



## Gelest® UtenSil™ Dissolution Agent D1

Safety Data Sheet PP1-USD1

Date of issue: 31/08/2015 Version: 1.0

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1. Product identifier

Product form	: Mixture
Physical state	: Liquid
Product name	: Gelest® UtenSil™ Dissolution Agent D1
Product code	: PP1-USD1
Synonyms	: SILICONE CLEANING SOLVENT; ODORLESS MINERAL SPIRITS - AROMATIC SULFONIC ACID BLEND
Chemical family	: PETROLEUM DISTILLATE

#### 1.2. Relevant identified uses of the substance or mixture and uses advised against

##### 1.2.1. Relevant identified uses

Use of the substance/mixture : Chemical intermediate

##### 1.2.2. Uses advised against

No additional information available

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

##### GELEST, INC.

11 East Steel Road  
Morrisville, PA 19067

##### USA

T 215-547-1015 - F 215-547-2484 - (M-F): 8:00 AM - 5:30 PM EST

[info@gelest.com](mailto:info@gelest.com) - [www.gelest.com](http://www.gelest.com)

##### GELEST INC.

Fritz-Klatte-Strasse 8  
65933 Frankfurt

##### Germany

T +49 (0) 69 3535106-500 - F +49 (0) 69 3535106-501 - (M-F): 8:00 AM - 4:00 PM

[info@gelestde.com](mailto:info@gelestde.com) - [www.gelestde.com](http://www.gelestde.com)

#### 1.4. Emergency telephone number

Emergency number : CHEMTREC: 1-800-424-9300 (USA); +1 703-527-3887 (International)

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

##### Classification according to Regulation (EC) No. 1272/2008 [CLP]

Acute toxicity (oral), Category 4	H302
Skin corrosion/irritation, Category 1C	H314
Serious eye damage/eye irritation, Category 1	H318
Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation	H335
Aspiration hazard, Category 1	H304

Full text of H statements : see section 16

##### Adverse physicochemical, human health and environmental effects

No additional information available

# Gelest® UtenSil™ Dissolution Agent D1

## Safety Data Sheet

### 2.2. Label elements

#### Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :



GHS05

GHS07

GHS08

Signal word (CLP) :

Danger

Hazardous ingredients :

Dodecylbenzene sulfonic acid; Light petroleum distillate-hydrotreated

Hazard statements (CLP) :

H302 - Harmful if swallowed.  
H304 - May be fatal if swallowed and enters airways.  
H314 - Causes severe skin burns and eye damage.  
H335 - May cause respiratory irritation.

Precautionary statements (CLP) :

P280 - Wear protective gloves/protective clothing/eye protection/face protection.  
P260 - Do not breathe vapours.  
P264 - Wash hands thoroughly after handling.  
P270 - Do not eat, drink or smoke when using this product.  
P271 - Use only outdoors or in a well-ventilated area.  
P301+P310 - IF SWALLOWED: Immediately call a POISON CENTER.

### 2.3. Other hazards

No additional information available

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

Not applicable

### 3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Light petroleum distillate-hydrotreated	(CAS-No.) 64742-47-8	75 - 85	Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335 Asp. Tox. 1, H304
Dodecylbenzene sulfonic acid	(CAS-No.) 27176-87-0	15 - 25	Acute Tox. 4 (Oral), H302 Skin Corr. 1C, H314 Eye Dam. 1, H318

Full text of H-statements: see section 16

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

First-aid measures general :

Remove contaminated clothing and shoes. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). If possible show this sheet; if not available show packaging or label. IF exposed or concerned: Get medical advice/attention.

First-aid measures after inhalation :

Remove person to fresh air and keep comfortable for breathing. Get medical advice/attention.

First-aid measures after skin contact :

Wash with plenty of water/.... Get immediate medical advice/attention.

First-aid measures after eye contact :

Immediately flush eyes thoroughly with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get immediate medical advice/attention.

First-aid measures after ingestion :

Never give anything by mouth to an unconscious person. Immediately call a POISON CENTER/doctor.

### 4.2. Most important symptoms and effects, both acute and delayed

Symptoms/effects :

Causes severe skin burns and eye damage.

Symptoms/effects after inhalation :

May cause respiratory irritation. Petroleum Distillate can cause vertigo, incoordination and stupor at 5000ppm.

