Safety Data Sheet

Hydrotech® Surface Conditioner 56170

Formerly know as Surface Conditioner

SECTION 1. IDENTIFICATION

Product Identifier Hydrotech® Surface Conditioner 56170

Other Means of Identification

Recommended Use Primer for concrete substrates

Manufacturer / Supplier Sika Corporation

Emergency Phone No. CANUTEC, (613) 996 - 6666, 24 hours

SDS No. 0123

SECTION 2. HAZARDS IDENTIFICATION

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No.	%	Other Identifiers
Stoddard solvent	8052-41-3	60-100	
Asphalt (Bitumen) fume	8052-42-4	25-50	

SECTION 4. FIRST-AID MEASURES

First-aid Measures

Inhalation

Move to fresh air. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Loosen tight clothing such as collar, tie, belt or waistband. Get medical attention immediately.

Skin Contact

For hot asphalt splash, cool affected body part with water immersion or shower. Do not attempt removal of asphalt but split longitudinally if circumferential to avoid tourniquest effect. No attempt should be made to remove firmly adhering bitumen from the skin. Once the bitumen has cooled, it will do no further harm and in fact provide a sterile covering over a burnt area. As healing takes place, the bitumen plaque, the bitumen plaque will detach itself, usually after a few days. For skin soiling without underlying burn, cleanse with mineral oil followed by soap and water. Use olive oil in vicinity of eyes.

Eye Contact

If a contact lens is present, DO NOT delay flushing or attempt to remove the lens. Immediately rinse the contaminated eye(s) with lukewarm, gently flowing water for 15-20 minutes, while holding the eyelid(s) open. Get medical attention immediately.

Ingestion

Rinse mouth with water. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention immediately. Call a Poison Centre or doctor if you feel unwell or are concerned.

Most Important Symptoms and Effects, Acute and Delayed

If in eyes:
Symptoms include sore, red eyes, and tearing.
If swallowed:
Symptoms may include nausea, vomiting, stomach cramps and diarrhea.

Immediate Medical Attention and Special Treatment

Special Instructions

No specific treatment. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

SECTION 5. FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media

Carbon dioxide, dry chemical powder or appropriate foam.

Unsuitable Extinguishing Media

Do not spray water onto burning product as this may cause spattering and spreading of the flame.

Specific Hazards Arising from the Chemical

Flammable liquid and vapour. Can ignite at room temperature. Releases vapour that can form explosive mixture with air. Can be ignited by static discharge. See Section 9 (Physical and Chemical Properties) for flash point and explosive limits. Vapours may travel considerable distances to ignition sources and cause a flash fire. Cool containing vessels with water jet in order to prevent pressure build-up, auto-ignition or explosion.
This material is not sensitive to mechanical impact. This material is sensitive to static discharge at temperatures above the flash point.

Special Protective Equipment and Precautions for Fire-fighters

Chemical protective clothing (e.g. chemical splash suit) and positive pressure SCBA may be necessary. See Skin Protection in Section 8 (Exposure Controls/Personal Protection) for advice on suitable chemical protective materials.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment, and Emergency Procedures

No action shall be taken involving any personal risk or without suitable training. Evacuate the area immediately. Isolate the hazard area. Keep out unnecessary and unprotected personnel. Do not touch damaged containers or spilled product unless wearing appropriate protective equipment. Increase ventilation to area or move leaking container to a well-ventilated and secure area. Use the personal protective equipment recommended in Section 8 of this safety data sheet. Monitor area for flammable or explosive atmosphere.

Environmental Precautions

It is good practice to prevent releases into the environment. Do not allow into any sewer, on the ground or into any waterway. If the spill is inside a building, prevent product from entering drains, ventilation systems and confined areas. Minimize the use of water to prevent environmental contamination. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and Materials for Containment and Cleaning Up

Small spills or leaks: stop or reduce leak if safe to do so. Contain and soak up spill with absorbent that does not react with spilled product. Do not use absorbents. Contain spill using noncombustible material such as vermiculite, earth or sand. Do NOT use combustible materials such as sawdust. Cover the spill surface with the appropriate type of foam to reduce the release of vapour. Place used absorbent into suitable, covered, labelled containers for disposal. Contaminated absorbent poses the same hazard as the spilled product. Large spills or leaks: dike spilled product to prevent runoff. Knock down gas with fog or fine water spray. Knock down vapour with fog or fine water spray. Do not direct water at spill or source. Remove or recover liquid using pumps or vacuum equipment. Flush spill area. Dike and recover contaminated water for appropriate disposal. Avoid generating dust. Avoid dry sweeping. If necessary, use a dust suppressant such as water. Do not use compressed air for clean-up. Use water fog or spray curtain to reduce amount of dust in air. Collect using shovel/scoop or approved HEPA vacuum and place in a suitable container for disposal. Get expert advice before treating the spilled product with other chemicals to make it less hazardous. Store recovered product in suitable containers that are: covered, tightly-covered. Review Section 13 (Disposal Considerations) of this safety data sheet. Contact emergency services and manufacturer/supplier for advice.

