MSDS Name: 2-443A

12752-1012

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Lubrizol

Material Safety Data Sheet

1 - Product and company information

Product name	2-443A		
Product number	2-443A	**Effective date**	05/14/2007
Company identification	Lubrizol Advanced Materials, Inc. 9911 Brecksville Rd. Cleveland, OH 44141-3247 United States of America	**Company Canadian Address**	Lubrizol Advanced Materials Canada. 100 Regina Street South Suite 360 Waterloo, Ontario, N2J 4P9 Canada
Telephone **Chemtrec (24 Hour)**	(216) 447-5000 (800) 424-9300	**Telephone** **CANUTEC**	(519) 888-3330 (613) 996-6666
Preparer	Health, Safety, and Environmental Department		
Product description	Adhesive		

2 - Composition / information on ingredients

Chemical Name	CAS Number	Weight % Less Than
Polymer/solids	Proprietary	55
Water	0007732-18-5	44

Amounts specified are typical and do not represent a specification. Remaining components are proprietary, non-hazardous, and/or present at amounts below reportable limits.
Notes: Amounts specified are typical and do not represent a specification. Remaining components are proprietary, nonhazardous and/or present at amounts below reportable limits.

3 - Hazards identification

Emergency overview
See below for product details

Acute health effects
Vapors or direct eye contact may cause irritation. Repeated or prolonged skin contact may cause irritation. Ingestion may cause irritation. Inhalation may cause irritation of the respiratory tract and mucous membranes. Overexposure to aerosol, vapor or mist may cause eye and respiratory tract irritation, dizziness, headache, nausea and flu-like symptoms.

Chronic health effects
None known

Signs/Symptoms of exposure
Irritation

Routes of exposure/entry
Skin Contact, Inhalation, Ingestion, Eye Contact

Target organs
Eyes,Respiratory tract,Skin

Medical conditions aggravated by exposure
Pre-existing skin problems may be aggravated by prolonged or repeated contact. Persons with sensitive airways (e.g., asthmatics) may react to vapors.

Carcinogenic status
The components of this mixture are not known to be listed or regulated by IARC, NTP, OSHA or ACGIH.

Reproductive effects
None Expected

4 - First aid measures

If irritation or other symptoms (as noted above) occur or persist from any route of exposure, remove the affected individual from the area: see a physician/get medical attention.

Eye contact
Immediately flush eyes with plenty of clean water for an extended time, not less than five (5) minutes. Flush longer if there is any indication of residual chemical in the eye. Ensure adequate flushing of the eyes by separating the eyelids with fingers and roll eyes in a circular motion.

Skin contact
Wash the affected area thoroughly with plenty of water and soap.

Inhalation
If affected, remove to fresh air. If not breathing, give artificial respiration. See a physician.

Ingestion
Treat symptomatically. No ingestion effects known. Treat symptomatically. See a physician.

Notes to physician
No Additional Information

5 - Fire fighting measures

NFPA flammability class: N/A

Flash point: Not Available

Explosive range: **LEL** Not Available
UEL Not Available

Notes: No Additional Information

Fire and explosive properties
This product is not known to present any fire hazard.

Extinguishing media

Water for dried polymer. Being an aqueous system, product is not a fire hazard, as supplied. After water is evaporated, dry solids could burn. Water spray, ABC dry chemical and protein type air foams are effective. Carbon dioxide may be ineffective on larger fires due to a lack of cooling capacity, which may result in reignition.

Fire fighting instructions
Use water/water spray to cool fire exposed containers. Wear self-contained breathing apparatus (SCBA) equipped with a full facepiece and operated in a pressure-demand mode (or other positive pressure mode) and approved protective clothing. Personnel without suitable respiratory protection must leave the area to prevent significant exposure to hazardous gases from combustion, burning or decomposition. In an enclosed or poorly ventilated area, wear SCBA during cleanup immediately after a fire as well as during the attack phase of firefighting operations. Wear self-contained breathing apparatus (SCBA) equipped with a full facepiece and operated in a pressure-demand mode (or other positive pressure mode) and protective clothing.

Unusual fire/explosion hazards
None known for the product as delivered (water solution). Irritating and toxic substances will be emitted upon combustion, burning or decomposition of the dry solids. Closed container may rupture (due to build up in pressure) when exposed to extreme heat.

6 - Accidental release measures

Containment techniques
Contain spill. If spilled in an enclosed area, ventilate.

Clean-up techniques
Wear proper personal protective clothing and equipment. Do not flush liquid into public sewer, water systems or surface waters. Do not flush liquid into public sewer, water systems or surface waters. Soak up large spill residue and small spills with an inert absorbent. Recover as much as possible for reuse. Place into labeled, closed container; store in safe location to await disposal. Wash the spill area with soap and water. Change contaminated clothing and launder before reuse. CAUTION: Spilled liquid and dried film are slippery. Use care to avoid falls.

