SAFETY DATA SHEET



1. Identification

Product identifier BH5501

Other means of identification Not available.

Recommended use None known.

None known.

Manufacturer/Importer/Supplier/Distributor information

Manufacturer

ManufacturerErgon ArmorDivisionKansas CityAddress450 Funston DriveKansas City, KS 66115

Website: www.ergonarmor.com

E-Mail sds@ergon.com

Hours of Operation 08:00 AM - 05:00 PM (US Central Standard Time)

ERGON General 1.800.222.7122

Assistance

CHEMTREC 1.800.424.9300

2. Hazard(s) identification

Physical hazards Flammable liquids Category 3

Health hazardsNot classified.Environmental hazardsNot classified.OSHA defined hazardsNot classified.

Label elements



Signal word Warning

Hazard statement Flammable liquid and vapor.

Prevention Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Keep container tightly

closed. Ground/bond container and receiving equipment. Use explosion-proof

electrical/ventilating/lighting equipment. Use only non-sparking tools.

Response In case of fire: Use CO2 for extinction. **Storage** Store in a well-ventilated place. Keep cool.

Disposal Dispose of contents/container in accordance with local/regional/national/international regulations.

See section 13 of this SDS for disposal instructions.

Hazard(s) not otherwise

classified (HNOC)

None known.

Supplemental information None.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
STODDARD SOLVENT		8052-41-3	20 - 35
ASPHALT		8052-42-4	0 - 50
ASPHALT, OXIDIZED		64742-93-4	0 - 50
OUARTZ		14808-60-7	< 1

Composition comments The full text for all R-phrases is displayed in Section 16 of the SDS.

4. First-aid measures

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. Get medical attention if symptoms occur.

Skin contact Wash off with soap and plenty of water. For minor skin contact, avoid spreading material on

unaffected skin. If skin irritation occurs: Get medical advice/attention.

Eye contact Immediately flush eyes with plenty of water for at least 15 minutes. If a contact lens is present, DO

NOT delay irrigation or attempt to remove the lens. Remove contact lenses, if present and easy to

do. Continue rinsing. Get medical attention if irritation develops and persists.

Ingestion Rinse mouth thoroughly. 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. Aspiration may cause pulmonary edema and pneumonitis. If ingestion of a large amount does

occur, call a poison control center immediately.

Most important symptoms/effects, acute and delayed Not available.

Indication of immediate medical attention and special treatment needed

In case of shortness of breath, give oxygen. Symptoms may be delayed.

General information IF exposed or concerned: Get medical advice/attention. Wash contaminated clothing before reuse.

5. Fire-fighting measures

Suitable extinguishing media

Unsuitable extinguishing

media

Foam. Dry powder. Carbon dioxide (CO2). Extinguish with water fog. Do not use water jet as an extinguisher, as this will spread the fire.

Fire may produce irritating, corrosive and/or toxic gases.

Specific hazards arising from the chemical

Special protective equipment and precautions for

firefighters

Fire-fighting equipment/instructions

Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA. Structural firefighters protective clothing will only provide limited protection.

In case of fire and/or explosion do not breathe fumes. Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA. Move containers from fire area if you can do so without risk. For massive fire in cargo area, use unmanned hose holder or monitor nozzles, if possible. If not, withdraw and let fire burn out. Some of these materials, if spilled, may evaporate leaving a flammable residue.

Water runoff can cause environmental damage.

Specific methods In the event of fire, cool tanks with water spray. Self-contained breathing apparatus and full

protective clothing must be worn in case of fire.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Methods and materials for containment and cleaning up

Remove sources of ignition. Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Do not touch or walk through spilled material.

Dike far ahead of spill for later disposal. Cover with DRY earth, DRY sand, or other non-combustible material followed with plastic sheet to minimize spreading or contact with rain. Collect spillage. Prevent product from entering drains.

Never return spills in original containers for re-use.

