SAFETY DATA SHEET

KS0073300

Section 1. Identification		
Product name	: KOOL SEAL® Emulsion Driveway Sealer	
Product code	: KS0073300	
Other means of identification	: Not available.	
Product type	: Liquid.	
Relevant identified uses of t	he substance or mixture and uses advised against	
Not applicable.		
Manufacturer	: KST COATINGS 101 Prospect Avenue N.W. Cleveland, OH 44115	
Emergency telephone number of the company	: (216) 566-2917	
Product Information Telephone Number	: (888) 321-5665	
Regulatory Information Telephone Number	: (216) 566-2902	
Transportation Emergency Telephone Number	: (800) 424-9300	

Section 2. Hazards identification

OSHA/HCS status	 This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
Classification of the substance or mixture	: CARCINOGENICITY - Category 1A
GHS label elements	
Hazard pictograms	
Signal word	: Danger
Hazard statements	: May cause cancer.
Precautionary statements	
General	: Read label before use. Keep out of reach of children. If medical advice is needed, have product container or label at hand.
Prevention	: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves. Wear eye or face protection. Wear protective clothing.
Response	: IF exposed or concerned: Get medical attention.
Storage	: Store locked up.
Disposal	: Dispose of contents and container in accordance with all local, regional, national and international regulations.

Date of issue/Date of revision	: 6/4/2016	Date of previous issue	: 6/3/2016	Version : 2	1/11
--------------------------------	------------	------------------------	------------	-------------	------

Section 2. Hazards identification

Supplemental label elements	Adequate ventilation required when sanding or abrading the dried film. If Adequate ventilation cannot be provided wear an approved particulate respirator (NIOSH approved). Follow respirator manufacturer's directions for respirator use. DELAYED EFFECTS FROM LONG TERM OVEREXPOSURE. Abrading or sanding of the dry film may release Crystalline Silica which has been shown to cause lung damage and cancer under long term exposure. WARNING: This product contains chemicals known to the State of California to cause cancer. FOR INDUSTRIAL USE ONLY.				
	Please refer to the SDS for additional information. Keep out of reach of children. Do not transfer contents to other containers for storage.				
Hazards not otherwise classified	: None known.				

Section 3. Composition/information on ingredients

Substance/mixture	: Mixture
Other means of identification	: Not available.

CAS number/other identifiers

Ingredient name	% by weight	CAS number
Asphalt (Petroleum)	40	8052-42-4
Carbon Black	1.9	1333-86-4
Crystalline Silica, respirable powder	0.2	14808-60-7

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary	first aid measures
Eye contact	 Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.
Inhalation	: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
Skin contact	: Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.
Ingestion	: Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Most important symptoms/effects, acute and delayed Potential acute health effects

Date of issue/Date of revision : 6/4/201	Date of previous issue: 6/3/2016	Version : 2 2/11
--	----------------------------------	------------------

Section 4. First aid measures

Eye contact	: No known significant effects or critical hazards.
Inhalation	: No known significant effects or critical hazards.
Skin contact	: No known significant effects or critical hazards.
Ingestion	: No known significant effects or critical hazards.
<u>Over-exposure signs/symp</u>	<u>otoms</u>
Eye contact	: No specific data.
Inhalation	: No specific data.
Skin contact	: No specific data.
Ingestion	: No specific data.
Indication of immediate me	dical attention and special treatment needed, if necessary
Notes to physician	 Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
Specific treatments	: No specific treatment.
Protection of first-aiders	: No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media	
Suitable extinguishing media	: Use an extinguishing agent suitable for the surrounding fire.
Unsuitable extinguishing media	: None known.
Specific hazards arising from the chemical	: In a fire or if heated, a pressure increase will occur and the container may burst.
Hazardous thermal decomposition products	: Decomposition products may include the following materials: carbon dioxide carbon monoxide metal oxide/oxides
Special protective actions for fire-fighters	 Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
Special protective equipment for fire-fighters	: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protect	<u>tive equipmen</u>	t and emergency proce	<u>edures</u>			
For non-emergency personnel	Evacuate s entering. D Provide ade	hall be taken involving ar urrounding areas. Keep to not touch or walk throu equate ventilation. Wear . Put on appropriate pers	unnecessary and u ugh spilled material. appropriate respira	Inprotected perso Avoid breathing ator when ventilat	onnel fr g vapor	om
For emergency responders	Section 8 o	ed clothing is required to on suitable and unsuitable personnel".				
Date of issue/Date of revision	: 6/4/2016	Date of previous issue	: 6/3/2016	Version	:2	3/11

Section 6. Accidental release measures

Environmental precautions	: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. 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 spill	: Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
Large spill	: Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling

