SAFETY DATA SHEET

KS0024300

Section 1. Identification

Product name : KOOL SEAL® Fibered Aluminum Roofing Coating (3 year)

Product code : KS0024300

Other means of : Not available.

identification

Product type : Liquid.

Relevant identified uses of the substance or mixture and uses advised against

Paint or paint related material.

Manufacturer : KST Coatings

A Business Unit of the Sherwin-Williams Co.

101 W. Prospect Avenue Cleveland, OH 44115

Emergency telephone number of the company

: US / Canada: (216) 566-2917

Mexico: SETIQ 01-800-00-214-00 / (52) 55-5559-1588 24 hours / 365 days a year

Product Information

: US / Canada: (888) 321-5665 Mexico: Not Available

Telephone Number Mexico: Not Availa

Regulatory Information Telephone Number

: US / Canada: (216) 566-2902

Mexico: Not Available

Transportation Emergency Telephone Number

: US / Canada: (216) 566-2917

Mexico: SETIQ 01-800-00-214-00 / (52) 55-5559-1588 24 hours / 365 days a year

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

: FLAMMABLE LIQUIDS - Category 3 CARCINOGENICITY - Category 1A

SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract

irritation) - Category 3

SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) -

Category 3

SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) (central nervous

system (CNS), lungs) - Category 1 ASPIRATION HAZARD - Category 1

Percentage of the mixture consisting of ingredient(s) of unknown acute oral toxicity: 59% Percentage of the mixture consisting of ingredient(s) of unknown acute dermal toxicity:

87.7%

Percentage of the mixture consisting of ingredient(s) of unknown acute inhalation toxicity: 87.7%

GHS label elements

Hazard pictograms :







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Section 2. Hazards identification

Signal word

: Danger

Hazard statements

Flammable liquid and vapor.

May cause cancer.

May be fatal if swallowed and enters airways. May cause respiratory irritation.

May cause drowsiness or dizziness.

Causes damage to organs through prolonged or repeated exposure. (central nervous

system (CNS), lungs)

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. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use explosion-proof electrical, ventilating, lighting and all material-handling equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Keep container tightly closed. Use only outdoors or in a well-ventilated area. Do not breathe vapor. Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling.

Response

: Get medical attention if you feel unwell. IF exposed or concerned: Get medical attention. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or physician if you feel unwell. IF SWALLOWED: Immediately call a POISON CENTER or physician. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.

Storage Disposal

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

Dispose of contents and container in accordance with all local, regional, national and international regulations.

Supplemental label

elements

DELAYED EFFECTS FROM LONG TERM OVEREXPOSURE. Contains solvents which can cause permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling the contents can be harmful or fatal. WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. 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.

Please refer to the SDS for additional information. Keep out of reach of children. Do not transfer contents to other containers for storage.

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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

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Section 3. Composition/information on ingredients

Ingredient name	% by weight	CAS number
Light Aliphatic Hydrocarbon	≥25 - ≤50	64742-47-8
Asphalt (Petroleum)	≥25 - ≤50	8052-42-4
Stoddard Solvent	<10	8052-41-3
Mica	≤10	12001-26-2
Aluminum	≤5	7429-90-5
Perlite	≤5	93763-70-3
Cellulose	≤3	9004-34-6
Kaolin	≤3	1332-58-7
Heavy Aliphatic Solvent	≤3	64742-82-1
Crystalline Silica, respirable powder	<1	14808-60-7
1,3,5-Trimethylbenzene	<1	108-67-8
1,2,4-Trimethylbenzene	<1	95-63-6
Crystalline Silica, non-respirable	≤0.3	14808-60-7
Xylene, mixed isomers	≤0.3	1330-20-7

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 it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. 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 necessary, call a poison center or physician. 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

: Get medical attention immediately. Call a poison center or physician. 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. Aspiration hazard if swallowed. Can enter lungs and cause damage. Do not induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. 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

Eye contact

: No known significant effects or critical hazards.