SECTION 7. HANDLING AND STORAGE

Precautions for Safe Handling

Only use where there is adequate ventilation. Avoid generating vapours or mists. Avoid generating dusts. Prevent uncontrolled release of product. Immediately report leaks, spills or failures of the safety equipment (e.g. ventilation system). In the event of a spill or leak, exit the area immediately. Eliminate heat and ignition sources such as sparks, open flames, hot surfaces and static discharge. Post "No Smoking" signs. Do not use near welding operations or other high energy sources. Avoid heating that will increase the amount of vapours. Do not weld, cut or perform hot work on empty container until all traces of product have been removed. Good housekeeping is extremely important. Prevent dust accumulation on ALL surfaces including ceiling rafters and other hidden surfaces. Do not use compressed air to clean equipment, clothing or spills. Electrically bond and ground equipment. Ground clips must contact bare metal. Increase conductivity by reducing flowrate in transfer operations and/or handle at lower temperature. Prevent accidental contact with incompatible chemicals. Avoid ALL unprotected contact with this product or with contaminated equipment/surfaces. Wear personal protective equipment to avoid direct contact with this chemical. Avoid repeated or prolonged skin contact with product or with contaminated equipment/surfaces. Prevent contamination of surfaces that unprotected personnel may use. Keep dry. Prevent exposure to water and humidity. Handle under inert gas atmosphere in dry equipment. Prevent any accidental contact with water in handling and storage areas. Avoid shock, friction or impact. Do not skid, drag or drop containers. Do not chip or grind lumps. Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapour or mist. Keep in an original container or an approved alternative made from a compatible material, kept tightly closed when in use. Empty containers retain product residue and can be hazardous. Do not reuse container. During storage, transit and cooling of asphalt, solvent vapour and hydrogen sulphide may accumulate in enclosed spaces such as tank cars. Open tank car hatches with caution. Maintain same precautions when gauging and sampling.
Do NOT smoke in work areas. Do NOT eat, drink or store food in work areas. Remove contaminated clothing and protective equipment before entering eating areas or leaving work area. Wash hands thoroughly after handling this material.

Conditions for Safe Storage

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlablled containers. Use appropriate containment to avoid environmental contamination. Engineering controls are usually required in the storage area to protect against the product's hazard(s). Review Section 8 (Exposure Controls/Personal Protection) for information. See advice on temperature in Conditions to Avoid in Section 10 (Stability and Reactivity) to determine suitable storage temperature. Electrically bond and ground containers. Ground clips must contact bare metal. Avoid bulk storage indoors. Do not handle swollen drums. Get expert advice. Empty containers may contain hazardous residue. Store separately. Keep closed. Follow all precautions given on this safety data sheet. Comply with all applicable health and safety regulations, fire and building codes.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters

	ACGIH TLV®		OSHA PEL		AIHA WEEL	
Chemical Name	**TWA**	**STEL**	**TWA**	**Ceiling**	**8-hr TWA**	**TWA**
Asphalt (Bitumen) fume	0.5 mg/m3 (I) A4 BEI		Not established			
Stoddard solvent	100 ppm		100 ppm			

Appropriate Engineering Controls

Use only with adequate ventilation. Exhaust ventilation/engineering controls need to keep vapor and gas concentrations below recommended limits and below any lower explosive limits.

Individual Protection Measures

Eye/Face Protection

Wear chemical safety goggles and face shield when contact is possible.

Skin Protection

Wear chemical protective clothing e.g. gloves, aprons, boots.

Chemical-resistant, imperious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Suitable materials are: nitrile rubber.