Protective measures	: Put on appropriate personal protective equipment (see Section 8). Avoid exposure - obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapor or mist. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.
Advice on general occupational hygiene	: 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. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
Conditions for safe storage, including any incompatibilities	: 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. Store locked up. 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 unlabeled containers. Use appropriate containment to avoid environmental contamination.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits (OSHA United States)

Ingredient name			Exposure limits		
Asphalt (Petroleum)			CEIL: 5 mg/m ACGIH TLV (U	Inited States, 10/2013). ³ 15 minutes. Form: Fume Inited States, 3/2015).	
Carbon Black			aerosol) 8 hour NIOSH REL (U	/m ³ , (as benzene soluble rs. Form: Inhalable fraction Inited States, 10/2013).	
				/m³ 10 hours. of PAHs/cm³ 10 hours. nited States, 2/2013).	
Date of issue/Date of revision : 6/4/2016 Date of pro		Date of previous issue	: 6/3/2016	Version :2	4/11

Section 8. Exposure controls/personal protection

	TWA: 3.5 mg/m ³ 8 hours. ACGIH TLV (United States, 3/2015).
	TWA: 3 mg/m ³ 8 hours. Form: Inhalable
	fraction
	Taction
Crystalline Silica, respirable powder	OSHA PEL Z3 (United States, 2/2013).
	TWA: 250 mppcf / (%SiO2+5) 8 hours. Form:
	Respirable
	TWA: 10 mg/m ³ / (%SiO2+2) 8 hours. Form:
	Respirable
	ACGIH TLV (United States, 3/2015).
	TWA: 0.025 mg/m ³ 8 hours. Form:
	Respirable fraction
	NIOSH REL (United States, 10/2013).
	TWA: 0.05 mg/m ³ 10 hours. Form: respirable
	dust

Occupational exposure limits (Canada)

Ingredient name	Exposure limits
None.	

Appropriate engineering controls Environmental exposure controls	 If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.
Individual protection measu	e <u>s</u>
Hygiene measures	: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
Eye/face protection	: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.
Skin protection	
Hand protection	: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
Body protection	: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Other skin protection	: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

	Date of issue/Date of revision	: 6/4/2016	Date of previous issue	: 6/3/2016	Version : 2	5/11
--	--------------------------------	------------	------------------------	------------	-------------	------

Section 8. Exposure controls/personal protection

- **Respiratory protection**
- : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

Section 9. Physical and chemical properties

Appearance		
Physical state	:	Liquid.
Color		Not available.
Odor		Not available.
Odor threshold	:	Not available.
рН	:	7
Melting point	:	Not available.
Boiling point	:	212°C (413.6°F)
Flash point	:	Closed cup: >93.3°C (>199.9°F) [Pensky-Martens Closed Cup]
Evaporation rate	:	0.09 (butyl acetate = 1)
Flammability (solid, gas)	:	Not available.
Lower and upper explosive (flammable) limits	1	Not available.
Vapor pressure	:	0.27 kPa (2 mm Hg) [at 20°C]
Vapor density	:	1 [Air = 1]
Relative density	:	1.2
Solubility	:	Not available.
Partition coefficient: n- octanol/water	:	Not available.
Auto-ignition temperature	:	Not available.
Decomposition temperature	:	Not available.
Viscosity	1	Kinematic (room temperature): >0.07 cm²/s (>7 cSt) Kinematic (40°C (104°F)): >0.07 cm²/s (>7 cSt)
Molecular weight	:	Not applicable.
Aerosol product		
Heat of combustion	1	9.473 kJ/g

Section 10. Stability and reactivity

Reactivity	-	No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	:	The product is stable.
Possibility of hazardous reactions	:	Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	:	No specific data.
Incompatible materials	:	No specific data.
Hazardous decomposition products	:	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Date of issue/Date of revision : 6/4/	V/2016 Date of previous issue	e : 6/3/2016 Version	:2 6/11
---------------------------------------	-------------------------------	----------------------	---------

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Asphalt (Petroleum) Carbon Black	LD50 Oral LD50 Oral		>5000 mg/kg >15400 mg/kg	-

Irritation/Corrosion

Not available.

Sensitization

Not available.

Mutagenicity

Not available.

Carcinogenicity

Not available.

Classification

Product/ingredient name	OSHA	IARC	NTP
Asphalt (Petroleum) Carbon Black Crystalline Silica, respirable powder	-	2B 2B 1	- - Known to be a human carcinogen.

Reproductive toxicity

Not available.

Teratogenicity

Not available.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Name		Route of exposure	Target organs
Crystalline Silica, respirable powder	Category 1	Inhalation	Not determined

Aspiration hazard

Not available.

Information on the likely
routes of exposureNot available.Potential acute health effectsEye contact: No known significant effects or critical hazards.Inhalation: No known significant effects or critical hazards.Skin contact: No known significant effects or critical hazards.Ingestion: No known significant effects or critical hazards.