Inhalation

: Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness. May cause respiratory irritation.

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Section 4. First aid measures

Skin contact: No known significant effects or critical hazards.

Ingestion : Can cause central nervous system (CNS) depression. May be fatal if swallowed and

enters airways.

Over-exposure signs/symptoms

Eye contact : No specific data.

Inhalation : Adverse symptoms may include the following:

respiratory tract irritation

coughing

nausea or vomiting

headache

drowsiness/fatigue dizziness/vertigo unconsciousness

Skin contact : No specific data.

Ingestion : Adverse symptoms may include the following:

nausea or vomiting

Indication of immediate medical 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 dry chemical, CO₂, water spray (fog) or foam.

Unsuitable extinguishing

media

: Do not use water jet.

Specific hazards arising from the chemical

: Flammable liquid and vapor. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. The vapor/gas is heavier than air and will spread along the ground. Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway,

sewer or drain.

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. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

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Section 5. Fire-fighting measures

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, protective equipment and emergency procedures

For non-emergency personnel

: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders: If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For nonemergency personnel".

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). Water polluting material. May be harmful to the environment if released in large quantities.

Methods and materials for containment and cleaning up

Small spill

: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. 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. Use spark-proof tools and explosion-proof equipment. 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 breathe vapor or mist. Do not swallow. Avoid release to the environment. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. 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.

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Section 7. Handling and storage

Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations. Store in a segregated and approved area. 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. Eliminate all ignition sources. Separate from oxidizing materials. 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. See Section 10 for incompatible materials before handling or use.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits (OSHA United States)

Ingredient name	CAS#	Exposure limits		
Light Aliphatic Hydrocarbon	64742-47-8	ACGIH TLV (United States, 3/2019). Absorbed through skin. TWA: 200 mg/m³, (as total hydrocarbon vapor) 8 hours.		
Asphalt (Petroleum)	8052-42-4	NIOSH REL (United States, 10/2016). CEIL: 5 mg/m³ 15 minutes. Form: Fume ACGIH TLV (United States, 3/2019). TWA: 0.5 mg/m³, (as benzene soluble aerosol) 8 hours. Form: Inhalable fraction		
Stoddard Solvent	8052-41-3	ACGIH TLV (United States, 3/2019). TWA: 100 ppm 8 hours. TWA: 525 mg/m³ 8 hours. NIOSH REL (United States, 10/2016). TWA: 350 mg/m³ 10 hours. CEIL: 1800 mg/m³ 15 minutes. OSHA PEL (United States, 5/2018). TWA: 500 ppm 8 hours. TWA: 2900 mg/m³ 8 hours.		
Mica	12001-26-2	ACGIH TLV (United States, 3/2019). TWA: 3 mg/m³ 8 hours. Form: Respirable fraction NIOSH REL (United States, 10/2016). TWA: 3 mg/m³ 10 hours. Form: Respirable fraction OSHA PEL Z3 (United States, 6/2016). TWA: 20 mppcf 8 hours.		
Aluminum	7429-90-5	NIOSH REL (United States, 10/2016). TWA: 5 mg/m³ 10 hours. Form: Respirable fraction TWA: 10 mg/m³ 10 hours. Form: Total ACGIH TLV (United States, 3/2019). TWA: 1 mg/m³ 8 hours. Form: Respirable fraction OSHA PEL (United States, 5/2018). TWA: 5 mg/m³, (as Al) 8 hours. Form: Respirable fraction TWA: 15 mg/m³, (as Al) 8 hours. Form: Total dust		
Perlite	93763-70-3	NIOSH REL (United States, 10/2016). TWA: 5 mg/m³ 10 hours. Form: Respirable fraction		

