

SAFETY DATA SHEET

1. Identification

Product identifier	S-Hydroprene Solution	
Other means of identification		
Item	S-13189A1	
Recommended use	For Laboratory Use Only	
Recommended restrictions	None known.	
Manufacturer/Importer/Supplier	/Distributor information	
Manufacturer		
Company name Address	Chem Service, Inc. 660 Tower Lane West Chester, PA 19380 United States	
Telephone	Toll Free Direct	800-452-9994 610-692-3026
Website E-mail Emergency phone number	www.chemservice.com info@chemservice.com Chemtrec US Chemtrec outside US	800-424-9300 +1 703-527-3887
2. Hazard(s) identification		
Physical hazards	Flammable liquids	Categor

Physical hazards	Flammable liquids	Category 2
Health hazards	Acute toxicity, oral	Category 3
	Acute toxicity, dermal	Category 3
	Acute toxicity, inhalation	Category 4
	Serious eye damage/eye irritation	Category 2A
Environmental hazards	Not classified.	
OSHA defined hazards	Not classified.	

Label elements



Signal word	Danger
Hazard statement	Highly flammable liquid and vapor. Toxic if swallowed. Toxic in contact with skin. Causes serious eye irritation. Harmful if inhaled.
Precautionary statement	
Prevention	Keep away from heat/sparks/open flames/hot surfaces No smoking. Use only outdoors or in a well-ventilated area. Keep container tightly closed. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Avoid breathing vapors. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Wear protective gloves/protective clothing. Wear protective gloves/eye protection/face protection.
Response	If swallowed: Immediately call a poison center/doctor. If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. If inhaled: Remove person to fresh air and keep comfortable for breathing. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a poison center/doctor if you feel unwell. Specific treatment (see this label). Rinse mouth. If eye irritation persists: Get medical advice/attention. Take off immediately all contaminated clothing and wash it before reuse. In case of fire: Use appropriate media to extinguish.
Storage	Store in a well-ventilated place. Keep cool. Store locked up.
Disposal	Dispose of contents/container in accordance with local/regional/national/international regulations.
Hazard(s) not otherwise classified (HNOC)	Static accumulating flammable liquid can become electrostatically charged even in bonded and grounded equipment. Sparks may ignite liquid and vapor. May cause flash fire or explosion.
Supplemental information	0.01% of the mixture consists of component(s) of unknown acute dermal toxicity. 0.01% of the mixture consists of component(s) of unknown acute inhalation toxicity.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
Acetonitrile		75-05-8	>99
S-Hydroprene		65733-18-8	0.01

*Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. First-aid measures

4. Filst-alu measules	
Inhalation	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Oxygen or artificial respiration if needed. Do not use mouth-to-mouth method if victim inhaled the substance. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Call a POISON CENTER or doctor/physician if you feel unwell.
Skin contact	Take off immediately all contaminated clothing. Rinse skin with water/shower. Call a POISON CENTER or doctor/physician if you feel unwell. Get medical attention if irritation develops and persists.
Eye contact	Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.
Ingestion	Call a physician or poison control center immediately. Rinse mouth. Do not induce vomiting without advice from poison control center. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. Do not use mouth-to-mouth method if victim ingested the substance. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.
Most important symptoms/effects, acute and delayed	Symptoms may include stinging, tearing, redness, swelling, and blurred vision.
Indication of immediate medical attention and special treatment needed	Provide general supportive measures and treat symptomatically. Thermal burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital. In case of shortness of breath, give oxygen. Keep victim warm. Keep victim under observation. Symptoms may be delayed.
General information	Take off immediately all contaminated clothing. In the case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Wash contaminated clothing before reuse.
5. Fire-fighting measures	
Suitable extinguishing media	Alcohol resistant foam. Water fog. Carbon dioxide (CO2). Dry chemical powder, carbon dioxide, sand or earth may be used for small fires only.
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.
Specific hazards arising from the chemical	Vapors may form explosive mixtures with air. Vapors may travel considerable distance to a source of ignition and flash back. This product is a poor conductor of electricity and can become electrostatically charged. If sufficient charge is accumulated, ignition of flammable mixtures can occur. To reduce potential for static discharge, use proper bonding and grounding procedures. This liquid may accumulate static electricity when filling properly grounded containers. Static electricity accumulation may be significantly increased by the presence of small quantities of water or other contaminants. Material will float and may ignite on surface of water. During fire, gases hazardous to health may be formed.
Special protective equipment and precautions for firefighters	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Fire-fighting equipment/instructions	In case of fire and/or explosion do not breathe fumes. Move containers from fire area if you can do so without risk.
Specific methods	Use standard firefighting procedures and consider the hazards of other involved materials.
General fire hazards	Highly flammable liquid and vapor.
6 Accidental release mea	sures

