier creams should be reviewed prior to use.

NOTE: The material may produce skin sensitization in predisposed individuals.

**Specific Respiratory Protection:** Not Specified

**Specific Thermal Hazards:** Not Available

### **Recommended Personal Protective Equipment**

EYES/FACE	SKIN	RESPIRATORY	THERMAL
			

**Environmental Exposure Controls:** Not Specified

**General Hygiene Considerations and Work Practices:** Not Specified

**Protective Measures During Repair and Maintenance of Contaminated Equipment:** Not Specified

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance:</b>	Light yellow liquid with a characteristic odor; does not mix with water.	<b>Explosive limits:</b>	Not Available
<b>Odor:</b>	Not Available	<b>Vapor pressure:</b>	Not Available
<b>Odor threshold:</b>	Not Available	<b>Vapor density:</b>	Not Available
<b>pH:</b>	Not Applicable	<b>Relative density:</b>	1.15-1.20
<b>Melting/freezing point:</b>	Not Available	<b>Solubility:</b>	Immiscible
<b>Initial boiling point and range:</b>	200 °C	<b>Partition coefficient: n-octanol/water:</b>	Not Available
<b>Flash point:</b>	200 °C	<b>Auto-ignition temperature:</b>	Not Available
<b>Evaporation rate:</b>	Not Available	<b>Decomposition temperature:</b>	>200
<b>Flammability:</b>	Not Applicable	<b>Viscosity:</b>	Not Available
<b>Explosive Properties:</b>	Not Available	<b>Oxidizing Properties:</b>	Not Available

## 10. STABILITY AND REACTIVITY

**Reactivity:** See section 7

**Chemical Stability:** Unstable in the presence of incompatible materials. Product is considered stable.  
Hazardous polymerization will not occur.

**Possibility of Hazardous Reactions:** See section 7

**Conditions to Avoid:** See section 7

**Incompatible materials:** See section 7

**Hazardous Decomposition Products:** See section 5

## 11. TOXICOLOGICAL INFORMATION

**Signs and Symptoms of Overexposure:** See Below

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Emergency Overview: Seek Medical Attention							
Likely Routes of Exposure	Signs and Symptoms	Single, Repeated, or Lifetime Exposure	Severity (Mild, Moderate, Severe)	Acute and Chronic Health Effect(s)	Target Organ(s)	LD50 Testing Data (as applicable)	LC50 Testing Data (as applicable)
Eye:	May cause eye irritation	May cause inflammation characterized by a temporary redness (similar to windburn) of the conjunctiva (conjunctivitis); temporary impairment of vision and/or other transient eye damage/ulceration	Yes	NA	Eye	NA	NA
Skin:	May damage the health of the individual; systemic effects may result following absorption	NA	NA	NA	Skin	NA	NA
Inhalation:	Not normally a hazard due to non-volatile nature of product	NA	NA	NA	Air ways	NA	NA
Ingestion:	NOT classified as "harmful by ingestion"	NA	NA	NA	NA	NA	NA
Other:	NA	NA	NA	NA	NA	NA	NA
<b>Medical Conditions Aggravated by Exposure:</b> Pulmonary sensitization, resulting in hyperactive airway dysfunction and pulmonary allergy may be accompanied by fatigue, malaise and aching. Significant symptoms of exposure may persist for extended periods, even after exposure ceases. Symptoms can be activated by a variety of nonspecific environmental stimuli such as automobile exhaust, perfumes and passive smoking.							
<b>Carcinogenicity:</b> Not Known to be Carcinogenic							

## 12. ECOLOGICAL INFORMATION

<b>Toxicity:</b> Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. DO NOT discharge into sewer or waterways.
<b>Persistence and Degradability:</b> Not Available
<b>Bio-accumulative Potential:</b> Not Available

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**Mobility in Soil:** Not Available

**Other Adverse Effects:** Not Available

**Results of PBT/vPvB Assessment:** Not Available

## 13. DISPOSAL CONSIDERATIONS

**Regulations:** Dispose in accordance with current local, state and federal regulations. Keep spills out of sewers and open bodies of water

**Properties (Physical/Chemical) Affecting Disposal:** None Specified

**Waste Treatment Recommendations:** Consult manufacturer for recycling options and recycle where possible. Consult State Land Waste Management Authority for disposal. Incinerate residue at an approved site. Recycle containers if possible, or dispose of in an authorized landfill.

