



Safety Data Sheet

1. Product Identifier and Company Identification

Product name	: Scale Solvent 241	
HBCC SDS number	: CS01000	
Synonym	: Inhibited Hydrochloric Acid;	
Product use and Restrictions	: Refer to label or call	
Manufacturer		
Contact Address	: Corporate Headquarters Hill Brothers Chemical Company 1675 North Main Street Orange, California 92867 714-998-8800 800-821-7234	Corporate Safety & Compliance Hill Brothers Chemical Company 7121 West Bell Road, Suite 250 Glendale, Arizona 85308 623-535-9955 – Office 623-535-9944 – Fax
Emergency telephone Number (Chemtrec)	: 800-424-9300	
Website	: http://hillbrothers.com	

2. Hazard Identification

Classification : Acute Toxicity; Oral: Category 4
Skin Corrosion/Irritation: Category 1
Serious Eye Damage/Eye Irritation: Category 1
Specific Target Organ Toxicity (Single Exposure): Category 3

Signal Word : DANGER

Pictogram(s) :



Hazard Statements : H302: Harmful if swallowed.
H314: Causes severe skin burns and eye damage.
H335: May cause respiratory irritation.
H336: May cause drowsiness or dizziness.

Precautionary Statements

Response : P301+P330+P331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P312: Call a POISON CENTER or doctor if you feel unwell.
P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P310: Immediately call a POISON CENTER or doctor.
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several

minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310: Immediately call a POISON CENTER or doctor.

P303+P361+P353: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water (or shower).

P363: Wash contaminated clothing before reuse.

Prevention

- : P260: Do not breathe dusts or mists.
- 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.
- P280: Wear protective gloves, protective clothing, and eye protection and face protection.

Storage

- : P403+P233: Store in a well-ventilated place. Keep container tightly closed.
- P405: Store locked up.

Disposal

- : P501: Dispose of contents/container in accordance with local, regional, national, and international regulations.

3. Composition/Information on Ingredients

CAS Number	Ingredient Name	Weight %
67-56-1	Methanol	<1.5%
Trade Secret	Scale Solvent Inhibitor	<2%
107-19-7	Propargyl Alcohol	<0.5%
7647-01-0	Hydrochloric Acid	<30%
7732-18-5	Water	<70%

4. First Aid Measures

Ingestion

- : Do not induce vomiting. GET MEDICAL ATTENTION IMMEDIATELY. Do not make an unconscious person vomit.

Inhalation

- : Move the exposed person to fresh air at once. If breathing is difficult, administer oxygen; if breathing has stopped, perform artificial respiration. GET MEDICAL ATTENTION IMMEDIATELY.

Skin

- : Promptly flush the contaminated skin with water for 15 minutes. If skin irritation persists, GET MEDICAL ATTENTION. Wash contaminated clothing before reuse. Destroy or thoroughly clean contaminated shoes.

Eyes

- : Wash eyes immediately with large amounts of water for 15 minutes, lifting the lower and upper lids occasionally. GET MEDICAL ATTENTION IMMEDIATELY. Contact lenses should not be worn when working with this chemical.

Medical Conditions

- : Persons with pre-existing skin disorders, impaired liver function, impaired renal function, or pre-existing eye diseases might have increased health risks working with acid.

Effects of Overexposure : Long-term repeated exposure to high vapor concentrations (greater than 1000 ppm may produce impairment of vision).

Summary of Acute Health Hazards : N/A

Ingestion : Toxic. Can cause severe burns of the mouth, esophagus, and stomach.

Inhalation : Vapors have an irritating effect on the respiratory system causing coughing, burning of the throat, bronchitis, and pulmonary edema.

Skin : May cause reddening and burning of the skin.

Eyes : Causes severe burns, and if not removed immediately, could cause blindness.

Note to Physicians : Keep under medical supervision for at least 48 hours.

Summary of Chronic Health : Respiratory distress, irritation of mucosa lining.