6. Accidental release measures

Personal precautions,	Immediately evacuate personnel to safe areas. Keep unnecessary personnel away. Keep people
protective equipment and	away from and upwind of spill/leak. Keep out of low areas. Eliminate all ignition sources (no
emergency procedures	smoking, flares, sparks, or flames in immediate area). Wear appropriate protective equipment and
• • • •	clothing during clean-up. Avoid inhalation of vapors. Fully encapsulating, vapor protective clothing
	should be worn for spills and leaks with no fire. Do not touch damaged containers or spilled
	material unless wearing appropriate protective clothing. Ventilate closed spaces before entering
	them. Use appropriate containment to avoid environmental contamination. Transfer by mechanical
	means such as vacuum truck to a salvage tank or other suitable container for recovery or safe
	disposal. Local authorities should be advised if significant spillages cannot be contained. For
	personal protection, see section 8 of the SDS.

Methods and materials for containment and cleaning up	Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Take precautionary measures against static discharge. Use only non-sparking tools. Keep combustibles (wood, paper, oil, etc.) away from spilled material.	
	Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Prevent entry into waterways, sewer, basements or confined areas. Following product recovery, flush area with water.	
	Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.	
Environmental precautions	Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS. Avoid discharge into drains, water courses or onto the ground. Use appropriate containment to avoid environmental contamination.	
7. Handling and storage		
Precautions for safe handling	Vapors may form explosive mixtures with air. Do not handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. Minimize fire risks from flammable and combustible materials (including combustible dust and static accumulating liquids) or dangerous reactions with incompatible materials. Handling operations that can promote accumulation of static charges include but are not limited to: mixing, filtering, pumping at high flow rates, splash filling, creating mists or sprays, tank and container filling, tank cleaning, sampling, gauging, switch loading, vacuum truck operations. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Use non-sparking tools and explosion-proof equipment. Do not taste or swallow. Avoid breathing vapor. Avoid contact with skin. Avoid contact with eyes. Avoid prolonged exposure. Avoid contact with clothing. Use only outdoors or in a well-ventilated area. Wear appropriate personal protective equipment. Observe good industrial hygiene practices. When using, do not eat, drink or smoke. Wash hands thoroughly after handling. Wash contaminated clothing before reuse.	
Conditions for safe storage, including any incompatibilities	Store locked up. Keep away from heat, sparks and open flame. Prevent electrostatic charge build-up by using common bonding and grounding techniques. Avoid spark promoters. Eliminate sources of ignition. Ground/bond container and equipment. These alone may be insufficient to remove static electricity. Store in original tightly closed container. Store in a cool, dry place out of direct sunlight. Store in a well-ventilated place. Refrigeration recommended. Store away from incompatible materials (see Section 10 of the SDS). Keep in an area equipped with sprinklers.	
8. Exposure controls/personal protection		

Components	Туре	Value	
Acetonitrile (CAS 75-05-8)	PEL	70 mg/m3	
		40 ppm	
US. ACGIH Threshold Limit Value	s		
Components	Туре	Value	
Acetonitrile (CAS 75-05-8)	TWA	20 ppm	
US. NIOSH: Pocket Guide to Cher	nical Hazards		
Components	Туре	Value	
Acetonitrile (CAS 75-05-8)	TWA	34 mg/m3	
		20 ppm	
logical limit values No I	piological exposure lim	its noted for the ingredient(s).	
oosure guidelines			
US - California OELs: Skin desigr	ation		
Acetonitrile (CAS 75-05-8)		Can be absorbed through the skin.	
US - Minnesota Haz Subs: Skin d	esignation applies		
Acetonitrile (CAS 75-05-8)		Skin designation applies.	
US ACGIH Threshold Limit Value	s: Skin designation		
Acetonitrile (CAS 75-05-8)		Can be absorbed through the skin.	