Symptoms related to the	<u>physical, chemica</u>	I and toxicological cha	racteristics			
Eye contact	: No specific da	ta.				
Inhalation	: No specific da	ta.				
Date of issue/Date of revision	: 6/4/2016	Date of previous issue	: 6/3/2016	Version	:2	7/11

Skin contact	:	No specific data.
Ingestion	:	No specific data.

Delayed and immediate ef	fects and also chronic effects from short and long term exposure				
<u>Short term exposure</u>					
Potential immediate effects	: Not available.				
Potential delayed effects	: Not available.				
Long term exposure					
Potential immediate effects	: Not available.				
Potential delayed effects	: Not available.				
Potential chronic health effects					
Not available.					
General	: No known significant effects or critical hazards.				
Carcinogenicity	: May cause cancer. Risk of cancer depends on duration and level of exposure.				
Mutagenicity	: No known significant effects or critical hazards.				
Teratogenicity	: No known significant effects or critical hazards.				
Developmental effects	: No known significant effects or critical hazards.				
Fertility effects	: No known significant effects or critical hazards.				

Numerical measures of toxicity Acute toxicity estimates Not available.

Section 12. Ecological information

Toxicity

Not available.

Persistence and degradability

Not available.

Bioaccumulative potential

Not available.

Mobility in soil

Soil/water partition : Not available. coefficient (Koc)

Other adverse effects : No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods	The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.
------------------	--

Section 14. Transport information

	DOT Classification	TDG Classification	Mexico Classification	ΙΑΤΑ	IMDG
UN number	Not regulated.	Not regulated.	Not regulated.	Not regulated.	Not regulated.
UN proper shipping name	-	-	-	-	-
Transport hazard class(es)	-	-	-	-	-
Packing group	-	-	-	-	-
Environmental hazards	No.	No.	No.	No.	No.
Additional information	-	-	-	-	Emergency schedules (Ems Not Applicable

Special precautions for user : Multi-modal shipping descriptions are provided for informational purposes and do not consider container sizes. The presence of a shipping description for a particular mode of transport (sea, air, etc.), does not indicate that the product is packaged suitably for that mode of transport. All packaging must be reviewed for suitability prior to shipment, and compliance with the applicable regulations is the sole responsibility of the person offering the product for transport. People loading and unloading dangerous goods must be trained on all of the risks deriving from the substances and on all actions in case of emergency situations.

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

: Not available.

Proper shipping name Ship type **Pollution category**

: Not available.

: Not available.

: Not available.

Section 15. Regulatory information

SARA 313

SARA 313 (40 CFR 372.45) supplier notification can be found on the Environmental Data Sheet.

California Prop. 65

WARNING: This product contains chemicals known to the State of California to cause cancer.

Section 16. Other information

Hazardous Material Information System (U.S.A.)



The customer is responsible for determining the PPE code for this material.

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks Although HMIS® ratings are not required on SDSs under 29 CFR 1910. 1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.

Procedure used to derive the classification

Classification		Justification
CARCINOGENICITY - Catego	ory 1A	Calculation method
<u>History</u>		
Date of printing	: 6/4/2016	
Date of issue/Date of revision	: 6/4/2016	
Date of previous issue	: 6/3/2016	
Version	: 2	
Key to abbreviations	IATA = International Air Tra IBC = Intermediate Bulk Co IMDG = International Mariti LogPow = logarithm of the MARPOL = International Co	ctor d System of Classification and Labelling of Chemicals nsport Association ntainer

Notice to reader

It is recommended that each customer or recipient of this Safety Data Sheet (SDS) study it carefully and consult resources, as necessary or appropriate, to become aware of and understand the data contained in this SDS and any hazards associated with the product. This information is provided in good faith and believed to be accurate as of the effective date herein. However, no warranty, express or implied, is given. The information presented here applies only to the product as shipped. The addition of any material can change the composition, hazards and risks of the product. Products shall not be repackaged, modified, or tinted except as specifically instructed by Sherwin-Williams, including but not limited to the incorporation of non Sherwin-Williams products or the use or addition of products in proportions not specified by Sherwin-Williams. Regulatory requirements are subject to change and may differ between various locations and jurisdictions. The customer/buyer/user is responsible to ensure that his activities comply with all country, federal, state, provincial or local laws. The conditions for use of the product are not under the control of the manufacturer; the customer/buyer/user is responsible to determine the conditions necessary for the safe use of this product. The customer/buyer/user should not use the product for any purpose other than the purpose shown in the applicable section of this SDS without first

Date of issue/Date of revision : 6/4/2016 Date of previous issue : 6/3/2016 Version : 2	10/11
---	-------

Section 16. Other information

referring to the supplier and obtaining written handling instructions. Due to the proliferation of sources for information such as manufacturer-specific SDS, the manufacturer cannot be responsible for SDSs obtained from any other source.