Symptoms/effects after skin contact :

Causes (severe) skin burns.

Symptoms/effects after eye contact :

Causes serious eye damage.

Symptoms/effects after ingestion :

May be fatal if swallowed and enters airways.

Chronic symptoms :

The related nonhydrotreated volatile petroleum distillate is a potential human carcinogen.

# Gelest® UtenSil™ Dissolution Agent D1

## Safety Data Sheet

### 4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

Suitable extinguishing media : Water spray. Foam. Carbon dioxide. Dry chemical.

Unsuitable extinguishing media : Do not use straight streams.

### 5.2. Special hazards arising from the substance or mixture

Fire hazard : Combustible liquid. Irritating fumes of hydrochloric acid and organic acid vapors may develop when material is exposed to water or open flame.

### 5.3. Advice for firefighters

Firefighting instructions : Use water spray to cool exposed surfaces. Exercise caution when fighting any chemical fire.

Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection. Avoid all eye and skin contact and do not breathe vapour and mist.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

General measures : Remove ignition sources. Use special care to avoid static electric charges.

#### 6.1.1. For non-emergency personnel

Protective equipment : Wear protective equipment as described in Section 8.

Emergency procedures : Evacuate unnecessary personnel.

#### 6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. Equip cleanup crew with proper protection. For further information refer to section 8: "Exposure controls/personal protection".

### 6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

### 6.3. Methods and material for containment and cleaning up

For containment : Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.

Methods for cleaning up : Clean up any spills as soon as possible, using an absorbent material to collect it. Sweep or shovel spills into appropriate container for disposal. Use only non-sparking tools.

### 6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Additional hazards when processed : Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Precautions for safe handling : Avoid all eye and skin contact and do not breathe vapour and mist. Provide good ventilation in process area to prevent formation of vapour. Ground/bond container and receiving equipment. Use only non-sparking tools.

Hygiene measures : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Wash contaminated clothing before reuse.

### 7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep container tightly closed. Keep in a cool place. Store locked up.

Incompatible materials : Oxidizing agent.

Storage area : Store in a well-ventilated place. Store away from heat.

### 7.3. Specific end use(s)

No additional information available

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

No additional information available

# Gelest® UtenSil™ Dissolution Agent D1

## Safety Data Sheet

### 8.2. Exposure controls

#### Appropriate engineering controls:

Provide local exhaust or general room ventilation.

#### Personal protective equipment:

Avoid all unnecessary exposure. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.

#### Hand protection:

Neoprene or nitrile rubber gloves

#### Eye protection:

Chemical goggles or face shield. Contact lenses should not be worn

#### Skin and body protection:

Wear suitable protective clothing

#### Respiratory protection:

Where exposure through inhalation may occur from use, respiratory protection equipment is recommended. NIOSH-certified combination organic vapor/acid gas (yellow cartridge) respirator.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Appearance	: Liquid.
Colour	: Amber.
Odour	: Mild.
Odour threshold	: No data available
Refractive index	: No additional information available
pH	: No data available
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: No data available
Freezing point	: < -20 °C
Boiling point	: 200 °C (initial)
Flash point	: 76 °C
Auto-ignition temperature	: 210 °C (petroleum distillate)
Decomposition temperature	: No data available
Flammability (solid, gas)	: Combustible liquid
Vapour pressure	: < 10 mm Hg @ 20°C
Relative vapour density at 20 °C	: > 3
Relative density	: 0.847
% Volatiles	: > 70 %
Solubility	: Insoluble in water. Reacts with water.
Log Pow	: No data available
Log Kow	: No data available
Viscosity, kinematic	: 3 - 5 cSt
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: 0.7 - 5 vol % (lower; upper: petroleum distillate)

### 9.2. Other information

No additional information available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

No additional information available

### 10.2. Chemical stability

Stable in sealed containers stored under a dry inert atmosphere.

# Gelest® UtenSil™ Dissolution Agent D1

## Safety Data Sheet

### 10.3. Possibility of hazardous reactions

No additional information available

### 10.4. Conditions to avoid

Heat. Open flame. Sparks.

### 10.5. Incompatible materials

Oxidizing agent.

