SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : ARDROX® 9D1B AEROSOL

Substance number : REL_200509A

Chemical usage : Nondestructive Testing

Manufacturer or supplier's details

Company : Chemetall US, Inc.

Address : 675 Central Avenue
New Providence NJ 07974

Telephone : (800) 526-4473

Telefax : (908) 464-4658

Emergency telephone no : CHEMTREC - 800-424-9300, 1-703-527-3887 (International)

SECTION 2. HAZARDS IDENTIFICATION

Emergency Overview

Appearance	aerosol
Colour	white
Odour	sweet
Hazard Summary	Flammable/Combustible! Harmful by inhalation and if swallowed. Causes irritation of eyes and skin.

GHS Classification

Flammable aerosols : Category 1

Eye irritation : Category 2A

Carcinogenicity : Category 1A

Specific target organ toxicity - single exposure : Category 3 (Central nervous system)

GHS Label element

Hazard pictograms :

Signal word : Danger

Hazard statements	:	Extremely flammable aerosol. Causes serious eye irritation. May cause drowsiness or dizziness. May cause cancer.
Precautionary statements	:	**Prevention:** Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not spray on an open flame or other ignition source. Pressurized container: Do not pierce or burn, even after use. Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray. Wash skin thoroughly after handling. Use only outdoors or in a well-ventilated area. Wear eye protection/ face protection. Use personal protective equipment as required. **Response:** IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/ physician if you feel unwell. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. IF exposed or concerned: Get medical advice/ attention. If eye irritation persists: Get medical advice/ attention. **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 to an approved waste disposal plant.

Potential Health Effects

Inhalation	:	yes
Skin	:	yes
Ingestion	:	yes
Aggravated Medical Condition	:	None known.

Carcinogenicity:

IARC	Group 1: Carcinogenic to humans	
	Hydrous magnesium silicate	14807-96-6
ACGIH	Confirmed human carcinogen	
	Hydrous magnesium silicate	14807-96-6
OSHA	No component of this product present at levels greater than or	

equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

NTP Known to be human carcinogen

Hydrous magnesium silicate 14807-96-6

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture :

Hazardous components

Component	CAS-No.	Weight percent
ACETONE	67-64-1	30 - 50
Propane	74-98-6	10 - 20
2-Propanol	67-63-0	10 - 20
Butane	106-97-8	5 - 10
Hydrous magnesium silicate	14807-96-6	5 - 10
Isobutane	75-28-5	5 - 10

Unidentified ingredients are considered not hazardous under Federal Hazard Communication Standard (29CFR 1910.1200).

Specific chemical identity of composition has been withheld as a trade secret.

Exact percentage of composition has been withheld as a trade secret.

SECTION 4. FIRST AID MEASURES

If inhaled : Remove to fresh air.
If symptoms persist, call a physician.
If breathing is irregular or stopped, administer artificial respiration.

In case of skin contact : Wash off immediately with plenty of water for at least 15 minutes.
Get medical attention if irritation develops and persists

In case of eye contact : Rinse immediately with plenty of water for at least 15 minutes.
Keep eye wide open while rinsing.
Seek medical advice.

If swallowed : Rinse mouth.
Drink plenty of water.
Obtain medical attention.

SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media : Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Further information : Use water spray to cool unopened containers.

Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures : Ensure adequate ventilation.
Remove all sources of ignition.

Methods and materials for containment and cleaning up : Ventilate area.
Remove all heat and ignition sources.
Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).
Keep in suitable, closed containers for disposal.
Flush with plenty of water.

Additional advice : Never return spills in original containers for re-use.

