SAFETY DATA SHEET.

Issuing date 27-Apr-2021 **Revision Date** 27-Apr-2021 **Version** 1

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product identifier

Product name KBS UnderCoat - Solvent-Based Asphalt

Recommended use of the chemical and restrictions on use

Product code 76xxx

Product Type Highly Flammable Liquid and Vapor

Synonyms None

Supplier's details

Recommended Use Undercoating

Uses advised against No information available

Manufactured For:
KBS Coatings
1101 Cumberland Crossing #180
Valparaiso, IN 46303
KBS-Coatings.com

Emergency telephone number

Chemical Emergency Phone Number Infotrac 800-535-5053

Company Emergency Phone Number 219-263-0073

2. HAZARDS IDENTIFICATION

Classification

Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2A
Carcinogenicity	Category 2
Reproductive Toxicity	Category 2
Specific target organ toxicity (single exposure)	Category 1
Specific target organ toxicity (repeated exposure)	Category 1
Aspiration toxicity	Category 1
Flammable Liquids	Category 2

GHS Label elements, including precautionary statements

Emergency Overview

DANGER

Hazard Statements
Causes skin irritation
Causes serious eye irritation
Suspected of causing cancer
Suspected of damaging fertility or the unborn child
Causes damage to organs (Central Nervous System, Central Vascular System, Eyes, Gastrointestinal Tract,Kidney, Liver, Respiratory System, and Skin.)
Causes damage to organs (Central Nervous System, Central Vascular System, Eyes, Gastrointestinal Tract,Kidney, Liver, ,Respiratory System, and Skin) through prolonged or repeated exposure.
May be fatal if swallowed and enters airways
Highly flammable liquid and vapor

Appearance opaque **Physical state** Liquid **Odor** Solvent

Precautionary Statements - Prevention
Obtain special instructions before use
Do not handle until all safety precautions have been read and understood
Wear protective gloves/protective clothing/eye protection/face protection
Wash face, hands and any exposed skin thoroughly after handling
Do not breathe dust/fume/gas/mist/vapors/spray
Do not eat, drink or smoke when using this product
Keep away from heat/sparks/open flames/hot surfaces. — No smoking
Keep container tightly closed
Ground/Bond container and receiving equipment
Use explosion-proof electrial/ventilating/lighting /equipment.
Use only non-sparking tools
Take precautionary measures against static discharge

Precautionary Statements - Response
IF exposed: Call a POISON CENTER or doctor/physician
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
If eye irritation persists: Get medical advice/attention

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
If skin irritation occurs: Get medical advice/attention
Wash contaminated clothing before reuse
IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician
Do NOT induce vomiting
In case of fire: Use CO2, dry chemical, or foam for extinction

Precautionary Statements - Storage
Store locked up
Store in a well-ventilated place. Keep cool

Precautionary Statements - Disposal
Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

None

Other information

• Harmful to aquatic life with long lasting effects

0% of the mixture consists of ingredient(s) of unknown toxicity

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS-No	Weight %*
MAGNESIUM SILICATE	14807-96-6	20-30
PETROLEUM BITUMEN	8052-42-4	20-30
MAGNESIUM CARBONATE	546-93-0	10-20
TOLUENE	108-88-3	10-20
PETROLEUM DISTILLATES	8052-41-3	1-10
METHYL ACETATE	79-20-9	1-10
METHANOL	67-56-1	1-10
XYLENE	1330-20-7	0.1-1.0
CARBON BLACK	1333-86-4	0.1-1.0

*The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

First aid measures for different exposure routes

General advice Avoid contact with eyes,skin, and clothing.Avoid breathing, vapors,mist,or gas.

Eye contact In the case of contact with eyes, rinse immediately with plenty of water for 15 minutes and seek medical advice.

Skin contact Wash off immediately with plenty of water. Get medical attention immediately if symptoms occur.

Inhalation IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.

Ingestion Do NOT induce vomiting. Call a physician immediately. Never give anything by mouth to an unconscious person. Risk of product entering the lungs on vomiting after ingestion.

Most important symptoms/effects, acute and delayed

Main Symptoms Irritating to skin and eyes. Inhalation causing Central Nervous System effects. Ingestion causing lung damage.

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media
water fog. Dry chemical. Carbon dioxide (CO2). Cool containers / tanks with water spray.