### 10.6. Hazardous decomposition products

Organic acid vapors.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity : Oral: Harmful if swallowed.

#### Gelest® UtenSil™ Dissolution Agent D1

ATE CLP (oral)	500 mg/kg bodyweight
----------------	----------------------

#### Dodecylbenzene sulfonic acid (27176-87-0)

LD50 oral rat	650 mg/kg
ATE CLP (oral)	650 mg/kg bodyweight

Skin corrosion/irritation : Causes severe skin burns and eye damage.  
Serious eye damage/irritation : Causes serious eye damage.  
Respiratory or skin sensitisation : Not classified  
Germ cell mutagenicity : Not classified  
Carcinogenicity : Not classified  
Reproductive toxicity : Not classified  
STOT-single exposure : May cause respiratory irritation.  
STOT-repeated exposure : Not classified  
Aspiration hazard : May be fatal if swallowed and enters airways.  
Symptoms/effects after inhalation : May cause respiratory irritation. Petroleum Distillate can cause vertigo, incoordination and stupor at 5000ppm.  
Symptoms/effects after skin contact : Causes (severe) skin burns.  
Symptoms/effects after eye contact : Causes serious eye damage.  
Symptoms/effects after ingestion : May be fatal if swallowed and enters airways.  
Chronic symptoms : The related nonhydrotreated volatile petroleum distillate is a potential human carcinogen.  
Reason for classification : Expert judgment

## SECTION 12: Ecological information

### 12.1. Toxicity

Acute aquatic toxicity : Not classified  
Chronic aquatic toxicity : Not classified

### 12.2. Persistence and degradability

No additional information available

### 12.3. Bioaccumulative potential

No additional information available

### 12.4. Mobility in soil

No additional information available

### 12.5. Results of PBT and vPvB assessment

No additional information available

### 12.6. Other adverse effects

Other adverse effects : This substance may be hazardous to the environment.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Sewage disposal recommendations : Do not dispose of waste into sewer.  
Product/Packaging disposal recommendations : May be incinerated. Dispose in a safe manner in accordance with local/national regulations. Dispose of contents/container to licensed waste disposal facility.

# Gelest® UtenSil™ Dissolution Agent D1

## Safety Data Sheet

Ecology - waste materials : Avoid release to the environment.

### SECTION 14: Transport information

#### 14.1. UN number

In accordance with ADR / RID / IMDG / IATA / ADN

#### 14.1. UN number

UN-No. (ADR) : 2586  
UN-No. (IMDG) : 2586  
UN-No. (IATA) : 2586  
UN-No. (ADN) : 2586  
UN-No. (RID) : 2586

#### 14.2. UN proper shipping name

Proper Shipping Name (ADR) : ALKYL SULPHONIC ACIDS, LIQUID  
Proper Shipping Name (IMDG) : ALKYL SULPHONIC ACIDS, LIQUID  
Proper Shipping Name (IATA) : Alkylsulphonic acids, liquid  
Proper Shipping Name (ADN) : ALKYL SULPHONIC ACIDS, LIQUID  
Proper Shipping Name (RID) : ALKYL SULPHONIC ACIDS, LIQUID  
Transport document description (ADR) : UN 2586 ALKYL SULPHONIC ACIDS, LIQUID, 8, III, (E)  
Transport document description (IMDG) : UN 2586 ALKYL SULPHONIC ACIDS, LIQUID, 8, III  
Transport document description (IATA) : UN 2586 Alkylsulphonic acids, liquid, 8, III  
Transport document description (ADN) : UN 2586 ALKYL SULPHONIC ACIDS, LIQUID, 8, III  
Transport document description (RID) : UN 2586 ALKYL SULPHONIC ACIDS, LIQUID, 8, III

#### 14.3. Transport hazard class(es)

##### ADR

Transport hazard class(es) (ADR) : 8  
Danger labels (ADR) : 8



##### IMDG

Transport hazard class(es) (IMDG) : 8  
Danger labels (IMDG) : 8



##### IATA

Transport hazard class(es) (IATA) : 8  
Hazard labels (IATA) : 8



##### ADN

Transport hazard class(es) (ADN) : 8  
Danger labels (ADN) : 8

# Gelest® UtenSil™ Dissolution Agent D1

## Safety Data Sheet



### RID

Transport hazard class(es) (RID) : 8  
Danger labels (RID) : 8



### 14.4. Packing group


Packing group (ADR) : III  
Packing group (IMDG) : III  
Packing group (IATA) : III  
Packing group (ADN) : III  
Packing group (RID) : III