5. Fire Fighting Measures

Extinguishing : Dry chemical, alcohol foam, or carbon dioxide. Use water spray to cool fire -exposed containers and structures.

Special Exposure Hazards : Vapors formed from this liquid, are heavier than air, and may be moved by air currents. Flashback of flame along the vapor trail to the handling site may occur. Approach methanol fire with caution; methanol burns with an almost invisible flame in daylight.

Special Protective Equipment for Firefighters : Use self-contained breathing apparatus and protective clothing.

Fire Fighting Procedures : To fight fire use alcohol foam.

NFPA Rating : Health - 3
Flammability - 0
Instability - 0



0=Insignificant 1=Slight 2=Moderate 3=High 4=Extreme

Uniform Fire Code Rating : Class IB Flammable Liquid (Methanol)

6. Accidental Release Measures

- Personal Precautions** : Handling equipment must be grounded to prevent sparking.
- Emergency Procedures** : Eliminate all ignition sources.
- Methods of Containment And Clean-Up** : For large spills, evacuate the hazard area of unprotected personnel. Shut off source of leak only if safe to do so. Dike and contain. If vapor cloud forms, water fog may be used to suppress; contain run-off. For small spills, seal tightly for proper disposal. For large spills, Remove with vacuum trucks or pump to storage/salvage vessels. Soak up residue with an absorbent such as clay, sand or other suitable material, and place in non-leaking containers for proper disposal. Flush area with water to remove trace residue; dispose of flush solutions as above. For small spills, take up with an absorbent material and place in non-leaking containers.

7. Handling and Storage

- Safe Handling** : Store in a cool, dry well-ventilated location, away from any area where the fire hazard may be acute. Use non-sparking type tools and equipment. The reaction of methanol with nitric acid is considered hazardous not only because it is exothermic, but also because it produces methyl nitrate. Methyl nitrate reportedly can explode violently if shocked mechanically or heated.
- Storage** : Outside or detached storage is preferred. Separate from incompatibles. Protect against physical damage. Containers should be bonded and grounded for transfers to avoid static sparks. Storage and use areas should be 'No Smoking' areas. Containers of this material may be hazardous when empty since they retain product residues (vapors, liquid); observe all warnings and precautions listed for the product. Do Not attempt to clean empty containers since residue is difficult to remove. Do not pressurize, cut, weld, braze, solder, drill, grind or expose such containers to heat, sparks, flame, static electricity or other sources of ignition: they may explode and cause injury or death.
- Work/Hygienic Practices** : All employees who handle methanol should wash their hands before eating, smoking, or using the toilet facilities. Do NOT place food, coffee or other drinks in the area where dusting or splashing of solutions is possible.
- Ventilation** : Explosion proof ventilation. This product should be confined within closed equipment, in which case general (mechanical) room ventilation should be suitable. Special, local ventilation is needed at points where vapors are expected to be vented to the workplace air.

8. Exposure Controls/Personal Protection

Occupational Exposure Limits

Chemical Name: Mixture				
Exposure Limits (TWAs) in Air				
CAS Number	Chemical	ACGIH TLV	OSHA PEL	STEL
67-56-1	Methanol	200 ppm	200 ppm	250 ppm
107-19-7	Propargyl Alcohol	1 ppm	1 ppm	N/A
7647-01-0	Hydrochloric Acid	5 ppm	5 ppm	7 ppm

Protective Equipment

: Wear appropriate respirator and protective clothing. Avoid prolonged or repeated contact with the skin. Wear chemical-resistant clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact. An eye bath, safety shower, chemical apron and boots should be available.

Eye Protection

: Avoid contact with the eyes. Wear chemical goggles if there is the likelihood of contact with the eyes. Maintain eye wash fountain and quick-drench facilities in work area.

Respiratory Protection

: Use MSHA/NIOSH approved self-contained breathing apparatus in high vapor concentrations.