Respiratory Protection

Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. Recommended: organic vapour filter cartridge or canister with a dust, fume or mist filter (R, or P series) may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits. Protection provided by air-purifying respirators is limited.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Basic Physical and Chemical Properties

Appearance	Dark black.
Odour	Characteristic asphaltic odour or "rotten egg" odour if H2S present, but odour is an unreliable warning, since it may deaden the sense of smell.
Odour Threshold	Not available
pH	Not available
Melting Point/Freezing Point	Not available (melting); Not applicable (freezing)
Initial Boiling Point/Range	160 ºC (320 ºF)
Flash Point	10 ºC (50 ºF) (closed cup)
Evaporation Rate	Not available
Upper/Lower Flammability or Explosive Limit	6% (upper); 0.8% (lower)
Vapour Pressure	10 kPa (75 mm Hg) at 20 ºC
Vapour Density (air = 1)	3 - 4
Relative Density (water = 1)	0.938
Solubility	Insoluble in water
Partition Coefficient, n-Octanol/Water (Log Kow)	Not available
Auto-ignition Temperature	Not available
Viscosity	Not available (kinematic)

Other Information

Physical State	Liquid
Bulk Density	Not available

SECTION 10. STABILITY AND REACTIVITY

Chemical Stability

Stable under normal storage conditions.

Possibility of Hazardous Reactions

Hazardous polymerizations does not occur.

Conditions to Avoid

Open flames, sparks, static discharge, heat and other ignition sources. Incompatible materials. Exposure to heat.

Incompatible Materials

Acids. Bases. Oxidizers.

Hazardous Decomposition Products

Not available.

SECTION 11. TOXICOLOGICAL INFORMATION

Likely Routes of Exposure

Eye contact; skin contact; inhalation; ingestion; skin absorption.

Acute Toxicity

Chemical Name	LC50	LD50 (oral)	LD50 (dermal)
Asphalt (Bitumen) fume		> 5000 mg/kg (rat)	> 2000 mg/kg (rabbit)
Stoddard solvent	> 1300 ppm (rat) (4-hour exposure)	> 5000 mg/kg (rat)	> 3000 mg/kg (rabbit)

Skin Corrosion/Irritation

Irritating to skin. Signs/symptoms may include localized redness, swelling, and itching. Hot liquid product may cause serious thermal burns on direct contact. Asphalt fumes can increase susceptibility to sunburn.

Serious Eye Damage/Irritation

Irritating to eyes. Signs/symptoms may include redness, swelling, pain, tearing, and blurred or hazy vision. Hot liquid product may cause serious thermal burns on direct contact. Hydrogen sulphide may cause eye irritation at 1 - 20 ppm and acute conjunctivitis at higher concentrations. Above 50 ppm H2S, eye irritation may include symptoms of redness, sever swelling, tearing, sensitivity to light and the appearance of 'Halos' around lights.

EYE IRRITANT. Symptoms include sore, red eyes, and tearing. Hot liquid product may cause thermal burns.

STOT (Specific Target Organ Toxicity) - Single Exposure

Inhalation

No information was located.

Inhalation of this product may cause respiratory tract irritation and Central Nervous System (CNS) Depression, symptoms of which may include' weakness, dizziness, slurred speech, drowsiness, unconsciousness and in cases of severe overexposure; coma and death. At higher concentrations (above 10 ppm), hydrogen sulphide is extremely toxic by inhalation, may cause respiratory-tract irritation and respiratory failure, coma and death. Pulmonary edema can occur up to 24 hours after hydrogen sulphide exposure. While hydrogen sulphide emits a strong odour of rotten eggs, detection by smell is not sufficient as a warning property for exposure to this substance, as it may deaden the sense of smell quickly.

Ingestion

Symptoms may include nausea, vomiting, stomach cramps and diarrhea.

STOT (Specific Target Organ Toxicity) - Repeated Exposure

Prolonged or repeated contact may dry skin and cause irritation. Exposure to Naphtha may damage the blood-forming organs resulting in fatigue and anemia (RBC), decreased resistance to infection, and/or excessive bruising and bleeding (platelet effect). Peripheral nerve damage may be evidence by impairment to motor function (incoordination, unsteady walk, or muscle weakness in the extremities, and/or loss of sensation in the arms and legs). Auditory system effects may include temporary hearing loss and/or ringing in the ears. This product contains small quantities of Polycyclic aromatic hydrocarbons. Prolonged contact with these compounds has been associated with the induction of skin and lung tumors, anemia, disorders of the liver, bone marrow and lymphoid tissues. Long term inhalation of Benzene or Xylene vapours can result in bone marrow abnormalities with damage to blood forming tissues and may cause anemia and other blood cell abnormalities. Immunodepressive effects have also been reported. Hydrogen sulphide may reduce lung function; cause neurological effects such as headaches, nausea, depression and personality changes; eye and mucous membrane irritation: damage to cardiovascular system.