## 14. TRANSPORT INFORMATION

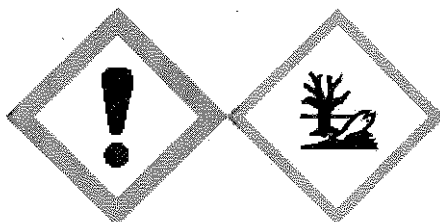
**UN Identification Number:** 3082

**UN Proper Shipping Name:** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains bisphenol A/ epichlorohydrin resin)

**Transport hazard class(es):** 9

**Packing Group:** III

**Special precautions for user:** Environmentally Hazardous Substances meeting the descriptions of UN 3077 or UN 3082 are not subject to this Code when transported by road or rail in; (a) packaging; b) IBCs; or (c) any other receptacle not exceeding 500 kg (L).



## 15. REGULATORY INFORMATION

### U.S. Federal Regulations

**Comprehensive Environmental Response and Liability Act of 1980 (CERCLA):** Not Specified

**Toxic Substances Control Act (TSCA):** Not Specified

**Clean Water Act (CWA):** Not Specified

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Clean Air Act (CAA): Not Specified

Superfund Amendments and Reauthorization Act (SARA) Title III Information: Not Specified

SARA Section 311/312 (40 CFR 370) Hazard Categories: Not Specified

Immediate Hazard:	NA	Pressure Hazard:	NA
Delayed Hazard:	NA	Reactivity Hazard:	NA
Fire Hazard:	NA		

This product contains the following toxic chemical(s) subject to reporting requirements of SARA Section 313 (40 CFR 372):

Components	C.A.S. #	WT %
NA	NA	NA

## State Regulations

**California:** This product contains the following chemicals(s) known to the State of California to cause cancer, birth defects or reproductive harm:

Components	C.A.S. #	WT %
NA	NA	NA

## International Regulations

**Canadian Environmental Protection Act:** NA

**Canadian Workplace Hazardous Materials Information System (WHMIS):** NA

**European Inventory of Existing Chemicals (EINECS):** 500-033-5

## 16. OTHER INFORMATION

Full text of Classification abbreviations used in Section 2 and 3:

R36/38 Irritating to eyes and skin.

R51/53 Toxic to aquatic organisms may cause long-term adverse effects in the aquatic environment.

R43 May cause sensitization by skin contact.

S23 Do not breathe gas/fumes/vapor/spray.

S24 Avoid contact with skin.

S25 Avoid contact with eyes.

S26 In case of contact with eyes, rinse with plenty of water and contact Doctor or Poisons Information Centre.

S29 Do not empty into drains.

S35 This material and its container must be disposed of in a safe way.

S37 Wear suitable gloves.

S39 Wear eye/face protection.

S40 To clean the floor and all objects contaminated by this material, use water and detergent.

S46 If swallowed, seek medical advice immediately and show this container or label.

S56 Dispose of this material and its container at hazardous or special waste collection point.

S57 Use appropriate container to avoid environmental contamination.

S61 Avoid release to the environment. Refer to special instructions/Safety data



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H315 Causes skin irritation  
H320 Causes eye irritation  
H411 Toxic to aquatic life with long lasting effects  
P260 Do not breathe dust/fume/gas/mist/vapors/spray  
P273 Avoid release to the environment  
P332+313 If skin irritation occurs: Get medical advice/attention

Date of SDS Preparation/Revision: 10/14/2014  
Data Sources: Manufacturer

## Safety Data Sheet

Date Issued: 10/16/2014

Document Number: SDSAH26P

Date Revised:

Revision Number: 0

### 1. PRODUCT IDENTIFICATION

**Trade Name (as labeled):** AH 26 Powder  
**Chemical Name/Classification:** AH 26 Powder  
**Product Identifier (Part/Item Number):** 6116-200  
**U.N. Number:** 1328  
**U.N. Dangerous Goods Classification:** 4.1  
**Recommended Use:** Preparation of root canal filling material  
**Restrictions on Use:** For use by Dental Professionals only  
**Distributed by:** DENTSPLY Maillefer  
**Distributors Address:** 608 Rolling Hills Dr., Johnson City, TN 37604  
**Distributor Telephone Number:** 1-800- 924-7393 (Product Information)  
**Emergency Contact Telephone Number:** Chemtrec (800) -262-8200  
**Email address:** [Chemtrec@chemtrec.com](mailto:Chemtrec@chemtrec.com)

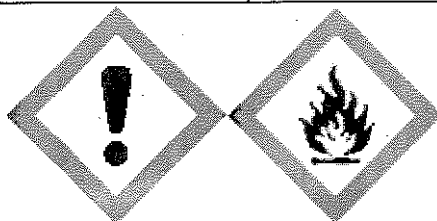
### 2. HAZARD(s) IDENTIFICATION

#### Hazard/Danger Classification:

Health	Environmental	Physical
R43, S2, S24, S37	S60	R11

#### Associated Hazards:

Hazard Statements	Precautionary Statements
Na	na



# DENTSPLY Maillefer

EU Classification: F, Xi

EU Risk (R) and Safety (S) Phrases: R43, S2, S24, S37, S60

Refer to Section 16 for the full text of the EU Classifications and R Phrases.