Unsuitable Extinguishing Media Do not use a solid water stream as it may scatter and spread fire.

Specific hazards arising from the chemical
Highly Flammable. Keep product and empty container away from heat and sources of ignition.

Explosion Data
Sensitivity to Mechanical Impact none.
Sensitivity to Static Discharge Yes.

Protective Equipment and Precautions for Firefighters
As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Use shielding to protect fire-fighters from bursting containers.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions Use with adequate ventiliation to keep the exposure levels below the OELS.

Environmental precautions

Environmental precautions Report spills as required by local and federal regulations. Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas.

Methods and materials for containment and cleaning up

Methods for Containment Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Contain liquid and collect with an inter,non-combustible material.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling Avoid contact with skin and eyes. Avoid breathing vapors or mist.Contents under pressure. DO not puncture or incinerate container. Use with adequate ventilation. Keep container away from heat, flames, and all other sources of ignition. Do not lay on its side. Store in a cool place.

Conditions for safe storage, including any incompatibilities

Technical measures/Storage conditions Keep containers tightly closed in a dry, cool and well-ventilated place.

Incompatible products Store away from strong oxidizers and acids.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines .

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
MAGNESIUM SILICATE 14807-96-6	TWA: 2 mg/m³ particulate matter containing no asbestos and <1% crystalline silica, respirable fraction	(vacated) TWA: 2 mg/m³ respirable dust <1% Crystalline silica, containing no Asbestos TWA: 20 mppcf if 1% Quartz or more, use Quartz limit	IDLH: 1000 mg/m³ TWA: 2 mg/m³ containing no Asbestos and <1% Quartz respirable dust
PETROLEUM BITUMEN 8052-42-4	TWA: 0.5 mg/m³ benzene soluble aerosol fume, inhalable fraction	-	Ceiling: 5 mg/m³ fume 15 min
MAGNESIUM CARBONATE 546-93-0	-	TWA: 15 mg/m³ total dust TWA: 5 mg/m³ respirable fraction	TWA: 10 mg/m³ total dust TWA: 5 mg/m³ respirable dust
TOLUENE 108-88-3	TWA: 20 ppm	TWA: 200 ppm (vacated) TWA: 100 ppm (vacated) TWA: 375 mg/m³ (vacated) STEL: 150 ppm (vacated) STEL: 560 mg/m³ Ceiling: 300 ppm	IDLH: 500 ppm TWA: 100 ppm TWA: 375 mg/m³ STEL: 150 ppm STEL: 560 mg/m³
PETROLEUM DISTILLATES 8052-41-3	TWA: 100 ppm	TWA: 500 ppm TWA: 2900 mg/m³ (vacated) TWA: 100 ppm (vacated) TWA: 525 mg/m³	IDLH: 20000 mg/m³ Ceiling: 1800 mg/m³ 15 min TWA: 350 mg/m³
METHYL ACETATE 79-20-9	STEL: 250 ppm TWA: 200 ppm	TWA: 200 ppm TWA: 610 mg/m³ (vacated) TWA: 200 ppm (vacated) TWA: 610 mg/m³ (vacated) STEL: 250 ppm (vacated) STEL: 760 mg/m³	IDLH: 3100 ppm TWA: 200 ppm TWA: 610 mg/m³ STEL: 250 ppm STEL: 760 mg/m³
METHANOL 67-56-1	STEL: 250 ppm TWA: 200 ppm Skin - potential significant contribution to overall exposure by the cutaneous route	TWA: 200 ppm TWA: 260 mg/m³ (vacated) TWA: 200 ppm (vacated) TWA: 260 mg/m³ (vacated) STEL: 250 ppm (vacated) STEL: 325 mg/m³ (vacated) S*	IDLH: 6000 ppm TWA: 200 ppm TWA: 260 mg/m³ STEL: 250 ppm STEL: 325 mg/m³
XYLENE 1330-20-7	STEL: 150 ppm TWA: 100 ppm	TWA: 100 ppm TWA: 435 mg/m³ (vacated) TWA: 100 ppm (vacated) TWA: 435 mg/m³ (vacated) STEL: 150 ppm (vacated) STEL: 655 mg/m³	-
CARBON BLACK 1333-86-4	TWA: 3 mg/m³ inhalable fraction	TWA: 3.5 mg/m³ (vacated) TWA: 3.5 mg/m³	IDLH: 1750 mg/m³ TWA: 3.5 mg/m³ TWA: 0.1 mg/m³ Carbon black in presence of Polycyclic aromatic hydrocarbons PAH

ACGIH: (American Conference of Governmental Industrial Hygienists)
OSHA: (Occupational Safety & Health Administration)
NIOSH IDLH: Immediately Dangerous to Life or Health

Other Exposure Guidelines Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).