Environmental precautions Prevent further leakage of

Prevent further leakage or spillage if safe to do so. Do not contaminate water.

7. Handling and storage

Precautions for safe handling

DO NOT handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. All equipment used when handling the product must be grounded. Do not breathe dust/fume/gas/mist/vapors/spray. Wear personal protective equipment. Do not use in areas without adequate ventilation. Avoid prolonged exposure. When using, do not eat, drink or smoke. Wash thoroughly after handling. Do not empty into drains.

Conditions for safe storage, including any incompatibilities

The pressure in sealed containers can increase under the influence of heat. Do not handle or store near an open flame, heat or other sources of ignition. This material can accumulate static charge which may cause spark and become an ignition source. Prevent electrostatic charge build-up by using common bonding and grounding techniques. Store in a well-ventilated place. Keep container tightly closed. Use care in handling/storage.

8. Exposure controls/personal protection

Occupational exposure limits

Components	Туре	Value	
STODDARD SOLVENT (CAS 8052-41-3)	PEL	2900 mg/m3	
•		500 ppm	
US. OSHA Table Z-3 (29 C	FR 1910.1000)		
Components	Туре	Value	Form
QUARTZ (CAS 14808-60-7)	TWA	0.3 mg/m3	Total dust.
		0.1 mg/m3	Respirable.
		2.4 mppcf	Respirable.
US. ACGIH Threshold Limit	it Values		
Components	Туре	Value	Form
ASPHALT (CAS 8052-42-4)	TWA	0.5 mg/m3	Inhalable fraction.
QUARTZ (CAS 14808-60-7)	TWA	0.025 mg/m3	Respirable fraction.
STODDARD SOLVENT (CAS	TWA	100 ppm	
8052-41-3)			
U.S NIOSH			
Components	Туре	Value	
ASPHALT, OXIDIZED (CAS 64742-93-4)	REL	5 mg/m3	
US. NIOSH: Pocket Guide	to Chemical Hazards		
Components	Туре	Value	Form
ASPHALT (CAS 8052-42-4)	Ceiling	5 mg/m3	Fume.
QUARTZ (CAS 14808-60-7)	TWA	0.05 mg/m3	Respirable dust.
STODDARD SOLVENT (CAS 8052-41-3)	Ceiling	1800 mg/m3	
,	TWA	350 mg/m3	
logical limit values	No biological exposure limits noted for	or the ingredient(s).	
propriate engineering	Provide adequate ventilation, including appropriate local extraction, to ensure that the defined		

controls occupational exposure limit is not exceeded.

Individual protection measures, such as personal protective equipment

Eye/face protection Chemical goggles are recommended.

Hand protection Chemical resistant gloves are recommended. If contact with forearms is likely wear gauntlet style

gloves.

Other Wear appropriate chemical resistant clothing. Chemical resistant gloves.

Skin protection

Respiratory protection When workers are facing concentrations above the exposure limit they must use appropriate

certified respirators.

Thermal hazards Not available.

General hygiene considerations

When using do not smoke. When using, do not eat, drink or smoke. Avoid contact with eyes. Avoid contact with skin. Wash hands before breaks and immediately after handling the product. Handle in

accordance with good industrial hygiene and safety practice.

9. Physical and chemical properties

Viscous liquid **Appearance Physical state** Liquid. **Form** Liauid.

Color Brown to Black Odor Mild Petroleum Odor

Odor threshold Not available. Not available. pН Melting point/freezing point Not available. Initial boiling point and 212 °F (100 °C)

boiling range

Flash point 100.0 - 140.0 °F (37.8 - 60.0 °C) Cleveland Open Cup

Evaporation rate Not available. Flammability (solid, gas) Not available. Upper/lower flammability or explosive limits

Flammability limit - lower Not available.

Flammability limit -

upper (%)

Not available.

Explosive limit - lower

(%)

Not available.

Explosive limit - upper

(%)

Not available.