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Cellulose	9004-34-6	TWA: 10 mg/m³ 10 hours. Form: Total OSHA PEL (United States, 5/2018). TWA: 5 mg/m³ 8 hours. Form: Respirable fraction TWA: 15 mg/m³ 8 hours. Form: Total dust ACGIH TLV (United States, 3/2019). TWA: 10 mg/m³ 8 hours. NIOSH REL (United States, 10/2016).
	1000 50 7	TWA: 5 mg/m³ 10 hours. Form: Respirable fraction TWA: 10 mg/m³ 10 hours. Form: Total OSHA PEL (United States, 5/2018). TWA: 5 mg/m³ 8 hours. Form: Respirable fraction TWA: 15 mg/m³ 8 hours. Form: Total dust
Kaolin	1332-58-7	ACGIH TLV (United States, 3/2019). TWA: 2 mg/m³ 8 hours. Form: Respirable fraction NIOSH REL (United States, 10/2016). TWA: 5 mg/m³ 10 hours. Form: Respirable fraction TWA: 10 mg/m³ 10 hours. Form: Total OSHA PEL (United States, 5/2018). TWA: 5 mg/m³ 8 hours. Form: Respirable fraction TWA: 15 mg/m³ 8 hours. Form: Total dust
Heavy Aliphatic Solvent Crystalline Silica, respirable powder	64742-82-1 14808-60-7	None. OSHA PEL Z3 (United States, 6/2016). TWA: 250 mppcf / (%SiO2+5) 8 hours. Form: Respirable TWA: 10 mg/m³ / (%SiO2+2) 8 hours. Form: Respirable OSHA PEL (United States, 5/2018). TWA: 50 μg/m³ 8 hours. Form: Respirable dust ACGIH TLV (United States, 3/2019). TWA: 0.025 mg/m³ 8 hours. Form: Respirable fraction NIOSH REL (United States, 10/2016). TWA: 0.05 mg/m³ 10 hours. Form: respirable dust
1,3,5-Trimethylbenzene	108-67-8	ACGIH TLV (United States, 3/2019). TWA: 25 ppm 8 hours. TWA: 123 mg/m³ 8 hours. NIOSH REL (United States, 10/2016). TWA: 25 ppm 10 hours. TWA: 125 mg/m³ 10 hours.
1,2,4-Trimethylbenzene	95-63-6	ACGIH TLV (United States, 3/2019). TWA: 25 ppm 8 hours. TWA: 123 mg/m³ 8 hours. NIOSH REL (United States, 10/2016). TWA: 25 ppm 10 hours. TWA: 125 mg/m³ 10 hours.
Crystalline Silica, non-respirable	14808-60-7	OSHA PEL (United States, 5/2018). TWA: 50 µg/m³ 8 hours. Form: Respirable dust OSHA PEL Z3 (United States, 6/2016).

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		TWA: 30 mg/m³ / (%SiO2+2) 8 hours. Form:
		Total dust
Xylene, mixed isomers	1330-20-7	ACGIH TLV (United States, 3/2019).
		TWA: 100 ppm 8 hours.
		TWA: 434 mg/m³ 8 hours.
		STEL: 150 ppm 15 minutes.
		STEL: 651 mg/m³ 15 minutes.
		OSHA PEL (United States, 5/2018).
		TWA: 100 ppm 8 hours.
		TWA: 435 mg/m³ 8 hours.

Occupational exposure limits (Canada)