Exposure controls

Engineering Measures Ventilation systems. Use adequate ventilation to keep the exposure levels below the OELs.

Individual protection measures, such as personal protective equipment

Eye/Face Protection Safety glasses with side-shields.

Skin and body protection Chemical resistant apron. Protective gloves.

Respiratory protection	If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.
Hygiene measures	Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical and chemical properties

Physical state	Liquid		
Appearance	opaque	**Odor**	Solvent
Color	black	**Odor Threshold**	No information available

Property	**Values**	**Remarks • Methods**
pH	No information available	
Melting/freezing point	No information available	
Boiling point/boiling range	No information available	
Flash Point	-10 °C / 14 °F	Based on lowest flashpoint of the products constituent.
Evaporation rate	No information available	
Flammability (solid, gas)	No information available	
Flammability Limits in Air		
upper flammability limit	No information available	
lower flammability limit	No information available	
Vapor pressure	No information available	
Vapor density	No information available	
Specific Gravity	1.335	
Water solubility	Practically insoluble	
Partition coefficient: n-octanol/water	No information available	
Autoignition temperature	No information available	
Decomposition temperature	No information available	
Viscosity	No information available	
Explosive properties	No information available	

Other information

VOC Content(%) 24.73

10. STABILITY AND REACTIVITY

Reactivity
No data available

Chemical stability
Stable under recommended storage conditions.

Possibility of hazardous reactions
None under normal processing.

Conditions to Avoid
Extremes of temperature and direct sunlight.

Incompatible Materials
Store away from strong oxidizers and acids.

Hazardous Decomposition Products
Carbon oxides.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information Product does not present an acute toxicity hazard based on known information

Inhalation Exposure to high vapour concentrations may cause nervous systems effects such as headache, nausea, and dizziness.

Eye contact Irritating to eyes.

Skin contact Irritating to skin. Prolonged skin contact may defat the skin and produce dermatitis.

Ingestion Not acutely toxic. Aspiration into the lungs during swallowing may cause serious lung damage which may be fatal.

Component Information

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
PETROLEUM BITUMEN 8052-42-4	> 5000 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	-
TOLUENE 108-88-3	= 2600 mg/kg (Rat)	= 12000 mg/kg (Rabbit)	= 12.5 mg/L (Rat) 4 h
METHYL ACETATE 79-20-9	> 5000 mg/kg (Rat)	> 5 g/kg (Rabbit)	= 16000 ppm (Rat) 4 h
METHANOL 67-56-1	= 6200 mg/kg (Rat)	-	= 22500 ppm (Rat) 8 h
XYLENE 1330-20-7	= 3500 mg/kg (Rat)	> 4350 mg/kg (Rabbit)	= 29.08 mg/L (Rat) 4 h

Information on toxicological effects

Symptoms Symptoms of overexposure may be headache, dizziness, tiredness, nausea,and vomiting.Irritating to skin and eyes. Prolonged or repeated exposure may cause dermatitis. Aspiration into the lungs during swallowing may cause serious lung damage which may be fatal.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation Irritating to skin.
Eye damage/irritation Irritating to eyes.
Sensitization No information available.
Germ Cell Mutagenicity No information available.
Carcinogenicity The table below indicates whether each agency has evaluated a listed ingredient as a carcinogen.