3.25 hPa estimated Vapor pressure

Vapor density > 1

Relative density Not available.

Solubility(ies)

Not available. Solubility (water) **Partition coefficient** Not available.

(n-octanol/water)

Not available **Auto-ignition temperature Decomposition temperature** Not available. **Viscosity** Not available.

Other information

Density 8.42 lb/gal Flammability class Class II Specific gravity 1.01 VOC (Weight %) < 350 g/l

10. Stability and reactivity

Reactivity The product is stable and non-reactive under normal conditions of use, storage and transport.

Chemical stability Stable under normal temperature conditions. Possibility of hazardous Hazardous polymerization does not occur.

reactions

Conditions to avoid Heat, flames and sparks. **Incompatible materials** Strong oxidizing agents. **Hazardous decomposition** Irritants. Toxic gas.

products

11. Toxicological information

Information on likely routes of exposure

Ingestion May cause discomfort if swallowed. However, ingestion is not likely to be a primary route of

occupational exposure.

Inhalation May cause irritation to the respiratory system. However, this product does not currently meet the

criteria for classification.

Skin contact Frequent or prolonged contact may defat and dry the skin, leading to discomfort and dermatitis.

Eve contact Causes eye irritation.

Symptoms related to the physical, chemical and toxicological characteristics Not available.

Information on toxicological effects

Acute toxicity Not classified.

Skin corrosion/irritation May cause defatting of the skin, but is neither an irritant nor a sensitizer.

Serious eye damage/eye

irritation

Not classified. May be irritating to eyes.

Respiratory or skin sensitization

Respiratory sensitization Not available. Skin sensitization Irritating to skin.

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Germ cell mutagenicityNo data available to indicate product or any components present at greater than 0.1% are

mutagenic or genotoxic.

Carcinogenicity Risk of cancer cannot be excluded with prolonged exposure. This product contains crystalline silica.

Silica is a known carcinogen; however in this encapsulated form the normal routes of exposure are

unavailable.

IARC Monographs. Overall Evaluation of Carcinogenicity

ASPHALT (CAS 8052-42-4) 2B Possibly carcinogenic to humans. ASPHALT, OXIDIZED (CAS 64742-93-4) 2A Probably carcinogenic to humans.

QUARTZ (CAS 14808-60-7) 1 Carcinogenic to humans.

STODDARD SOLVENT (CAS 8052-41-3) 3 Not classifiable as to carcinogenicity to humans.

US. National Toxicology Program (NTP) Report on Carcinogens

QUARTZ (CAS 14808-60-7) Known To Be Human Carcinogen.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

Reproductive toxicity Based on available data, the classification criteria are not met.

Specific target organ toxicity

Not available.

- single exposure

Specific target organ toxicity

- repeated exposure

Not available.

Aspiration hazard Not classified.

Chronic effects Not expected to be hazardous by OSHA criteria.

Further information Symptoms may be delayed.

12. Ecological information

Ecotoxicity Components of this product are hazardous to aquatic life. Accumulation in aquatic organisms is

expected. Not expected to be harmful to aquatic organisms.

Persistence and degradability Not available. **Bioaccumulative potential** Not available.

Partition coefficient n-octanol / water (log Kow)

STODDARD SOLVENT 3.16 - 7.15

Mobility in soilNot available.Other adverse effectsNot available.

13. Disposal considerations

Disposal instructionsContract with a disposal operator licensed by the Law on Disposal and Cleaning. Dispose of this

material and its container to hazardous or special waste collection point. If discarded, this product is considered a RCRA ignitable waste, D001. Dispose of contents/container in accordance with local/regional/national/international regulations. Dispose in accordance with all applicable

regulations.

Hazardous waste code D001: Waste Flammable material with a flash point <140 F

Waste from residues / unused products

Dispose of in accordance with local regulations.

Contaminated packaging Offer rinsed packaging material to local recycling facilities.