Respirator Selection

2000 ppm: SA/SCBA

10,000 ppm: SAF/SCBAF

25,000 ppm: SAF: PD, PP, CF

Escape: SCBA

9. Physical and Chemical Properties

Appearance: Watery, clear to light straw liquid	Odor: Pungent
Odor Threshold: 100 ppm	pH: <2
Melting Point/Freezing Point: N/A	Initial Boiling Point/Range: (64° -109° C)(148° -230° F)
Flash Point: 50° F; 10° C, T.C.C. (Methanol)	Evaporation Rate (BuAc=1): >0.3 (n-butyl acetate= 1)
Flammability: N/A	Lower/Upper Explosive Limit: N/A
Vapor Pressure (mmHg): 25.8 @ 20° C (68° F)	Vapor Density (Air=1): N/A
Relative Density: N/A	Solubility in Water: Soluble
Partition Coefficient: N/A	Autoignition Temperature: 725° F; 385° C (Methanol)
Decomposition Temperature: N/A	Viscosity: N/A
% Volatiles: 70%	Specific Gravity (Water=1): 1.05-1.25
Molecular Weight: N/A	VOC: 0.00

10. Stability and Reactivity

Reactivity	: N/A
Chemical Stability	: Stable
Possibility of Hazardous Reactions or Polymerizations	: Hazardous polymerization will not occur.
Conditions to Avoid	: Avoid heat, sparks and flame - all ignition sources.
Incompatible Materials	: Alkali metals, concentrated nitric and sulfuric acids, aldehydes, acyl chlorides, strong bases, and strong oxidizers. The reaction of methanol with nitric acid is considered hazardous not only because it is exothermic, but also because it produces methyl nitrate. Methyl nitrate reportedly can explode violently if shocked mechanically or heated.
Hazardous Decomposition Products	: Burning can produce carbon monoxide and/or carbon dioxide, and formaldehyde.

11. Toxicological Information

Acute and Chronic Effects	: Prolonged and repeated exposure to high vapor concentrations, skin absorption or ingestion of methanol may result in visual disturbances, metabolic acidosis, headache, giddiness, nausea, insomnia, gastric disturbance, dizziness, and slow breathing. Also see Section 4.
<u>Routes of Exposure</u>	
Ingestion	: Yes
Inhalation	: Yes
Skin	: Yes
Eyes	: Yes
Symptoms related to Physical, Chemical & Toxicological Characteristics	: There have been severe cases reported of blindness, coma and death due to the ingestion of methanol.
Numerical Measures of Toxicity	: <u>Toxicity Data:</u> Oral LD ₅₀ = 6.2 g/kg (rat), Inhalation LC-50: (rat) 8h: > 22500 ppm Dermal LD-50: (rabbit) 15.8 g/kg Skin irritation: (guinea pig) moderate Eye Irritation: (rabbit) slight IDLH Value: 25,000 ppm, Aquatic: 250 ppm/11 hr/goldfish/died/fresh water, Biological Oxygen Demand (BOD): 0.6 to 1.12 lb/lb in 5 days
Chronic Toxicity	: N/A

Carcinogenicity : N/A

Product Name: Mixture					
ACGIH	IARC	EPA	NIOSH	NTP	OSHA
No	No	No	No	No	No

TARGET ORGANS : N/A

12. Ecological Information

Ecotoxicity : N/A

Persistence and Degradability : N/A

Bioaccumulative Potential :

Product/Ingredient	Log _{Pow}	BCF	Potential
-	-	-	-

Mobility in Soil : N/A

13. Disposal Considerations

Disposal of Container : At low concentrations in water, methanol is readily biodegradable in biological wastewater treatment plant. This product when spilled or disposed is a hazardous waste (RCRA-40 CFR 261). Preferred method is incineration or biological treatment in a federal/state approved facility. Consult Federal, State, or Local Authorities for proper disposal procedures.