Chemical Name	ACGIH	IARC	NTP	OSHA
MAGNESIUM SILICATE 14807-96-6	-	Group 3	-	-
PETROLEUM BITUMEN 8052-42-4	-	Group 2B	-	-
TOLUENE 108-88-3	-	Group 3	-	-
XYLENE 1330-20-7	-	Group 3	-	-
CARBON BLACK 1333-86-4	A3	Group 2B	-	-

ACGIH: (American Conference of Governmental Industrial Hygienists)
A3 - Animal Carcinogen
IARC: (International Agency for Research on Cancer)
Group 2B - Possibly Carcinogenic to Humans
Group 3 - Not Classifiable as to Carcinogenicity in Humans

Reproductive toxicity Product is or contains a chemical which is a known or suspected reproductive hazard.
Specific target organ systemic toxicity (single exposure) May cause disorder and damage to the. Target Organs.
Specific target organ systemic toxicity (repeated exposure) Causes damage to organs through prolonged or repeated exposure if swallowed.

Chronic toxicity	May cause adverse liver effects. Prolonged skin contact may defat the skin and produce dermatitis.
Target Organ Effects	Central nervous system, Central Vascular System (CVS), Eyes, Gastrointestinal tract (GI), Kidney, Liver, Respiratory system, Skin.
Aspiration hazard	May be fatal if swallowed and enters airways.

Numerical measures of toxicity - Product Information

Unknown Acute Toxicity 0% of the mixture consists of ingredient(s) of unknown toxicity

The following values are calculated based on chapter 3.1 of the GHS document .

ATEmix (oral)	14815 mg/kg
ATEmix (dermal)	18745 mg/kg
ATEmix (inhalation-dust/mist)	2078.2 mg/l
ATEmix (inhalation-vapor)	148 mg/l

12. ECOLOGICAL INFORMATION

Ecotoxicity

Chemical Name	Toxicity to algae	Toxicity to fish	Toxicity to microorganisms	Toxicity to daphnia and other aquatic invertebrates
MAGNESIUM SILICATE 14807-96-6	-	100 g/L LC50 Brachydanio rerio 96h semi-static	-	-
TOLUENE 108-88-3	433 mg/L EC50 Pseudokirchneriella subcapitata 96h 12.5 mg/L EC50 Pseudokirchneriella subcapitata 72h static	11.0 - 15.0 mg/L LC50 Lepomis macrochirus 96h static 14.1 - 17.16 mg/L LC50 Oncorhynchus mykiss 96h static 15.22 - 19.05 mg/L LC50 Pimephales promelas 96h flow-through 5.89 - 7.81 mg/L LC50 Oncorhynchus mykiss 96h flow-through 50.87 - 70.34 mg/L LC50 Poecilia reticulata 96h static 12.6 mg/L LC50 Pimephales promelas 96h static 28.2 mg/L LC50 Poecilia reticulata 96h semi-static 5.8 mg/L LC50 Oncorhynchus mykiss 96h semi-static 54 mg/L LC50 Oryzias latipes 96h static	-	5.46 - 9.83 mg/L EC50 Daphnia magna 48h Static 11.5 mg/L EC50 Daphnia magna 48h
METHYL ACETATE 79-20-9	120 mg/L EC50 Desmodesmus subspicatus 72h	250 - 350 mg/L LC50 Brachydanio rerio 96h static 295 - 348 mg/L LC50 Pimephales promelas 96h flow-through	-	1026.7 mg/L EC50 Daphnia magna 48h
METHANOL 67-56-1	-	13500 - 17600 mg/L LC50 Lepomis macrochirus 96h flow-through 18 - 20 mL/L LC50 Oncorhynchus mykiss 96h static 19500 - 20700 mg/L LC50 Oncorhynchus mykiss 96h flow-through 28200 mg/L LC50 Pimephales promelas 96h flow-through 100 mg/L LC50 Pimephales promelas 96h static	-	-

XYLENE 1330-20-7	-	13.1 - 16.5 mg/L LC50 Lepomis macrochirus 96h flow-through 13.5 - 17.3 mg/L LC50 Oncorhynchus mykiss 96h 2.661 - 4.093 mg/L LC50 Oncorhynchus mykiss 96h static 23.53 - 29.97 mg/L LC50 Pimephales promelas 96h static 30.26 - 40.75 mg/L LC50 Poecilia reticulata 96h static 7.711 - 9.591 mg/L LC50 Lepomis macrochirus 96h static 13.4 mg/L LC50 Pimephales promelas 96h flow-through 19 mg/L LC50 Lepomis macrochirus 96h 780 mg/L LC50 Cyprinus carpio 96h semi-static 780 mg/L LC50 Cyprinus carpio 96h	-	0.6 mg/L LC50 Gammarus lacustris 48h 3.82 mg/L EC50 water flea 48h

Persistence and degradability
No information available.

