MATERIAL SAFETY DATA SHEET

ASI 405 Vinyl Seal

1. Chemical Product and Company Identification

PRODUCT: ASI #405 V/S SILICONE SEALANT

Manufactured by: American Sealants, Inc.
3806 Option Pass
Fort Wayne, IN 46818

Revised: 02/01/2006
Issued: 02/01/2004

Phone: (260) 489-0728
Fax: (260) 489-0519
Emergency Phone # (800) 535-5053 (InfoTrac)

2. Composition/Information of Ingredients

Chemical characterization (preparation):
Chemical characteristics: Polydimethylsiloxane + filler + auxiliary products +alkoxysilane cross-linker

Information on ingredients:

Type	CAS No.	Substance	Contents (wt.%)		Note
			Lower	Upper	
INHA	1185-55-3	Trimethoxy methylsilane	1.0	5.0	
INHA	Trade Secret	Amino Functional alkoxyalkysiloxane	1.0	5.0	
INHA	2768-02-7	Trimethoxy vinylsilane	1.0	5.0	

Type: HYD - by - products upon hydrolysis, INHA -ingredient, NEBE - by product, MONO-residual monomer, VERU-impurity, VUL-by product upon vulcanization. ***NOTE: C1 - IARC carcinogen, C2-NTP carcinogen, C3-OSHA carcinogen, NH-non-hazardous, R-Reproductive toxin.

3. Hazards Identification

Hazards Classifications
HMIS rating (product as packaged)
Health: 1 Fire:1 Reactivity: 1 PPE: G
Note: Respiratory protection is only recommended in the event that ventilation or engineering controls are unable to maintian exposures below recommended levels; or in the event of a spill or other emergency response situation. Hazardous Material Identification System and HMIS are registered trademarks of the National Paint and Coating Association.

Canadian WHMIS Classification: None

Emergency Overview and potential hazards: This material is not hazardous under OSHA criteria. This material is not hazardous under WHMIS criteria
Physical Hazards: No known physical hazards.
Acute health effects:

Route of entry or possible contact: Eyes, skin, inhalation (hydrolysis products), ingestion
Eye contact: May cause slight eye irritation
Skin contact: May cause slight skin irritation
Inhalation: Not expected due to high viscosity. Section 3 "Additional Information on acute health

effects"

Ingestion: Not expected in industrial use.

Addition information on acute health effects: The toxicological evaluation is in accordance with test result(s) of an/some ingredients(s). This material releases methanol (methyl alcohol) upon moisture curing. Upon completion of the curing process, methanol will no longer be released. According to literature methanol (CAS-No. 67-56-1) irritates mucous membranes, has skin drying and narcotic effects up to coma or death. Absorption by the skin is possible. Possibility of damage to heart, kidneys, liver and optic nerves (blindness) over a period of time.

Further Information:

Chronic health effects: None known. By-products: See Additional Information on acute health effects.

Medical conditions which may be aggravated by exposure: Unknown

Carcinogens/Reproductive toxins: This material does not contain any reproductive toxins at or above OSHA or WHMIS reportable levels. Exposure to carcinogens cannot occur under normal conditions of use or during foreseeable emergencies.

4. FIRST AID MEASURES

General Information: In case of sickness seek medical advice (show label if possible)

After Inhalation: If inhaled, remove to fresh air. Get medical attention if symptoms occur. Show Label

After Contact with the skin: Remove material with a waterless skin cleaner from skin and clothing. Wash then with plenty of water or water and soap. Get medical attention if symptoms occur.

After contact with eyes: If contact with eyes, immediately flush eyes with plenty of water. Get medical attention if irritation occurs.

After swallowing: Drink plenty of water. Get medical attention immediately. Show label.