SECTION 7. HANDLING AND STORAGE

Advice on safe handling : Use only with adequate ventilation.
Take precautionary measures against static discharges.
Unscrew closure slowly. Allow all pressure to escape through threads before removing closure

Conditions for safe storage : Keep containers dry and tightly closed to avoid moisture absorption and contamination.
Store indoors in a cool, well-ventilated place
Keep away from open flames, hot surfaces and sources of ignition.
Keep container out of sun and away from heat.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
ACETONE	67-64-1	TWA	500 ppm	ACGIH
		STEL	750 ppm	ACGIH
		TWA	250 ppm 590.000000 mg/m3	NIOSH REL
		TWA	1,000 ppm 2,400.000000 mg/m3	OSHA Z-1
		TWA	750 ppm	OSHA P0

			1,800.000000 mg/m3	
		STEL	1,000 ppm 2,400.000000 mg/m3	OSHA P0
Propane	74-98-6	TWA	1,000 ppm 1,800.000000 mg/m3	NIOSH REL
		TWA	1,000 ppm 1,800.000000 mg/m3	OSHA Z-1
		TWA	1,000 ppm 1,800.000000 mg/m3	OSHA P0
2-Propanol	67-63-0	TWA	200 ppm	ACGIH
		STEL	400 ppm	ACGIH
		TWA	400 ppm 980.000000 mg/m3	NIOSH REL
		ST	500 ppm 1,225.000000 mg/m3	NIOSH REL
		TWA	400 ppm 980.000000 mg/m3	OSHA Z-1
		TWA	400 ppm 980.000000 mg/m3	OSHA P0
		STEL	500 ppm 1,225.000000 mg/m3	OSHA P0
Butane	106-97-8	TWA	800 ppm 1,900.000000 mg/m3	NIOSH REL
		TWA	800 ppm 1,900.000000 mg/m3	OSHA P0
		STEL	1,000 ppm	ACGIH
		TWA (Dust)	20 Million particles per cubic foot	OSHA Z-3
		TWA (Respirable)	2.000000 mg/m3	NIOSH REL
		TWA	0.1 fibre/cm3	ACGIH
		TWA (Respirable fraction)	2.000000 mg/m3	ACGIH
		TWA (respirable dust fraction)	2.000000 mg/m3	OSHA P0
Isobutane	75-28-5	TWA	800 ppm 1,900.000000 mg/m3	NIOSH REL
		STEL	1,000 ppm	ACGIH

Biological occupational exposure limits

Component	CAS-No.	Control parameters	Biological specimen	Sampling time	Permissible concentration	Basis
ACETONE	67-64-1, 67-64-1	Acetone	Urine	End of shift (As soon as possible after exposure ceases)	50.0000 mg/l	ACGIH BEI
2-Propanol	67-63-0, 67-63-0	Acetone	Urine	End of shift at end of workweek	40.0000 mg/l	ACGIH BEI

Personal protective equipment

Respiratory protection : If occupational exposure limits are exceeded, proper control and protection measures should be implemented.

Hand protection
Remarks : Neoprene gloves

Eye protection : Chemical resistant goggles must be worn.

Skin and body protection : Rubber or plastic apron

Hygiene measures : Avoid contact with skin, eyes and clothing.
Wear suitable gloves and eye/face protection.
Wear suitable protective clothing.
Wash hands before breaks and immediately after handling the product.
Provide adequate ventilation.
Do not inhale fumes.
Keep away from food and drink.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : aerosol

Colour : white

Odour : sweet

pH : no data available

Melting point/range : no data available

Boiling point/boiling range : no data available

Flash point : not applicable

Evaporation rate : GLP: No information available.

Upper explosion limit	:	no data available
Lower explosion limit	:	no data available
Vapour pressure	:	no data available
Relative density	:	no data available
Bulk density	:	no data available
Solubility(ies)		
Water solubility	:	negligible
Partition coefficient: n-octanol/water	:	no data available
Auto-ignition temperature	:	No data available
Thermal decomposition	:	No data available
Viscosity, dynamic	:	No data available

SECTION 10. STABILITY AND REACTIVITY

Conditions to avoid	:	Heat, flames and sparks. Exposure to sunlight.
Incompatible materials	:	Strong oxidizing agents
Hazardous decomposition products	:	Carbon oxides

SECTION 11. TOXICOLOGICAL INFORMATION

Acute toxicity

Product:

Acute oral toxicity	:	Acute toxicity estimate : 2,800.000000 mg/kg Method: Calculation method

Components:

ACETONE:

Acute oral toxicity	:	LD50 mouse: 3,000.000000 mg/kg
		LD50 rat: 5,800.000000 mg/kg
		LD50 rabbit: 5,340.000000 mg/kg
Acute inhalation toxicity	:	LC50 mouse: 44.000000 mg/l Exposure time: 4 h