14. Transport information

DOT

user

UN number UN1999 **UN proper shipping name** Tars, liquid

Transport hazard class(es)

Class Combustible Liquid

Subsidiary risk Label(s) 3
Packing group III
Environmental hazards

Marine pollutant No

Special precautions for If shipped by ground in quantities LESS than 119 gallons (450 L): Not regulated as a hazardous

material.

Special provisions B1, B13, IB3, T1, TP3

Packaging exceptions150Packaging non bulk203Packaging bulk242

IATA

UN number UN1999 **UN proper shipping name** Tars, liquid

Transport hazard class(es)
Class 3
Subsidiary risk Packing group III
Environmental hazards No.
ERG Code 3L

Special precautions for

user

Not available.

Other information

Passenger and cargo

aircraft

Allowed.

Cargo aircraft only Allowed.

IMDG

UN number UN1999 **UN proper shipping name** Tars, liquid

Transport hazard class(es)
Class 3
Subsidiary risk Packing group III
Environmental hazards

Marine pollutant No.

EmS F-E, S-E

Special precautions for Not available.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not available.

DOT



IATA; IMDG



Further information

If shipped by ground in quantities LESS than 119 gallons (450 L): Not regulated as a hazardous material. If shipped by vessel in individual containers that are less than 7.9 gallons (30 L) each, then IMDG 2.3.2.5 exception applies: Not regulated as a hazardous material.

15. Regulatory information

US federal regulationsThis product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard,

29 CFR 1910.1200.

CERCLA/SARA Hazardous Substances - Not applicable.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

ASPHALT (CAS 8052-42-4) Listed.

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US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories Immediate Hazard - No

Delayed Hazard - No Fire Hazard - Yes Pressure Hazard - No Reactivity Hazard - No

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 No

Hazardous chemical

SARA 313 (TRI reporting)

Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act

Not regulated.

(SDWA)

US state regulations WARNING: This product contains a chemical known to the State of California to cause cancer.

US. Massachusetts RTK - Substance List

ASPHALT (CAS 8052-42-4) QUARTZ (CAS 14808-60-7)

STODDARD SOLVENT (CAS 8052-41-3)

US. New Jersey Worker and Community Right-to-Know Act

Not regulated.

US. Pennsylvania RTK - Hazardous Substances

ASPHALT (CAS 8052-42-4) QUARTZ (CAS 14808-60-7)

STODDARD SOLVENT (CAS 8052-41-3)

US. Rhode Island RTK

Not regulated.

US. California Proposition 65

US - California Proposition 65 - CRT: Listed date/Carcinogenic substance

ASPHALT (CAS 8052-42-4) Listed: January 1, 1990 QUARTZ (CAS 14808-60-7) Listed: October 1, 1988

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

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).

Material name: BH5501 SDS US

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

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

 Issue date
 12-17-2014

 Revision date
 05-14-2015

Version # 02

Further information HMIS® is a registered trade and service mark of the NPCA.

References ACGIH

EPA: AQUIRE database

NLM: Hazardous Substances Data Base

US. IARC Monographs on Occupational Exposures to Chemical Agents

HSDB® - Hazardous Substances Data Bank

IARC Monographs. Overall Evaluation of Carcinogenicity National Toxicology Program (NTP) Report on Carcinogens

ACGIH Documentation of the Threshold Limit Values and Biological Exposure Indices

Disclaimer This safety data sheet was prepared in accordance with the Safety Data Sheet for Chemica

Products (JIS Z 7250:2005). Additional information is given in the Material Safety Data Sheet. The information in the sheet was written based on the best knowledge and experience currently available. The information provided in this Safety Data Sheet is correct to the best of our

knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any

other materials or in any process, unless specified in the text.

Revision Information Composition / Information on Ingredients: Ingredients

Physical & Chemical Properties: Multiple Properties

Transport information: Further information

GHS: Classification