5. FIRE FIGHTING MEASURES

Flammable Properties:

Flash Point:	Not applicable
Boiling Point	Not applicable
Lower explosion limit (LEL)	Not applicable
Upper explosion limit (UEL)	Not applicable
Autoignition temperature:	>400°C (>72°F)
Fire and explosion hazards:	Consider possible formation of explosive mixtures with air, for example in uncleaned containers
Recommended Extinguishing media:	Water-spray jet, carbon dioxide, dry chemical or alcohol-resistant foam-type extinguishing media.
Unsuitable extinguishing media:	Sharp water jet

Special exposure hazards arising from the substance or preparation itself, combustion productions, resulting gases:

Fire fighting procedures: Cool endangered containers with water. Fire fighters should wear full protective clothing including a self-contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES

Precautions: Wear personal protection equipment (see section 8). Avoid contact with eyes and skin. Avoid inhaling mists and vapours. If material is released indicate risk of slipping.

Containment: Do not introduce into waters, sewage water or soil. Dam in any fluid that runs out using suitable material (e.g. earth).

Spills of material which could reach surface water must be reported to the United States Coast Guard National Response Center's toll free phone number (800) 424-8802

Methods for Cleaning Up: Do not flush away with water. Take up mechanically and dispose of according to local/State/federal regulations. Absorb with a liquid binding material such as diatomaceous earth and dispose of according to local/state/federal regulations. Clean any slippery coating that remains using a cold cleaner. (e.g. petroleum naphtha or a water/surfactant mix).

Further Information: Eliminate all sources of ignition.

7. HANDLING AND STORAGE

Handling

Precautions for Safe handling:

Ensure adequate ventilation. Keep away from incompatible substances in accordance with section 10. Spilled substance increases risk of slipping.

Precautions against fire and explosion

Formation of explosive mixtures with air, also in empty, uncleaned containers. Keep away from sources of ignition and do not smoke. Take precautionary measures against electrostatic charging. Cool endangered containers with water.

Storage:

Conditions for storage rooms and vessels: -

Advice for storage of incompatible materials: -

Further information for storage: Protect against moisture. Keep container tightly closed and store in a cool, well ventilated place.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls:

Ventilation: Use only with adequate ventilation

Local Exhaust: Recommended

Associate substances with Specific Control parameters such as limit values Threshold limit values (TLV).

CAS No.	Material	Type	mg/m^3	ppm	Dust Fract.
67-56-1	Methanol	OSHA PEL	260.00	200.0	
67-56-1	Methanol	ACGIH TWA		200.0	

Re Methanol: STEL is 250 ppm, skin notation (ACGIH); STEL is 250 ppm, skin notation (NIOSH).

Personal protection equipment (PPE)

Respiratory Protection: In case of long or strong exposure use a NIOSH approved respirator for: organic vapors.

Hand protection: Rubber gloves

Eye Protection: Chemical safety goggles

Other protective clothing or equipment: Protective clothing

General hygiene and protection measures: Avoid contact with eyes, skin and clothing. Avoid breathing dust/vapor/mist/gas/ aerosol. Do not eat, drink or smoke when handling. Wash thoroughly after handling.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Form:	Paste
Color:	See cartridge
Odor:	Pleasant

Safety parameters:

Melting Point:	Not applicable
Boiling Point:	Not Applicable
Flash Point:	Not applicable
Autoignition temperature:	>400°C (>752°F)
Lower explosion limit (LEL)	Not applicable
Upper explosion limit (UEL)	Not applicable
Vapor pressure:	Not applicable
Density:	0.99-1.3 g/cm3 at 25°C (77°F)
Solubility in Water	Virtually insoluble
ph-Value	Not applicable

Further information:

Re. Solubility in Water: Hydrolytic decomposition occurs. Explosion limits for released methanol: 5.5-44% (V)
Thermal decomposition: Not applicable.

10. STABILITY AND REACTIVITY

General Information: If stored and handled in accordance with standard industrial practices no hazardous reactions are known.
Conditions to avoid: Moisture
Materials to avoid: Reacts with basic substances, acids, and water to form methanol.
Hazardous decomposition products: Under the effects of humidity: methanol. Measurements have shown the formation of small amounts of formaldehyde at temperatures above about 150°C (302°F) through oxidation.
Further information: Hazardous polymerization cannot occur.

11. TOXILOGICAL INFORMATION

General information: Toxicological testing has not been conducted with this material.

12. ECOLOGICAL INFORMATION

Information on elimination (persistence and degradability)

Biodegradation/further information: Biologically not degradable.
Further Information:

Behavior in environmental compartments
Further informaton: Bioaccumulation improbable.