14. Transport Information

UN# : UN1789
Proper Shipping Name : Hydrochloric Acid Mixture
Hazard Class/Division : 8
Packing Group : II
Marine Pollutant : No
Special Precautions : A3, A6, B3, B15, IB2, N41, T8, TP2
Emergency Response Guidebook : 2012 ERG, Guide 157, pages 252-253

Placard Advisory :



15. Regulatory Information

SARA 302 Extremely Hazardous Substances (EHS) : No chemical in this product is listed as an Extremely Hazardous Substance (EHS) under Section 302 of EPCRA.

SARA 304 Extremely Hazardous Substances (EHS) Release Notification : No chemical in this product is listed as an Extremely Hazardous Substance (EHS) which, if released to the environment in quantities at or above the substance's Reportable Quantity (RQ), would require reporting to the SERC and LEPC under Section 304 of EPCRA.

SARA 311/312 Hazards :

SARA 311/312 Hazards				
Acute	Chronic	Flammability	Pressure	Reactivity
No	No	No	No	No

SARA 313 Reportable Chemicals : This product contains the following chemical(s) subject to annual emissions, transfers, and/or waste management reporting under the Community-Right to-Know provisions of EPCRA Section 313, also known as the Toxic Release Inventory (TRI) Report or Form R:
Methanol, CAS #67-56-1
Propargyl alcohol, CAS #107-19-7

CERCLA Hazardous Substances : This product contains the following CERCLA hazardous substance(s) subject to the National Response Center (NRC) reporting requirements if released to the environment in quantities greater than or equal to the substance's CERCLA Reportable Quantity (RQ).
Methanol, CAS #67-56-1 CERCLA RQ = XXX lb. (YYY kg.)
Propargyl alcohol, CAS #107-19-7 CERCLA RQ = XXX lb. (YYY kg.)

Clean Air Act (CAA) Section 112(r) Air Pollutants : No chemical in this product is listed as an air pollutant under the U.S. Clean Air Act, Section 112(r) (40 CFR 61).

California Prop 65 Chemicals : **WARNING:** This product contains the following chemical(s) listed under California Proposition 65, which are chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.
Methanol, CAS #67-56-1

Hazard Label Warning : This product requires the following hazard label warning: Corrosive , 8

TSCA (Toxic Substances Control Act) : All chemical substances in this product are listed on the U.S. TSCA Inventory List.

ACRONYMS:

CAS # – Chemical Abstract Services Registry Number
CFR – Code of Federal Regulations
CERCLA – Comprehensive Environmental Response, Compensation, and Liability Act
EPCRA – Emergency Planning and Community Right-to-Know Act
LEPC – Local Emergency Planning Committee
SERC – State Emergency Response Commission

RCRA Code: U154 (Methanol); P102 (Propargyl Alcohol)

16. Other Information

Revision date : 05/05/2015
Supersedes : 06/30/2008
First Issue : 06/30/2008

Chemical Family/Type : N/A

Section(s) changed since last revision : MSDS to First Issue SDS Conversion

IMPORTANT! Read this SDS before use or disposal of this product. Pass along the information to employees and any other persons who could be exposed to the product to be sure that they are aware of the information before use or other exposure. This SDS has been prepared in accordance with the Globally Harmonized System of Chemical and Labeling of Chemicals (GHS) Fifth Edition and the OSHA Hazard Communication Standard [29 CFR 1910.1200]. The SDS information is based on sources believed to be reliable. Available data, safety standards, and government regulations are subject to change and the conditions of handling and use, or misuse are beyond our control; **Hill Brothers Chemical Company** makes no warranty, either expressed or implied, with respect to the completeness or continuing accuracy of the information contained herein and disclaims all liability for reliance thereon. Additional information may be necessary or helpful for specific conditions and circumstances of use. It is the user's responsibility to determine the suitability of this product and to evaluate risks and exercise appropriate precautions for protection of employees and others prior to use.