Ingredient name	CAS#	Exposure limits
Petroleum refining, hydrotreated light distillate	64742-47-8	CA British Columbia Provincial (Canada, 5/2019). Absorbed through skin. TWA: 200 mg/m³, (as total hydrocarbon vapour) 8 hours. CA Alberta Provincial (Canada, 6/2018). Absorbed through skin. 8 hrs OEL: 200 mg/m³, (as total hydrocarbon vapour) 8 hours. CA Ontario Provincial (Canada, 1/2018). Absorbed through skin. TWA: 200 mg/m³, (as total hydrocarbon vapour) 8 hours.
Stoddard solvent	8052-41-3	CA Alberta Provincial (Canada, 6/2018). 8 hrs OEL: 572 mg/m³ 8 hours. 8 hrs OEL: 100 ppm 8 hours. CA British Columbia Provincial (Canada, 5/2019). TWA: 290 mg/m³ 8 hours. STEL: 580 mg/m³ 15 minutes. CA Ontario Provincial (Canada, 1/2018). TWA: 100 ppm 8 hours. CA Quebec Provincial (Canada, 1/2014). TWAEV: 100 ppm 8 hours. TWAEV: 525 mg/m³ 8 hours. CA Saskatchewan Provincial (Canada, 7/2013). STEL: 125 ppm 15 minutes. TWA: 100 ppm 8 hours.
Kaolin	1332-58-7	CA Alberta Provincial (Canada, 6/2018). 8 hrs OEL: 2 mg/m³ 8 hours. Form: Respirable CA British Columbia Provincial (Canada, 5/2019). TWA: 2 mg/m³ 8 hours. Form: Respirable CA Quebec Provincial (Canada, 1/2014). TWAEV: 5 mg/m³ 8 hours. Form: Respirable dust. CA Ontario Provincial (Canada, 1/2018). TWA: 2 mg/m³ 8 hours. Form: Respirable fraction. CA Saskatchewan Provincial (Canada, 7/2013). STEL: 4 mg/m³ 15 minutes. Form: respirable

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	44000 55 -	fraction TWA: 2 mg/m³ 8 hours. Form: respirable fraction
Quartz	14808-60-7	CA British Columbia Provincial (Canada, 5/2019). TWA: 0.025 mg/m³ 8 hours. Form: Respirable CA Quebec Provincial (Canada, 1/2014). TWAEV: 0.1 mg/m³ 8 hours. Form: Respirable dust. CA Ontario Provincial (Canada, 1/2018). TWA: 0.1 mg/m³ 8 hours. Form: Respirable fraction. CA Alberta Provincial (Canada, 6/2018). 8 hrs OEL: 0.025 mg/m³ 8 hours. Form: Respirable particulate CA Saskatchewan Provincial (Canada, 7/2013). TWA: 0.05 mg/m³ 8 hours. Form: respirable fraction
Quartz	14808-60-7	CA Quebec Provincial (Canada, 1/2014). TWAEV: 0.1 mg/m³ 8 hours. Form: Respirable dust.
Xylene	1330-20-7	CA Alberta Provincial (Canada, 6/2018). 8 hrs OEL: 100 ppm 8 hours. 15 min OEL: 651 mg/m³ 15 minutes. 15 min OEL: 150 ppm 15 minutes. 8 hrs OEL: 434 mg/m³ 8 hours. CA British Columbia Provincial (Canada, 5/2019). TWA: 100 ppm 8 hours. STEL: 150 ppm 15 minutes. CA Quebec Provincial (Canada, 1/2014). TWAEV: 100 ppm 8 hours. TWAEV: 434 mg/m³ 8 hours. STEV: 150 ppm 15 minutes. STEV: 651 mg/m³ 15 minutes. CA Ontario Provincial (Canada, 1/2018). STEL: 150 ppm 15 minutes. TWA: 100 ppm 8 hours. CA Saskatchewan Provincial (Canada, 7/2013). STEL: 150 ppm 15 minutes. TWA: 100 ppm 8 hours.

Occupational exposure limits (Mexico)

	CAS#	Exposure limits
Light Aliphatic Hydrocarbon	64742-47-8	ACGIH TLV (United States, 3/2019). Absorbed through skin. TWA: 200 mg/m³, (as total hydrocarbon
Stoddard Solvent	8052-41-3	vapor) 8 hours. NOM-010-STPS-2014 (Mexico, 4/2016). TWA: 100 ppm 8 hours.

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Appropriate engineering controls

: Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

Environmental exposure controls

: 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 measures

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 sideshields.

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. When there is a risk of ignition from static electricity, wear antistatic protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.

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.

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.

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Section 9. Physical and chemical properties

Appearance

Physical state : Liquid.

Color : Not available.