Extoxicolgical effects: According to past experience toxicity to fish is improbable.
Effects in sewage treatment plants (bacteria toxicity: respiration-/reproduction inhibition):
According to present experience, no adverse effects on water purification plants.
Further ecological information:
General information:
In cross-linked state not soluble in water. Easily separable from water by filtration.

13. DISPOSAL CONSIDERATIONS

Product disposal

Recommendation: Dispose of according to regulations by incineration in a special waste incinerator. Small quantities may be disposed of in a domestic waste incinerator. Observe local/state/federal regulations.

Packaging Disposal:

Recommendations: Completely discharge containers (no tear drops, no powder rest, scraped carefully). Containers may be recycled or re-used. Observe local/state/federal regulations.

14. TRANSPORT INFORMATION

US DOT & Canada TDG Surface:
Valuation: Not regulated
Transport by sea IMDG-Code
Valuation: Not regulated
Air Transport ICAO-TI/IATA-DGR
Valuation: Not regulated

15. REGULATORY INFORMATION

U.S. Federal regulations:

TSCA inventory status and TSCA information: This material or its components are listed on or are in compliance with the requirements of the TSCA Chemical Substance Inventory

TSCA 12 (b) Export Notification

CAS No.	Chemical	Reporting required under TSCA
Trade Secret	Amino functional alkoxyalkysiloxane	Annual 12(b) Export Notification Required under Section 5 of TSCA

US State regulations:

This material contains no substances at or above the reportable levels which are listed on one of the following lists: SARA Title III Section 302 Extremely Hazardous substances, SARA Title III Section 313 Toxicity Chemicals, National Toxicology Program (NTP) Annual Report Carcinogens, International Agency for Research on Cancer (IARC) Human Carcinogens (Group 1, 2A or 2B), OSHA highly Hazardous chemicals, California Safe Drinking Water and Toxic Enforcement Act (Proposition 65) Substances (Carcinogens/Reproductive toxins), Massachusetts Substance List, New Jersey Right To Know Hazardous Substance List, Pennsylvania Hazardous Substance List.

Canadian regulations:

This product has been classified in accordance with the Hazard Criteria of the CPR and The MSDS contains all the information required by the CPR.

WHMIS Hazard Classes: None

DSL Status: This material or one or more of its components is not listed on the Canadian Domestic Substances List

Non-DSL Chemicals:

CAS No.	Chemical	Upper Limit Wt. %
Trade Secret	Amino Functional alkoxyalkylsiloxane	1.7

Canadian International Regulations:

EU Risk Phrases

R-Phase	Description
R-	-

Canadian International Regulations:

EU Safety Phrases

R-Phase	Description
S-	-

16. OTHER INFORMATION

Additional Information:

These data are offered in good faith as typical values and not as a product specification. No warranty, whether expressed or implied, is made. The recommended handling procedures are believed to be generally applicable. However, each user should review these recommendations in the specific content of the intended use.

Glossary of Terms

ACGIH = American Conference of Governmental Industrial Hygienists

DOT = Department of Transportation

hPa = Hectopascals
mPa*s = Milli Pascal - seconds
ppm = Parts per Million
SARA = Superfund Amendments and Reauthorization Act

OSHA = Occupational Safety and Health Administration
STEL = Short Term Exposure Limit
TWA = Time Weighted Average
TSCA =Toxic Substances Control Act
PEL = Permissible Exposure Limit
WHMIS = Canadian Workplace Hazardous Material Indentification System

Flash Point Determined Methods	**Common Name**
ASTM D56	Tagliabue (Tag) closed cup
ASTM D92, DIN 51376, ISO 2592	Cleveland Open Cup
ASTM D93, DIN 51758, ISO 2719	Pensky-Martens closed cup
ASTM D3278, DIN 55680, ISO 3679	Setaflash or Rapid Closed Cup
DIN 51755	Abel-Pensky Closed Cup.

Conversion Table:

Pressure:	1hPa * 0.75=1 Torr; 1bar = 1000 hPa
Viscosity:	1mPa*s = 1 Centipoise (Cp)

By-product = reaction by-product, TSCA inventory status not required 40CFR part 720.30 (h-2)