

ARLASOLVE® DMI

Material Safety Data Sheet

Date(s) : 2006-11-16 18:42:05

Version 5

MSDS#: 000549

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name	ARLASOLVE® DMI
Product Use	solvent
Address/Telephone number	Uniqema Uniqema Corporate Center 1000 Uniqema Boulevard New Castle, DE 19720-2790 Uniqema Operator (Mon.-Fri., 8:15 AM - 4:30 PM Eastern): (302) 574-5000 Medical Emergency (24 hr.): (888) 456-6218 Transportation Emergency Involving Chemical Spills, Leaks, Fires, or Accidents (24 hr.): (800) 424-9300

Uniqema is an international business of Croda PLC. Uniqema operates through Croda affiliated companies in the relevant countries. In the USA, Uniqema operates as Croda Uniqema Inc.

2. COMPOSITION/INFORMATION ON INGREDIENTS

Component Name	CAS Number	% (w/w)	OSHA PEL	ACGIH TLV
dimethyl isosorbide	5306-85-4	90-100	No PEL established	No TLV established

Ingredients not precisely identified are proprietary or nonhazardous.
Values are not product specifications.

3. HAZARDS IDENTIFICATION

ARLASOLVE® DMI

Material Safety Data Sheet

Date(s) : 2006-11-16 18:42:05

Version 5

MSDS#: 000549

Emergency Overview

Color	clear Colorless
Form	Liquid
Odor	slight odor

All ingredients not confirmed on the TSCA Section 8(b) Inventory. FOR TSCA-EXEMPT PURPOSES ONLY.

MAY CAUSE EYE IRRITATION

Limited toxicity data are available on this specific product; this health hazard assessment is based on the results of screening tests.

Routes of Exposure Eye contact Skin contact Inhalation

Eye contact	May cause eye irritation in man.
Skin contact	No irritation is likely to develop following contact with human skin. Systemically toxic concentrations of this product will probably not be absorbed through human skin.
Inhalation	This material may cause irritation following inhalation. No toxic effects are known to be associated with inhalation of this material.
Ingestion	In humans, irritation of the mouth, pharynx, esophagus and stomach can develop following ingestion of this product. No toxic effects are expected following ingestion of this product.
Other	Not listed by ACGIH, IARC, NIOSH, NTP OR OSHA.

4. FIRST AID MEASURES

ARLASOLVE® DMI

Material Safety Data Sheet

Date(s) : 2006-11-16 18:42:05

Version 5

MSDS#: 000549

Eye contact	Immediately flush with plenty of water for at least 15 minutes. If redness, itching, or a burning sensation develops, have eyes examined and treated by medical personnel.
Skin contact	Wash material off of the skin with plenty of soap and water. If redness, itching, or a burning sensation develops, get medical attention.
Inhalation	Remove victim to fresh air. If a cough or other respiratory symptoms develop, consult medical personnel.
Ingestion	DO NOT INDUCE VOMITING. Give one or two glasses of water to drink and refer to medical personnel or take direction from either a physician or a poison control center. Never give anything by mouth to an unconscious person.

5. FIRE-FIGHTING MEASURES

Flash Point (°F)	244.4 (closed cup)
Flash Point (°C)	118 (closed cup)
Autoignition Temperature (°F)	No data.
Autoignition Temperature (°C)	No data.
Flammable Limits	No data.
Extinguishing Media	Water fog, alcohol foam, carbon dioxide, dry chemical.
Special fire-fighting protective equipment	A self contained breathing apparatus and suitable protective clothing must be worn in fire conditions.
Fire and explosion hazards	None known.
Explosion data	
Sensitivity to mechanical impact	No data.
Sensitivity to static discharge	No data.

6. ACCIDENTAL RELEASE MEASURES

ARLASOLVE® DMI

Material Safety Data Sheet

Date(s) : 2006-11-16 18:42:05

Version 5

MSDS#: 000549

Personal precautions

Refer to section 8 for proper personal protective equipment.

Steps to be taken in case material is released or spilled

Contain spill.
Soak up material with absorbent and shovel into a chemical waste container.
Wash residue from spill area with water and flush to a sewer serviced by a permitted wastewater treatment facility.

7. HANDLING AND STORAGE

Handling

Prevent eye contact.
Prevent skin contact.
Avoid breathing this material.
Do not swallow.

Storage

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure limits

OSHA PEL

Component Name	Exposure limits	Notes
----------------	-----------------	-------

No OSHA PEL assigned. Minimize exposure in accordance with good hygiene practice.

ACGIH TLV

Component Name	Exposure limits	Notes
----------------	-----------------	-------

ARLASOLVE® DMI

Material Safety Data Sheet

Date(s) : 2006-11-16 18:42:05

Version 5

MSDS#: 000549

No ACGIH TLV assigned. Minimize exposure in accordance with good hygiene practice.

Engineering controls	Provide adequate ventilation.
Eye protection	Chemical tight goggles.
Protective clothing	Impervious gloves.
Respiratory protection	Respiratory protection is not normally needed if controls are adequate.
Other	Eyewash station in work area.

9. PHYSICAL AND CHEMICAL PROPERTIES

Color	clear
	Colorless
Form	Liquid
Odor	slight odor
pH	No data.
Boiling Point (°F)	> 234
Boiling Point (°C)	>112.2
Flash Point (°F)	244.4 (closed cup)
Flash Point (°C)	118 (closed cup)
Autoignition Temperature (°F)	No data.
Autoignition Temperature (°C)	No data.
Flammable Limits	No data.
Explosive Properties	No data.
Oxidizing Properties	No data.
Vapor Pressure (mmHg)	~ 2.0000
Specific Gravity	~1.16
Solubility (water)	Soluble
Solubility (other)	Soluble, in all common solvents.
Partition Coefficient	-2.1
Kinematic viscosity (mm²/s)	~6 (cs)
Freezing/melting point (°F)	< -70
Freezing/melting point (°C)	<-56.72

ARLASOLVE® DMI

Material Safety Data Sheet

Date(s) : 2006-11-16 18:42:05

Version 5

MSDS#: 000549

10. STABILITY AND REACTIVITY

Stability	Stable under normal conditions.
Materials to avoid	Strong oxidizing agents.
Conditions to avoid	None known.
Hazardous decomposition products	Carbon dioxide, carbon monoxide.
Hazardous polymerization	Will not occur.