Appropriate engineering controls	Explosion-proof general and local exhaust ventilation. Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Provide eyewash station.
Individual protection measures,	such as personal protective equipment
Eye/face protection	Wear eye/face protection. Wear safety glasses with side shields (or goggles).
Skin protection	
Hand protection	Wear protective gloves.
Other	Wear appropriate chemical resistant clothing.
Respiratory protection	If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn.
Thermal hazards	Wear appropriate thermal protective clothing, when necessary.
General hygiene considerations	When using, do not eat, drink or smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties

-	-
Appearance	
Physical state	Liquid.
Form	Liquid
Color	Not available.
Odor	Not available.
Odor threshold	Not available.
рН	Not available.
Melting point/freezing point	-49 °F (-45 °C) estimated
Initial boiling point and boiling range	178.88 °F (81.6 °C) estimated
Flash point	42.0 °F (5.6 °C) estimated
Evaporation rate	Not available.
Flammability (solid, gas)	Not available.
Upper/lower flammability or expl	osive limits
Flammability limit - lower (%)	3 % estimated
Flammability limit - upper (%)	16 % estimated
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	118.39 hPa estimated
Vapor density	Not available.
Relative density	Not available.
Solubility(ies)	
Solubility (water)	Not available.
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	975.2 °F (524 °C) estimated
Decomposition temperature	Not available.
Viscosity	Not available.
Other information	
Density	0.7873 g/cm3 estimated
Flammability class	Flammable IB estimated
Percent volatile	99.99 % estimated
Specific gravity	0.79 estimated
VOC (Weight %)	99.99 % estimated

10. Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	Hazardous polymerization does not occur.
Conditions to avoid	Avoid heat, sparks, open flames and other ignition sources. Avoid temperatures exceeding the flash point. Contact with incompatible materials.
Incompatible materials	Strong oxidizing agents.
Hazardous decomposition products	No hazardous decomposition products are known.

11. Toxicological information

Information on likely routes of	exposure
Ingestion	Toxic if swallowed.
Inhalation	Harmful if inhaled.
Skin contact	Toxic in contact with skin.
Eye contact	Causes serious eye irritation.
Symptoms related to the physical, chemical and toxicological characteristics	Symptoms may include stinging, tearing, redness, swelling, and blurred vision.

Information on toxicological effects

Acute toxicity	Toxic if swallowed. Toxic in contact with skin. Harmful if inhaled. Expected to be a low hazard for
-	usual industrial or commercial handling by trained personnel.

Components	Species	Test Results
Acetonitrile (CAS 75-05-8)		
Acute		
Dermal		
LD50	Rabbit	390 mg/kg
		0.5 ml/kg
Inhalation		
LC100	Dog	16000 ppm, 4 Hours
LC50	Guinea pig	5655 ppm, 4 Hours
	Mouse	3587 ppm, 4 Hours
		2693 ppm, 1 Hours
	Rabbit	2825 ppm, 4 Hours
	Rat	17100 ppm, 4 Hours
		7500 ppm, 8 Hours
		330 ppm, 90 Days
		75 mg/l
Oral		-
LD50	Guinea pig	140 mg/kg
		0.177 ml/kg
	Mouse	269 mg/kg
	Rat	158 mg/kg
		1.68 - 4.49 ml/kg
Other		Jan 19
LD50	Mouse	0.25 g/kg
	Rat	1100 mg/kg
		0.85 ml/kg
S-Hydroprene (CAS 65733-18	-8)	Ğ
Acute	,	
Oral		
LD50	Dog	> 10000 mg/kg
	Rat	> 5100 mg/kg