### 14.5. Environmental hazards

Dangerous for the environment : No  
Marine pollutant : No  
Other information : No supplementary information available

### 14.6. Special precautions for user

#### - Overland transport

Classification code (ADR) : C3  
Limited quantities (ADR) : 5I  
Excepted quantities (ADR) : E1  
Packing instructions (ADR) : P001, IBC03, LP01, R001  
Mixed packing provisions (ADR) : MP19  
Portable tank and bulk container instructions (ADR) : T4  
Portable tank and bulk container special provisions (ADR) : TP1  
Tank code (ADR) : L4BN  
Vehicle for tank carriage : AT  
Transport category (ADR) : 3  
Special provisions for carriage - Packages (ADR) : V12  
Hazard identification number (Kemler No.) : 80  
Orange plates : 

Tunnel restriction code (ADR) : E  
EAC code : 2X

#### - Transport by sea

Limited quantities (IMDG) : 5 L  
Excepted quantities (IMDG) : E1  
Packing instructions (IMDG) : P001, LP01  
IBC packing instructions (IMDG) : IBC03  
Tank instructions (IMDG) : T4  
Tank special provisions (IMDG) : TP1  
EmS-No. (Fire) : F-A  
EmS-No. (Spillage) : S-B

# Gelest® UtenSil™ Dissolution Agent D1

## Safety Data Sheet

Stowage category (IMDG) : B  
Properties and observations (IMDG) : Liquids usually with a pungent odour. When involved in a fire, evolve highly toxic gases. Corrosive to most metals. Cause burns to skin, eyes and mucous membranes.

### - Air transport

PCA Excepted quantities (IATA) : E1  
PCA Limited quantities (IATA) : Y841  
PCA limited quantity max net quantity (IATA) : 1L  
PCA packing instructions (IATA) : 852  
PCA max net quantity (IATA) : 5L  
CAO packing instructions (IATA) : 856  
CAO max net quantity (IATA) : 60L  
ERG code (IATA) : 8L

### - Inland waterway transport

Classification code (ADN) : C3  
Limited quantities (ADN) : 5 L  
Excepted quantities (ADN) : E1  
Carriage permitted (ADN) : T  
Equipment required (ADN) : PP, EP  
Number of blue cones/lights (ADN) : 0

### - Rail transport

Classification code (RID) : C3  
Limited quantities (RID) : 5L  
Excepted quantities (RID) : E1  
Packing instructions (RID) : P001, IBC03, LP01, R001  
Mixed packing provisions (RID) : MP19  
Portable tank and bulk container instructions (RID) : T4  
Portable tank and bulk container special provisions (RID) : TP1  
Tank codes for RID tanks (RID) : L4BN  
Transport category (RID) : 3  
Special provisions for carriage – Packages (RID) : W12  
Colis express (express parcels) (RID) : CE8  
Hazard identification number (RID) : 80

### 14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable

## SECTION 15: Regulatory information

### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

#### 15.1.1. EU-Regulations

Contains no REACH substances with Annex XVII restrictions  
Contains no substance on the REACH candidate list  
Contains no REACH Annex XIV substances

% Volatiles : > 70 %

#### 15.1.2. National regulations

##### Germany

Reference to AwSV : Water hazard class (WGK) 2, significant hazard to water (Classification according to AwSV, Annex 1)

12th Ordinance Implementing the Federal Immission Control Act - 12.BImSchV : Is not subject of the 12. BImSchV (Hazardous Incident Ordinance)

##### Netherlands

SZW-lijst van kankerverwekkende stoffen : None of the components are listed

SZW-lijst van mutagene stoffen : None of the components are listed



# Gelest® UtenSil™ Dissolution Agent D1

## Safety Data Sheet

NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Borstvoeding : None of the components are listed  
NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Vruchtbaarheid : None of the components are listed  
NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Ontwikkeling : None of the components are listed