Bioaccumulation
No information available.

Chemical Name	log Pow
PETROLEUM BITUMEN 8052-42-4	6
TOLUENE 108-88-3	2.65
METHYL ACETATE 79-20-9	0.18
METHANOL 67-56-1	-0.77
XYLENE 1330-20-7	3.15

Other adverse effects No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment

Waste Disposal Methods Dispose of in accordance with federal, state, and local regulations.

Contaminated packaging Do not re-use empty containers.

14. TRANSPORT INFORMATION

DOT Ground UN1993, FLAMMABLE LIQUIDS, N.O.S. (TOLUENE, METHYL ACETATE), 3, PGII

15. REGULATORY INFORMATION

International Inventories

Chemical Name	TSCA	DSL/NDSL	EINECS/ELINCS	ENCS	IECSC	KECL	PICCS	AICS
MAGNESIUM SILICATE	X	X	X	X	X	X	X	X
PETROLEUM BITUMEN	X	X	X	X	X	X	X	X
MAGNESIUM CARBONATE	X	X	X	X	X	X	X	X
TOLUENE	X	X	X	X	X	X	X	X
PETROLEUM DISTILLATES	X	X	X	X	X	X	X	X
METHYL ACETATE	X	X	X	X	X	X	X	X
METHANOL	X	X	X	X	X	X	X	X
XYLENE	X	X	X	X	X	X	X	X
CARBON BLACK	X	X	X	X	X	X	X	X

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances
ENCS - Japan Existing and New Chemical Substances
CHINA - China Inventory of Existing Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances
AICS - Australian Inventory of Chemical Substances

U.S. Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372:

Chemical Name	CAS-No	Weight %*	SARA 313 - Threshold Values %
TOLUENE - 108-88-3	108-88-3	10-20	1.0
METHANOL - 67-56-1	67-56-1	1-10	1.0
XYLENE - 1330-20-7	1330-20-7	0.1-1.0	1.0

SARA 311/312 Hazard Categories

Acute Health Hazard	Yes
Chronic Health Hazard	Yes
Fire Hazard	Yes
Sudden Release of Pressure Hazard	no
Reactive Hazard	no

Clean Water Act

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42):

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
TOLUENE 108-88-3	1000 lb	X	X	X
XYLENE 1330-20-7	100 lb			X

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302):

Chemical Name	Hazardous Substances RQs	Extremely Hazardous Substances RQs	RQ
TOLUENE 108-88-3	1000 lb 1 lb		RQ 1000 lb final RQ RQ 454 kg final RQ RQ 1 lb final RQ RQ 0.454 kg final RQ
METHANOL 67-56-1	5000 lb		RQ 5000 lb final RQ RQ 2270 kg final RQ
XYLENE 1330-20-7	100 lb		RQ 100 lb final RQ RQ 45.4 kg final RQ

U.S. State Regulations

California Proposition 65

This product contains the following Proposition 65 chemicals:

Chemical Name	California Prop. 65
TOLUENE - 108-88-3	Developmental Female Reproductive
METHANOL - 67-56-1	Carcinogen
CARBON BLACK - 1333-86-4	Carcinogen

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
MAGNESIUM SILICATE 14807-96-6	X	X	X
PETROLEUM BITUMEN 8052-42-4	X	X	X
MAGNESIUM CARBONATE 546-93-0	X	X	
TOLUENE 108-88-3	X	X	X
PETROLEUM DISTILLATES 8052-41-3	X	X	X
METHYL ACETATE 79-20-9	X	X	X
METHANOL 67-56-1	X	X	X
XYLENE 1330-20-7	X	X	X
CARBON BLACK 1333-86-4	X	X	X

EPA Pesticide Registration Number Not applicable

Canada

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

16. OTHER INFORMATION

NFPA	**Health Hazard** 2	**Flammability** 3	**Instability** 0	**Physical and chemical hazards** -
HMIS	**Health Hazard** 2	**Flammability** 3	**Physical Hazard** 0	**Personal protection** B

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Disclaimer

The information provided on this SDS 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 guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as 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 material or in any process, unless specified in the text.

End of Safety Data Sheet