## 3. COMPOSITION AND INFORMATION ON INGREDIENTS

Hazardous Components	C.A.S. # EC#	IUPAC Name	Substance Classification	WT %
Methenamine	100-97-0 202-905-8	1,3,5,7-Tetraazatricyclo[3.3.1.1 3,7]decane	XI, F, R11, R43	25-50%
TitaniumDioxide	13463-67-7 236-675-5			2.5-10%
Silver	7440-22-4 231-131-3			2.5%

Refer to Section 16 for the full text of the GHS and H phrases and EU Classifications and R Phrases.

## 4. FIRST-AID MEASURES

Routes of Exposure	First Aid Instructions
Eye	After eye contact rinse opened eye for several minutes under running water.
Skin	After skin contact immediately wash with water and soap and rinse thoroughly.
Inhalation	After inhalation supply fresh air and to be sure call for a doctor
Ingestion	After swallowing if symptoms persist consult doctor
Most important symptoms of exposure	na
Other	na
Note to Physicians (Treatment, Testing, and Monitoring) Treat Symptomatically	

## 5. FIRE-FIGHTING MEASURES





Suitable Extinguishing Media:	CO2, sand, extinguishing powder
Fire Fighting Procedures:	Wear self-contained respiratory protective device
Specific Hazards Arising from the Chemical:	Formation of toxic gases is possible during heating or in case of fire. Can form explosive gas-air mixtures.

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**Precautions for Fire Fighters:**

Do not use water

**Recommended Protective Equipment for Fire Fighters:**

EYES/FACE	SKIN	RESPIRATORY	THERMAL
			




## 6. ACCIDENTAL RELEASE MEASURES

**Personal Precautions, PPE and Emergency Procedures:** Avoid formation of dust. Wear protective equipment. Keep unprotected persons away.

**Environmental Precautions:** Do not allow to enter sewers! surface or ground water

**Methods and Materials for Containment and Clean-up:** Do not flush with water or aqueous cleansing agents ensure adequate ventilation. Dispose contaminated material as waste according to item 13

**Recommended Personal Protective Equipment for Containment and Clean-up:**

EYES/FACE	SKIN	RESPIRATORY
		




## 7. HANDLING AND STORAGE

**Precautions for Safe Handling:** Observe normal care for working with chemicals. Prevent formation of dust.  
- Information about fire - and explosion protection: Protect against electrostatic charges.

**Conditions for Safe Storage:** Store only in the original receptacle. Store in cool, dry conditions in well-sealed receptacles.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

# DENTSPLY Maillefer

<b>Occupational Exposure Limits:</b> None Specified		
<b>Biological Exposure Limits:</b> None Specified		
<b>Appropriate Engineering Controls:</b> None Specified		
<b>Individual Protection Measures (PPE)</b> <b>Specific Eye/face Protection:</b> Safely glasses <b>Specific Skin Protection:</b> Impermeable and resistant gloves <b>Specific Respiratory Protection:</b> Not necessary if room is well-ventilated. <b>Specific Thermal Hazards:</b> na		
<b>Recommended Personal Protective Equipment</b>		
EYES/FACE	SKIN	RESPIRATORY
		
<b>Environmental Exposure Controls:</b> None Specified		
<b>General Hygiene Considerations and Work Practices:</b> Immediately remove all soiled and contaminated clothing. Keep away from foodstuffs, beverages and feed. Wash hands before breaks and at the end of work.		
<b>Protective Measures During Repair and Maintenance of Contaminated Equipment:</b> None Specified		

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance:</b>	Yellow Powder	<b>Explosive limits:</b>	Non Explosive
<b>Odor:</b>	Characteristic	<b>Vapor pressure:</b>	Undetermined
<b>Odor threshold:</b>	Undetermined	<b>Vapor density:</b>	Undetermined
<b>pH:</b>	Undetermined	<b>Relative density:</b>	Undetermined
<b>Melting/freezing point:</b>	Undetermined	<b>Solubility:</b>	Slightly soluble in Water
<b>Initial boiling point and range:</b>	Undetermined	<b>Partition coefficient: n-octanol/water:</b>	Undetermined
<b>Flash point:</b>	250°C	<b>Auto-ignition temperature:</b>	Undetermined