		LC50 rat: 50.100000 mg/l Exposure time: 8 h
Acute dermal toxicity	:	LD50 guinea pig: 9,400.000000 mg/kg
Propane:		
Acute inhalation toxicity	:	LC50 rat: 658.000000 mg/l Exposure time: 4 h
2-Propanol:		
Acute oral toxicity	:	LD50 mouse: 3,600.000000 mg/kg
		LD50 rat: 5,045.000000 mg/kg
		LD50 rabbit: 6,410.000000 mg/kg
Acute inhalation toxicity	:	LC50 rat: 16000 ppm Exposure time: 8 h
Acute dermal toxicity	:	LD50 rabbit: 12,800.000000 mg/kg
Butane:		
Acute inhalation toxicity	:	LC50 rat: 0.658000 mg/l Exposure time: 4 h
Acute toxicity (other routes of administration)	:	Humans: Target Organs: Central nervous system
Hydrous magnesium silicate:		
Acute oral toxicity	:	LD50 rat: 500.000000 mg/kg
Acute inhalation toxicity	:	LC50 rat: 0.500000 - 2.040000 mg/l
Acute dermal toxicity	:	LD50 rat: > 5,000.000000 mg/kg

Skin corrosion/irritation

no data available

Serious eye damage/eye irritation

no data available

Respiratory or skin sensitisation

no data available

Germ cell mutagenicity

no data available

Carcinogenicity

no data available

Reproductive toxicity

no data available

STOT - single exposure

no data available

STOT - repeated exposure

no data available

Aspiration toxicity

no data available

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

no data available

Bioaccumulative potential

Product:

Partition coefficient: n-octanol/water	:	Remarks: no data available

Other adverse effects

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

Waste from residues	:	Refer to all federal, provincial, state and local regulation prior to disposition of container and unused contents by reuse, recycle or disposal.

SECTION 14. TRANSPORT INFORMATION

International regulation

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

Not applicable for product as supplied.

National Regulations

SECTION 15. REGULATORY INFORMATION

TSCA Status	:	All components of this material comply with US TSCA requirements.

OSHA Hazards : Carcinogen, Toxic by ingestion
WHMIS Classification : D2B: Toxic Material Causing Other Toxic Effects
A: Compressed Gas
B5: Flammable aerosol

EPCRA - Emergency Planning and Community Right-to-Know Act

CERCLA Reportable Quantity

Components	CAS-No.	Component RQ (lbs)	Calculated product RQ (lbs)
ACETONE	67-64-1	5,000	10,684

SARA 311/312 Hazards : Chronic Health Hazard
Acute Health Hazard

SARA 302 : SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 : SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

US State Regulations

Massachusetts Right To Know

ACETONE	67-64-1
Propane	74-98-6
2-Propanol	67-63-0
Butane	106-97-8
Hydrous magnesium silicate	14807-96-6
Isobutane	75-28-5

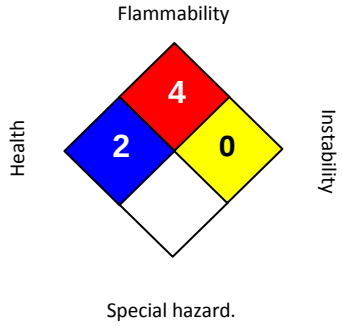
Pennsylvania Right To Know

ACETONE	67-64-1
Propane	74-98-6
2-Propanol	67-63-0
Butane	106-97-8
Hydrous magnesium silicate	14807-96-6
Isobutane	75-28-5

New Jersey Right To Know

ACETONE	67-64-1
Propane	74-98-6
2-Propanol	67-63-0
Butane	106-97-8
Hydrous magnesium silicate	14807-96-6
Isobutane	75-28-5

NFPA:



HMIS III:

HEALTH	2
FLAMMABILITY	4
PHYSICAL HAZARD	0

0 = not significant, 1 =Slight,
2 = Moderate, 3 = High
4 = Extreme, * = Chronic

Safety Glasses, Gloves, Vapour Respirator

SECTION 16. OTHER INFORMATION

Further information

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Chemetall US, Inc. warrants that the products described herein will conform with its published specifications.

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