Odor : Not available.

Odor threshold : Not available.

pH : Not available.

Melting point/freezing point : Not available.

Boiling point/boiling range : 141°C (285.8°F)

Flash point : Closed cup: 41°C (105.8°F) [Tagliabue Closed Cup]

Evaporation rate : 0.13 (butyl acetate = 1)

Flammability (solid, gas) : Not available.

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Section 9. Physical and chemical properties

Lower and upper explosive

(flammable) limits

: Lower: 0.8% Upper: 6%

Vapor pressure

: 0.69 kPa (5.17 mm Hg) [at 20°C]

Vapor density

5 [Air = 1]

Relative density

: 0.99

Solubility

: Not available.

Partition coefficient: n-

: Not available.

octanol/water

: Not available.

Auto-ignition temperature Decomposition temperature

: Not available.

Viscosity

Kinematic (40°C (104°F)): <0.205 cm²/s (<20.5 cSt)

Molecular weight

Not applicable.

Aerosol product

Heat of combustion : 24.448 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

: Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition. Do not allow vapor to accumulate in low or confined areas.

: Reactive or incompatible with the following materials:

oxidizing materials

Hazardous decomposition products

Incompatible materials

not be produced.

: Under normal conditions of storage and use, hazardous decomposition products should

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Asphalt (Petroleum)	LD50 Oral	Rat	>5000 mg/kg	-
Cellulose	LD50 Oral	Rat	>5 g/kg	-
1,3,5-Trimethylbenzene	LC50 Inhalation Vapor	Rat	24000 mg/m ³	4 hours
•	LD50 Oral	Rat	5000 mg/kg	-
1,2,4-Trimethylbenzene	LC50 Inhalation Vapor	Rat	18000 mg/m ³	4 hours
•	LD50 Oral	Rat	5 g/kg	-
Xylene, mixed isomers	LC50 Inhalation Gas.	Rat	5000 ppm	4 hours
,	LD50 Oral	Rat	4300 mg/kg	-

Irritation/Corrosion

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Section 11. Toxicological information

Product/ingredient name	Result	Species	Score	Exposure	Observation
Stoddard Solvent	Eyes - Mild irritant	Human	-	100 ppm	-
	Eyes - Moderate irritant	Rabbit	-	24 hours 500	-
				mg	
1,3,5-Trimethylbenzene	Eyes - Mild irritant	Rabbit	-	24 hours 500	-
				mg	
	Skin - Moderate irritant	Rabbit	-	24 hours 20	-
				mg	
Xylene, mixed isomers	Eyes - Mild irritant	Rabbit	-	87 mg	-
	Eyes - Severe irritant	Rabbit	-	24 hours 5	-
				mg	
	Skin - Mild irritant	Rat	-	8 hours 60 UI	-
	Skin - Moderate irritant	Rabbit	-	24 hours 500	-
				mg	
	Skin - Moderate irritant	Rabbit	-	100 %	-

Sensitization

Not available.

Mutagenicity

Not available.

Carcinogenicity

Not available.

Classification

Product/ingredient name	OSHA	IARC	NTP
Asphalt (Petroleum)	-	2B	-
Crystalline Silica, respirable powder	-	1	Known to be a human carcinogen.
Crystalline Silica, non-respirable	-	1	Known to be a human carcinogen.
Xylene, mixed isomers	-	3	-

Reproductive toxicity

Not available.

Teratogenicity

Not available.