Components	Species	Test Results
Other		
LD50	Rabbit	> 5100 mg/kg
	be based on additional component da	
Skin corrosion/irritation	Prolonged skin contact may cause	temporary irritation.
Serious eye damage/eye irritation	Causes serious eye irritation.	
Respiratory or skin sensitizatio	n	
Respiratory sensitization	Not available.	
Skin sensitization	This product is not expected to cau	
Germ cell mutagenicity	No data available to indicate produ mutagenic or genotoxic.	ict or any components present at greater than 0.1% are
Carcinogenicity	This product is not considered to b	e a carcinogen by IARC, ACGIH, NTP, or OSHA.
US. OSHA Specifically Reg Not listed.	ulated Substances (29 CFR 1910.1)	001-1050)
Reproductive toxicity	This product is not expected to cau	use reproductive or developmental effects.
Specific target organ toxicity - single exposure	Not classified.	
Specific target organ toxicity - repeated exposure	Not classified.	
Aspiration hazard	Not available.	
Chronic effects	Prolonged inhalation may be harm	ful.
12. Ecological information	n	
Ecotoxicity	The product is not classified as en	vironmentally hazardous. However, this does not exclude the ills can have a harmful or damaging effect on the environment
Components	Species	Test Results
Acetonitrile (CAS 75-05-8)		
Aquatic		
Fish	LC50 Fathead minnow (F	Pimephales promelas) > 100 mg/l, 96 hours
* Estimates for product may t	be based on additional component da	
Persistence and degradability	No data is available on the degrad	ability of this product.
Bioaccumulative potential	No data available.	
Partition coefficient n-octar Acetonitrile	nol / water (log Kow) -0.	34
Mobility in soil	No data available.	
Other adverse effects		ffects (e.g. ozone depletion, photochemical ozone creation bal warming potential) are expected from this component.
13. Disposal consideratio	ns	
Disposal instructions	and its container must be disposed sewers/water supplies. Do not con	ealed containers at licensed waste disposal site. This materia d of as hazardous waste. Do not allow this material to drain in taminate ponds, waterways or ditches with chemical or used tainer in accordance with local/regional/national/international
Local disposal regulations	Dispose in accordance with all app	licable regulations.
Hazardous waste code	The waste code should be assigne disposal company.	ed in discussion between the user, the producer and the waste
US RCRA Hazardous Waste Acetonitrile (CAS 75-05-		03
Waste from residues / unused products	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).	
Contaminated packaging	Empty containers should be taken	to an approved waste handling site for recycling or disposal. ain product residue, follow label warnings even after container

14. Transport information

DOT

DOT	
UN number	UN1648
UN proper shipping name	Acetonitrile, solution
Transport hazard class(es)	
Class	3
Subsidiary risk	
Label(s)	3
Packing group	II
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.
Special provisions	IB2, T7, TP2
Packaging exceptions	150
Packaging non bulk	202
Packaging bulk	242
ΙΑΤΑ	
UN number	UN1648
UN proper shipping name	Acetonitrile solution
Transport hazard class(es)	
Class	3
Subsidiary risk	-
Packing group	I
Environmental hazards	No.
ERG Code	3L
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.
Other information	
Passenger and cargo	Allowed.
aircraft	
Cargo aircraft only	Allowed.
IMDG	
UN number	UN1648
UN proper shipping name	ACETONITRILE SOLUTION
Transport hazard class(es)	
Class	3
Subsidiary risk	-
Packing group	II
Environmental hazards	
Marine pollutant	No.
EmS	F-E, S-D
· ·	• Read safety instructions, SDS and emergency procedures before handling.
Transport in bulk according to	Not available.
Annex II of MARPOL 73/78 and	
the IBC Code	
DOT	
FLAMMABLE	
TEAWIWADLE	
3	