Evacuation instructions
Not Applicable

7 - Handling and storage

Handling
Wash thoroughly after handling this product. Always wash up before eating, smoking or using the facilities. Use under well-ventilated conditions. Avoid eye contact. Avoid repeated or prolonged skin contact. Avoid inhalation of aerosol, mist, spray, fume or vapor. Avoid drinking, tasting, swallowing or ingesting this product. Provide eyewash fountains and safety showers in the work area. Minimize contact with air to reduce contamination with mold, fungus, or other organisms which could cause decomposition or spoilage.

Storage
Do not store in open, unlabeled or mislabeled containers. Keep container closed when not in use. Do not reuse empty container without commercial cleaning or reconditioning. Do not allow product to freeze.

8 - Exposure controls / personal protection

Chemical Name	ACGIH - TWA	ACGIH - STEL	OSHA - TWA	OSHA - STEL
Polymer/solids	N/E	N/E	N/E	N/E
Water	N/E	N/E	N/E	N/E

Notes: No Additional Information

Engineering controls
Always provide effective general and, when necessary, local exhaust ventilation to draw spray, aerosol, fume, mist and vapor away from workers to prevent routine inhalation. Ventilation must be adequate to maintain the ambient workplace atmosphere below the exposure limit(s) outlined in the MSDS. (Ventilation guidelines/techniques may be found in publications such as Industrial Ventilation: American Conference of Governmental Industrial Hygienists, 1330 Kemper Meadow Drive, Cincinnati, OH, 45240-1634, USA.)

Eye/face protection
Wear eye protection

Skin protection
Wear protective gloves.

Respiratory protection
In case of insufficient ventilation, wear suitable respiratory equipment. Wear an approved respirator (e.g., an organic vapor respirator, a full face air purifying respirator for organic vapors, or a self-contained breathing apparatus) whenever exposure to aerosol, mist, spray, fume or vapor exceed the exposure limit(s) of any chemical substance listed in this MSDS. Use respirator in accordance with manufacturer's use limitations and OSHA standard 1910.134 (29CFR).

General protection
No Additional Information

9 - Physical and chemical properties

Form	Liquid	**pH**	4.0 - 5.0
Appearance	White	**% Volatile by weight**	45% - 48.0 %
Odor	Acrid	**Specific gravity**	1.1
Solubility in water	Dilutable	**VOC**	<0.5%
Evaporation rate	Slower than n-butyl acetate		
Vapor pressure	~ 18 mm Hg @ 68°F (20°C)	**Boiling point °F** **Boiling point °C**	>212° 100°
Melting point	Not applicable		
Vapor density	Heavier than air		
Partition coefficient	Not Applicable		

Notes: No Additional Information

10 - Stability and reactivity

Stability
This product is stable.

Hazardous polymerization
Hazardous polymerization will not occur.

Notes:

No Additional Information

Conditions to avoid
Do not freeze.

Incompatibility with other materials
No specific incompatibilities. Materials which are not compatible with water will not be compatible with this product. Substances that are not compatible with ordinary organic compounds (such as strong oxidizers) will not be compatible with this product. Contamination with strong acids and bases may coagulate latex.

Hazardous decomposition products

After water is evaporated, decomposition or combustion of the dry solids may generate irritating vapors. CO, CO2, ammonia, and hydrocarbons.

Additional reactivity / stability information
None

Thermal processing emissions
Not Applicable

11 - Toxicological information

Caution must be exercised through the prudent use of protective equipment and handling procedures to minimize exposure.

Chemical Name	LC50 Inhalation	Species	LD50 Oral	Species	LD50 Skin	Species
Polymer/solids	N/E		N/E		N/E	
Water	N/E		N/E		N/E	

Chemical Name	LC50 Inhalation	Species	LD50 Oral	Species	LD50 Skin	Species
Polymer/solids	N/E		N/E		N/E	
Water	N/E		N/E		N/E	

No toxicity studies have been conducted on this product.
As with all chemicals for which test data are limited or do not exist, caution must be exercised through the prudent use of protective equipment and handling procedures to minimize exposure.

12 - Ecological information

No ecological testing has been conducted on this product.

Notes: No Additional Information

13 - Disposal information

Incinerate waste product when in liquid form (i.e., as supplied) in a properly permitted (approved) incineration facility in accordance with federal, state and local regulations. Liquids cannot be disposed of in a landfill. Liquid product generally

requires some pre-disposal treatment to separate the liquid from the polymeric portion. Typically, this is done by coagulating the polymer and removing the liquid. The liquid portion may be discharged to an industrial or public treatment works with approval of appropriate permitting authorities. Solid products can be sent to an approved landfill, or preferably incinerated.