### Denmark

Class for fire hazard : Class III-1  
Store unit : 50 liter  
Classification remarks : Flammable according to the Danish Ministry of Justice; Emergency management guidelines for the storage of flammable liquids must be followed  
Danish National Regulations : Young people below the age of 18 years are not allowed to use the product

### 15.2. Chemical safety assessment

No additional information available

## SECTION 16: Other information

Abbreviations and acronyms:

Abbreviations: ND: Not Determined, No Data; NA: Not Applicable; LD: Lethal Dose; LC: Lethal Concentration; ATE: Acute Toxicity Estimates; H: hour; °: °C unless otherwise stated; mm: millimeters Hg, torr; PEL: permissible exposure level; TWA: time weighted average; TLV: threshold limit value; TG: Test Guideline; NIOSH: National Institute for Occupational Safety and Health; IARC: International Agency for Research on Cancer; NTP: National Toxicology Program; HMIS: Hazardous Material Information System; CAS No.: Chemical Abstract Service Registration Number; EC No.: European Commission Registration Number; EC Index No.: European Commission Index Number; OECD: The Organisation for Economic Co-operation and Development; GHS: The Globally Harmonized System of Classification and Labelling; APF: Assigned Protection Factor

Other information : Prepared by safety and environmental affairs.

Full text of H- and EUH-statements:

Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Asp. Tox. 1	Aspiration hazard, Category 1
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Skin Corr. 1C	Skin corrosion/irritation, Category 1C
Skin Irrit. 2	Skin corrosion/irritation, Category 2
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.

SDS EU (REACH Annex II) - Custom

*The information contained in this document has been gathered from reference materials and/or Gelest, Inc. test data and is to the best knowledge and belief of Gelest, Inc. accurate and reliable. Such information is offered solely for your consideration, investigation and verification. It is not suggested or guaranteed that the hazard precautions or procedures described are the only ones which exist. Gelest, Inc. makes no warranties, express or implied, with respect to the use of such information and assumes no responsibility therefore. Information on this safety data sheet is not intended to constitute a basis for product specifications.*

© 2018 Gelest Inc. Morrisville, PA 19067

## UtenSil® Wetting Agent W1

### Hydrophilic Modification Solution for Reprographic Grade Silicones

#### Description

UtenSil® Wetting Agent W1 increases the wettability of reprographic silicone surfaces.

#### Solution Properties

Form	clear, colorless
Solids	5-7 wt%
Flashpoint	6°C
Specific Gravity	0.88
Viscosity	1.0-2.0 cSt
Contact Angle, water (1mm thickness)	20°

#### Shelf life

12 months when stored below 25°C in sealed containers. Keep container sealed after dispensing product.

#### Application Methods

Immerse oxygen plasma treated reprographic silicone into UtenSil® Wetting Agent W1 for 1 hour. (Reprographic silicones with a thickness >1mm may require longer immersion time in UtenSil® Solution.) Dip the silicone into ethanol to remove excess material. Cure wetting agent on silicone surface at 100°C over 2 hours.

#### Standard Packaging

PP1-USW1 UtenSil® Wetting Agent W1  
100 g  
1 kg

## UtenSil® Dissolution Agent D1

### Digestion Solution for Reprographic Grade Silicones

#### Description

UtenSil® Dissolution Agent D1 is a cleaning solvent that chemically reacts and dissolves silicones.

#### Solution Properties

Form	amber-light brown
Solids	20-30 wt%
Flashpoint	93°C
Specific Gravity	0.85
Viscosity	5-10 cSt

#### Shelf life

12 months when stored below 25°C in sealed containers. Keep container sealed after dispensing product.

#### Application Methods

Place silicone to be dissolved in a stainless steel or glass container which may be covered to reduce evaporation. Remove any water on the silicone by physical drying or heating in an oven. Immerse silicone in UtenSil® Dissolution Agent D1 solution at room temperature. Dissolution time depends on the type of silicone, thickness and surface area. A typical silicone with a 5 mm section thickness will dissolve in 4-8 hours. Dissolution can be accelerated by warming to 35-50°C. Spot dissolution can be achieved by deposition of Dissolution Agent D1 with a pipette and removing the dissolved material with a pipette, followed by a brief acetone and water rinse.

#### Standard Packaging

PP1-USD1 UtenSil® Dissolution Agent D1  
100 g  
1 kg