11. TOXICOLOGICAL INFORMATION

Eye contact

A 100% suspension of this material was tested.	Rabbit	Draize	7 days	Mildly irritating.	1964-1968
------------------------------------------------	--------	--------	--------	--------------------	-----------

Skin contact

A 100% suspension of this material was tested.	Rabbit	Draize	72 hours	Nonirritating.	27 Aug 1963
------------------------------------------------	--------	--------	----------	----------------	-------------

Dermal toxicity

100%	LD50 Rabbit > 10 ml/kg	24 hours	Practically nontoxic.	2nd March 1973 summary
------	------------------------	----------	-----------------------	------------------------

Ingestion

A 100% suspension of this material was tested.	LD50 rat > 4.64 ml/kg	Practically nontoxic.	19 Nov 1957
------------------------------------------------	-----------------------	-----------------------	-------------

ARLASOLVE® DMI

Material Safety Data Sheet

Date(s) : 2006-11-16 18:42:05

Version 5

MSDS#: 000549

Chronic

Chronic effects are unlikely. A study in animals has shown that repeated doses produce no teratogenic effects. Ingestion studies in animals have shown that high doses produce adverse effects to liver and kidneys rat An ingestion study in animals has shown that repeated doses produce no significant effects (dog). The no effect level was 30 mg/kg.

Mutagenicity

There is no evidence of mutagenic or clastogenic potential.

Toxicologically synergistic products

None known.

12. ECOLOGICAL INFORMATION

Persistence & Degradation

Biological Oxygen Demand (BOD 28 DAY/COD) Modified OECD 301C Test procedure <1 %

Toxicity

EC50 (48 hour) (static) Daphnia magna > 1000 mg/l

13. DISPOSAL CONSIDERATIONS

RCRA (Resource Conservation and Recovery Act) Classification:

Specifically Listed

Not applicable.

Wastes

Characteristic Wastes

Ignitability

Not applicable.

Corrosivity

Not applicable.

Reactivity

Not applicable.

Toxicity

Not applicable.

Disposal method

Disposal should be in accordance with local, state or national legislation.

ARLASOLVE® DMI

Material Safety Data Sheet

Date(s) : 2006-11-16 18:42:05

Version 5

MSDS#: 000549

Container disposal

Empty container retains product residue. Observe all hazard precautions. Do not distribute, make available, furnish or reuse empty container except for storage and shipment of original product. Remove all product residue from container and puncture or otherwise destroy empty container before disposal.

14. TRANSPORT INFORMATION

Department of Transportation:

Not regulated.

TDG (Transportation of Dangerous Goods):

Not regulated.

Not classified in RID/ADR - ADNR - IMDG - ICAO/IATA-DGR.

15. REGULATORY INFORMATION

Inventory Status

EU (EINECS/ELINCS/NLP)	Compliant.
Australia (AICS)	Compliant.
China (IECSC)	Compliant.
Korea (ECL)	Compliant.
Philippines (PICCS)	Compliant.

ARLASOLVE® DMI

Material Safety Data Sheet

Date(s) : 2006-11-16 18:42:05

Version 5

MSDS#: 000549

**OSHA Hazard Communication Standard,
29 CFR 1910.1200, Hazard Summary:**

Health Hazards

Irritant (eye)

Physical Hazards

None

WHMIS Classification

Noncontrolled (Nonhazardous).

**CERCLA and SARA Regulations (40 CFR
355, 370, and 372):**

**This material contains the following
chemicals subject to the reporting
requirements of SARA 313:**

No 313-listed
chemicals in this
product

SARA 311/312 Hazard Categories:

Immediate

Y

Delayed

N

Fire

N

Pressure

N

Reactivity

N

State Regulations:

California Proposition 65: WARNING. This product contains the following chemical(s) known to the State of California to cause cancer. Values listed are percent weight, i.e 0.0001 = 1ppm.

Formaldehyde

0.0035

ARLASOLVE® DMI

Material Safety Data Sheet

Date(s) : 2006-11-16 18:42:05

Version 5

MSDS#: 000549

16. OTHER INFORMATION

We assigned NFPA ratings and HMIS ratings to this product based on the hazards of its ingredient(s). Because the customer is most aware of the application of the product, he must ensure that the proper personal protective equipment (PPE) is provided consistent with information contained in the product MSDS.

HMIS Information

Health	1
Flammability	1
Physical Hazards	0

The HMIS ratings displayed above are from the HMIS III Third Edition. There have been significant changes made to the system. "Physical hazard" stands for physical hazard as defined in the OSHA Hazard Communication Standard and replaces the former code for reactivity. For a more detailed explanation of the system and the ratings, please contact our Product Safety and Regulatory Affairs group.

NFPA Information

Health	1
Flammability	1
Instability	0

This information is intended solely for the use of individuals trained in the particular hazard rating system.

The following sections contain revisions or new statements:

1,3,5,7,8,9,10,11,12,13,15,16

The information herein is given in good faith but no warranty, expressed or implied, is made. (R) is a Registered Trademark of Croda International PLC group (TM) is a Trademark of Croda International PLC group.

See also www.uniqema.com