US RQ
Not Applicable

14 - Transportation information

UN/NA Number:	N/A	**Hazard Class:**	N/A	**IMDG Class:**	N/A
Packing Group:	N/A	**ICAO/IATA Class:**	N/A	**TDG Class:**	N/A

Name of Material: Not regulated

Notes: No Additional Information

15 - Regulatory information

This MSDS has been prepared in accordance with the hazard criteria of the OSHA Hazard Communication Standard, 29 CFR 1910.1200

U.S. Toxic Substances Control Act:

All components of this product are either listed on the U.S. Toxic Substances Control Act (TSCA) inventory of chemicals or are otherwise compliant with TSCA regulations.

U.S. CERCLA – SARA:

SARA Title III Section 312 Hazard Category (40 CFR 311/312):

Not Hazardous

SARA Section 313: This product contains the following toxic chemicals subject to the reporting requirements of Section 313 of the Emergency Planning and Community Right-to-Know Act of 1986 and 40 CFR 372:

None Known

California Proposition 65:

Warning: The following ingredients present in the product are known to the state of California to cause Cancer:

None known to be present or none in reportable amounts for occupational exposure as per OSHA's approval of the California Hazard Communication Standard, Federal Register, page 31159 ff, 6 June 1997.

Warning: The following ingredients present in the product are known to the state of California to cause birth defects, or other reproductive hazards:

None known to be present or none in reportable amounts for occupational exposure as per OSHA's approval of the California Hazard Communication Standard, Federal Register, page 31159 ff, 6 June 1997.

The chemical identity of some or all components present is confidential business information (trade secret) and is being withheld as permitted by 29CFR1910.1200 (i).

Canadian Domestic Substances List (DSL):

Canadian DSL: One or more components of this product are not on the Canadian Domestic Substances List (DSL) or the Non-Domestic Substances List (NDSL).

Canadian Ingredient Disclosure List:
The following components are on the Canadian Ingredient Disclosure List (WHMIS):

None Listed

Canadian WHMIS Class:

Not controlled

Notes: No Additional Information

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

16 - Other information

Notes: No Additional Information

HMIS Rating			
Health: 1	**Flammability:** 1	**Reactivity:** 0	**Personal Protection:** X
NFPA Rating			
Health: 1	**Flammability:** 1	**Reactivity:** 0	

Key: 0=Insignificant; 1=Slight; 2=Moderate; 3=High; 4=Extreme

Hazardous Materials Identification System (HMIS), National Paint and Coating Assn. rating applies to product "as packaged" (i.e., ambient temperature). Ratings are based upon HMIS® Rating Manual 1984. Values do not reflect HMIS® III.
National Fire Protection Association (NFPA) rating identifies the severity of hazards of material during a fire emergency (i.e., "on fire").

Legend:

™:	Trademark owned by The Lubrizol Corporation.
ACGIH:	American Conference of Governmental Industrial Hygienists
A1:	Confirmed human carcinogen
A2:	Suspected human carcinogen
A3:	Animal carcinogen
CAS No:	Chemical Abstract Service Registry Number
IARC:	International Agency for Research on Cancer
Group 1:	Carcinogenic to humans
Group 2A:	Probably carcinogenic to humans

Group 2B:	Possibly carcinogenic to humans
Group 3:	Unclassified as a carcinogen to humans
MSHA:	Mine Safety and Health Administration
NIOSH:	National Institute for Occupational Safety and Health
NTP:	National Toxicology Program
N/A:	Not Applicable
N/E:	None Established
OSHA	Occupational Safety and Health Administration
PEL:	Permissible Exposure Limit
PNOC:	Particulates Not Otherwise Classified
RTK	Right To Know
STEL:	Short Term Exposure Limit (15 minute Time Weighted Average)
TLV	Threshold Limit Value
C:	Ceiling Limit
S:	Skin notation refers to the potential significant contribution to the overall exposure by the cutaneous route including mucous membranes and the eyes and by direct skin contact with the substance
WHMIS:	Canadian Workplace Hazardous Materials Information System

Users responsibility/disclaimer of liability

As the conditions or methods of use are beyond our control, we do not assume any responsibility and expressly disclaim any liability for any use of this product. Information contained herein is believed to be true and accurate but all statements or suggestions are made without warranty, expressed or implied, regarding accuracy of the information, the hazards connected with the use of the material or the results to be obtained from the use thereof. Compliance with all applicable federal, state, and local laws and local regulations remains the responsibility of the user.

This bulletin cannot cover all possible situations which the user may experience during processing. Each aspect of your operation should be examined to determine if, or where, additional precautions may be necessary. All health and safety information contained in this bulletin should be provided to your employees or customers. It is your responsibility to develop appropriate work practice guidelines and employee instructional programs for your operation.