Although the material in general is not considered to have chronic effects, it may contain benzene, a listed carcinogen. Refer to Section 11 of the MSDS for more detailed information.

Carcinogenicity

Chemical Name	IARC	ACGIH®	NTP	OSHA
Asphalt (Bitumen) fume	Group 2B	A4		

IARC: The International Agency for Research on Cancer (IARC) has determined that occupational exposures to oxide asphalt and their emissions during roofing operations are "probably carcinogenic to humans" (Group A). IARC concluded that occupational exposures to hard asphalt and their emissions during mastic asphalt work are "possibly carcinogenic to humans" (Group 2B). IARC concluded that occupational exposure to straight-run asphalt and their emissions during paving operations are "possibly carcinogenic to humans" (Group 2B).

An IARC working group has concluded that occupational exposures to straight-run bitumens and their emissions during road paving are 'possibly carcinogenic to humans' (Group 2B).

Reproductive Toxicity

Development of Offspring

Birth defects. Studies in people show effects on the unborn child.
The material in general is not expected to have toxic reproductive effects.

Sexual Function and Fertility

Animal studies show effects on sexual function and/or fertility. (Benzene). (Xylene (mixed isomers)) studies in people and animals show effects on sexual function and/or fertility. Effects on the menstrual cycle.
No known significant effects or critical hazards.

Germ Cell Mutagenicity

Causes mutagenicity in in vitro tests. Hazardous by OSHA/WHMIS criteria. May cause heritable genetic damage.
The material in general is not expected to produce mutagenic effects.

Interactive Effects

Not available.
Not available

SECTION 12. ECOLOGICAL INFORMATION

Toxicity

Marine Pollutant.

Persistence and Degradability

No information was located.

Bioaccumulative Potential

No information was located.

Mobility in Soil

Studies are not available.

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal Methods

Contact local environmental authorities for approved disposal or recycling methods in your jurisdiction. The required hazard evaluation of the waste and compliance with the applicable hazardous waste laws are the responsibility of the user. This product and its container must be disposed of as hazardous waste. Do NOT dump into any sewers, on the ground or into any body of water.

SECTION 14. TRANSPORT INFORMATION

Regulation	UN No.	Proper Shipping Name	Transport Hazard Class(es)	Packing Group
Canadian TDG	1999	Waterproofing Primer (Tars, Liquid, including road asphalt and oils, bitumen and cutbacks)	3	II
US DOT	1999	Waterproofing Primer (Tars, Liquid, including road asphalt and oils, bitumen and cutbacks)	3	II

Special Precautions for User Please note: PG*: Packing group

Transport in Bulk According to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15. REGULATORY INFORMATION

Safety, Health and Environmental Regulations

Canada

WHMIS Classification


Class B2


Class D2B

B2 - Flammable Liquid; D2B - Toxic (Skin irritant; Eye irritant)

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the SDS contains all of the information required by the Controlled Products Regulations.

USA

US OSHA HazCom 1994 Regulatory Status

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200 (1994)).

Additional USA Regulatory Lists

SARA Title III - Section 302: Not listed SARA Title III - Section 304 EHS RQ (lbs.) Not listed SARA Title III - Section 313: Not listed CERCLA: Not listed RCRA CODE Not listed CAA 112(r) TQ (lbs.) Not listed.

SECTION 16. OTHER INFORMATION

NFPA Rating	**Health - 2** **Flammability - 3** **Instability - 0**
	Based on Naphtha (petroleum), hydro treated heavy
SDS Prepared By	EPC & Risk Management Department
Phone No.	1 (416) 281 - 8181
Key to Abbreviations	ACGIH® = American Conference of Governmental Industrial Hygienists AIHA = American Industrial Hygiene Association HSDB® = Hazardous Substances Data Bank IARC = International Agency for Research on Cancer NFPA = National Fire Prevention Association NIOSH = National Institute for Occupational Safety and Health NTP = National Toxicology Program OSHA = US Occupational Safety and Health Administration RTECS® = Registry of Toxic Effects of Chemical Substances
References	CHEMINFO database. Canadian Centre for Occupational Health and Safety (CCOHS). HSDB® database. US National Library of Medicine. Available from Canadian Centre for Occupational Health and Safety (CCOHS). NIOSH Pocket Guide database. National Institute for Occupational Safety and Health. Available from Canadian Centre for Occupational Health and Safety (CCOHS). Registry of Toxic Effects of Chemical Substances (RTECS®) database. Accelrys, Inc. Available from Canadian Centre for Occupational Health and Safety (CCOHS).
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