IATA; IMDG



15. Regulatory information

US federal regulations	This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200. One or more components are not listed on TSCA.			
TSCA Section 12(b) Export	Notification (40 CFR 707, Su	ıbpt. D)		
Not regulated. CERCLA Hazardous Subst	ance List (40 CFR 302.4)			
Acetonitrile (CAS 75-05-		Listed.		
SARA 304 Emergency relea	-			
Not regulated. US. OSHA Specifically Reg Not listed.	ulated Substances (29 CFR	1910.1001-1050)		
Superfund Amendments and R	agutharization Act of 1986 (
Hazard categories	Immediate Hazard - Yes Delayed Hazard - No Fire Hazard - Yes Pressure Hazard - No Reactivity Hazard - No	DARA)		
SARA 302 Extremely hazar	dous substance			
Not listed.	No			
SARA 311/312 Hazardous chemical	No			
SARA 313 (TRI reporting)				
Chemical name		CAS number	% by wt.	
Acetonitrile		75-05-8	>99	
Other federal regulations				
	n 112 Hazardous Air Polluta	nts (HAPs) List		
Acetonitrile (CAS 75-05-		D	60 400	
	n 112(r) Accidental Release	Prevention (40 CFR	68.130)	
Not regulated. Safe Drinking Water Act (SDWA)	Not regulated.			
US state regulations				
US. Massachusetts RTK - S	Substance List			
Acetonitrile (CAS 75-05-				
•	d Community Right-to-Know	Act		
Acetonitrile (CAS 75-05- US. Pennsylvania RTK - Ha		500 LBS		
Acetonitrile (CAS 75-05-				
US. Rhode Island RTK				
Acetonitrile (CAS 75-05-	8)			
	65 Water and Toxic Enforcement listed as carcinogens or reproc		ition 65): This material is	not known to contain
International Inventories				
Country(s) or region	Inventory name			On inventory (yes/no)*
Australia	Australian Inventory of Che	mical Substances (A	ICS)	Yes
Canada	Domestic Substances List (DSL)		No
Canada	Non-Domestic Substances	List (NDSL)		No
China	Inventory of Existing Chem	ical Substances in Cl	hina (IECSC)	No
Europe	European Inventory of Exis Substances (EINECS)	ting Commercial Che	emical	No
Europe	European List of Notified C	hemical Substances	(ELINCS)	No
Japan	Inventory of Existing and N	ew Chemical Substa	nces (ENCS)	No
Korea	Existing Chemicals List (EC	CL)		No
New Zealand	New Zealand Inventory			No
Philippines	Philippine Inventory of Che (PICCS)	micals and Chemical	Substances	No

United States & Puerto Rico Toxic Substances Control Act (TSCA) Inventory

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s) A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

Issue date	07-07-2014
Version #	01
NFPA ratings	Health: 2 Flammability: 3 Instability: 0
Disclaimer	The above information is believed to be correct on the date it was last revised and must not be considered all inclusive. The information has been obtained only by a search of available literature and is only a guide for handling the chemicals. OSHA regulations require that if other hazards become evident, an upgraded SDS must be made available to the employee within three months. RESPONSIBILITY for updates lies with the employer and not with CHEM SERVICE, Inc.
	Persons not specifically and properly trained should not handle this chemical or its container. This product is furnished FOR LABORATORY USE ONLY! Our products may NOT BE USED as drugs, cosmetics, agricultural or pesticide products, food additives or as household chemicals.
	This Safety Data Sheet (SDS) is intended only for use with Chem Service, Inc. products and should not be relied on for use with materials from any other supplier even if the chemical name(s) on the product are identical! Whenever using an SDS for a solution or mixture the user should refer to the SDS for every component of the solution or mixture. Chem Service warrants that this SDS is based upon the most current information available to Chem Service at the time it was last revised. THIS WARRANTY IS EXCLUSIVE, AND CHEM SERVICE, INC. MAKES NO OTHER WARRANTY, EXPRESSED OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE. This SDS is provided gratis and CHEM SERVICE, INC. SHALL NOT BE LIABLE FOR ANY INCIDENTAL, CONSEQUENTIAL OR CONTINGENT DAMAGES.
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