# DENTSPLY Maillefer

<b>Evaporation rate:</b>	Undetermined	<b>Decomposition temperature:</b>	Undetermined
<b>Flammability:</b>	Undetermined	<b>Viscosity:</b>	Undetermined
<b>Explosive Properties:</b>	Undetermined	<b>Oxidizing Properties:</b>	Undetermined
<b>10. STABILITY AND REACTIVITY</b>			

<b>Reactivity:</b> na
<b>Chemical Stability:</b> na
<b>Possibility of Hazardous Reactions:</b> No dangerous reactions known
<b>Conditions to Avoid:</b> na
<b>Incompatible materials:</b> na
<b>Hazardous Decomposition Products:</b> Formaldehyde, Ammonia, Nitrogen oxides

## 11. TOXICOLOGICAL INFORMATION

<b>Signs and Symptoms of Overexposure:</b> None Known							
<b>Emergency Overview:</b> NA							
<b>Likely Routes of Exposure</b>	<b>Signs and Symptoms</b>	<b>Single, Repeated, or Lifetime Exposure</b>	<b>Severity (Mild, Moderate, Severe)</b>	<b>Acute and Chronic Health Effect(s)</b>	<b>Target Organ(s)</b>	<b>LD50 Testing Data (as applicable)</b>	<b>LC50 Testing Data (as applicable)</b>
<b>Eye:</b>	Irritating effect	NA	NA	NA	NA	NA	NA
<b>Skin:</b>	Irritant to skin and mucous membranes.	NA	NA	NA	NA	NA	NA
<b>Inhalation:</b>	NA	NA	NA	NA	NA	NA	NA
<b>Ingestion:</b>	NA	NA	NA	NA	NA	NA	NA
<b>Other:</b>	Sensitization possible through skin contact	NA	NA	NA	NA	NA	NA
<b>Medical Conditions Aggravated by Exposure:</b> None Known							
<b>Carcinogenicity:</b> Not Known to be Carcinogenic							

## 12. ECOLOGICAL INFORMATION

**Toxicity:** NA

**Persistence and Degradability:** NA

**Bio-accumulative Potential:** NA

**Mobility in Soil:** NA

**Other Adverse Effects:** Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

**Results of PBT/vPvB Assessment:** NA

## 13. DISPOSAL CONSIDERATIONS

**Regulations:**

**Properties (Physical/Chemical) Affecting Disposal:**

**Waste Treatment Recommendations:** Must not be disposed together with household garbage. Do not allow product to reach sewage system. Uncleansed pack aging: Dispose of material in accordance with federal, state and local regulations.

## 14. TRANSPORT INFORMATION

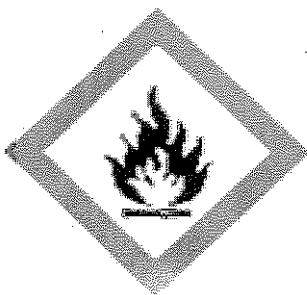
**UN Identification Number:** 1328

**UN Proper Shipping Name:** 1328 Hexamethylenetetramine

**Transport hazard class(es):** 4

**Packing Group:** III

**Special precautions for user:** Flammable solids, self-reactive substances and solid desensitized explosives



# DENTSPLY Maillefer

## 15. REGULATORY INFORMATION

### U.S. Federal Regulations

Comprehensive Environmental Response and Liability Act of 1980 (CERCLA): NA

Toxic Substances Control Act (TSCA): NA

Clean Water Act (CWA): 1

Clean Air Act (CAA): NA

Superfund Amendments and Reauthorization Act (SARA) Title III Information: NA

SARA Section 311/312 (40 CFR 370) Hazard Categories: Yes - Acute

Immediate Hazard:	Yes	Pressure Hazard:	NA
Delayed Hazard:	Yes	Reactivity Hazard:	NA
Fire Hazard:	Yes		

This product contains the following toxic chemical(s) subject to reporting requirements of SARA Section 313 (40 CFR 372):

Components	C.A.S. #	WT %
NA	NA	NA

### State Regulations

**California:** This product contains the following chemical(s) known to the State of California to cause cancer, birth defects or reproductive harm:

Components	C.A.S. #	WT %
NA	NA	NA

### International Regulations

Canadian Environmental Protection Act: NA

Canadian Workplace Hazardous Materials Information System (WHMIS): B4, D2A, D2B

European Inventory of Existing Chemicals (EINECS): 202-905-8, 236-675-5, 231-131-3

## 16. OTHER INFORMATION

Full text of Classification abbreviations used in Section 2 and 3:

R11 Highly flammable.

R43 May cause sensitization by skin contact.

S2 Keep out of the reach of children.

S24 Avoid contact with skin.

S37 Wear suitable gloves.



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S60 This material and its container must be disposed of as hazardous waste.

Date of SDS Preparation/Revision: 10/16/14

Data Sources: Supplier