Specific target organ toxicity (single exposure)

Name	Category	Route of exposure	Target organs
Light Aliphatic Hydrocarbon	Category 3 Category 3	Not applicable. Not applicable.	Narcotic effects Respiratory tract irritation
Stoddard Solvent	Category 3 Category 3	Not applicable. Not applicable.	Narcotic effects Respiratory tract irritation
Heavy Aliphatic Solvent	Category 3 Category 3	Not applicable. Not applicable.	Narcotic effects Respiratory tract irritation
1,3,5-Trimethylbenzene	Category 3	Not applicable.	Respiratory tract irritation
1,2,4-Trimethylbenzene	Category 3	Not applicable.	Respiratory tract irritation
Xylene, mixed isomers	Category 3	Not applicable.	Respiratory tract

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Section 11. Toxicological information

Specific target organ toxicity (repeated exposure)

Name	Category	Route of exposure	Target organs
Light Aliphatic Hydrocarbon	Category 2	Not determined	Not determined
Stoddard Solvent	Category 1	Not determined	Not determined
Mica	Category 1	Inhalation	lungs
Kaolin	Category 1	Inhalation	lungs
Heavy Aliphatic Solvent	Category 1	Not determined	central nervous system (CNS)
Crystalline Silica, respirable powder	Category 1	Inhalation	Not determined
Xylene, mixed isomers	Category 2	Not determined	Not determined

Aspiration hazard

Name	Result
Light Aliphatic Hydrocarbon	ASPIRATION HAZARD - Category 1
Stoddard Solvent	ASPIRATION HAZARD - Category 1
Heavy Aliphatic Solvent	ASPIRATION HAZARD - Category 1
1,3,5-Trimethylbenzene	ASPIRATION HAZARD - Category 1
1,2,4-Trimethylbenzene	ASPIRATION HAZARD - Category 1
Xylene, mixed isomers	ASPIRATION HAZARD - Category 1

Information on the likely routes of exposure

: Not available.

Potential acute health effects

Eye contact: No known significant effects or critical hazards.

Inhalation : Can cause central nervous system (CNS) depression. May cause drowsiness or

dizziness. May cause respiratory irritation.

Skin contact: No known significant effects or critical hazards.

Ingestion : Can cause central nervous system (CNS) depression. May be fatal if swallowed and

enters airways.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : No specific data.

Inhalation : Adverse symptoms may include the following:

respiratory tract irritation

coughing

nausea or vomiting

headache

drowsiness/fatigue dizziness/vertigo unconsciousness

Skin contact : No specific data.

Ingestion: Adverse symptoms may include the following:

nausea or vomiting

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate : Not available.

effects

Potential delayed effects: Not available.

Long term exposure

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Potential immediate

effects

: Not available.

Potential delayed effects : Not available.

Potential chronic health effects

Not available.

General: Causes damage to organs through prolonged or repeated exposure.

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

Product/ingredient name	Result	Species	Exposure
Light Aliphatic Hydrocarbon	Acute LC50 2200 μg/l Fresh water	Fish - Lepomis macrochirus	4 days
Aluminum	Acute LC50 38000 µg/l Fresh water	Daphnia - Daphnia magna	48 hours
	Acute LC50 120 µg/l Fresh water	Fish - Oncorhynchus mykiss -	96 hours
		Embryo	
	Chronic NOEC 9 mg/l Fresh water	Aquatic plants - Ceratophyllum	3 days
		demersum	
1,3,5-Trimethylbenzene	Acute LC50 13000 µg/l Marine water	Crustaceans - Cancer magister -	48 hours
		Zoea	
	Acute LC50 12520 µg/l Fresh water	Fish - Carassius auratus	96 hours
	Chronic NOEC 400 µg/l Fresh water	Daphnia - Daphnia magna	21 days
1,2,4-Trimethylbenzene	Acute LC50 4910 µg/l Marine water	Crustaceans - Elasmopus	48 hours
		pectenicrus - Adult	
	Acute LC50 7720 µg/l Fresh water	Fish - Pimephales promelas	96 hours
Xylene, mixed isomers	Acute LC50 8500 µg/l Marine water	Crustaceans - Palaemonetes	48 hours
		pugio	
	Acute LC50 13400 µg/l Fresh water	Fish - Pimephales promelas	96 hours

Persistence and degradability

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
Xylene, mixed isomers	-	-	Readily

Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
Heavy Aliphatic Solvent	-	10 to 2500	high
1,3,5-Trimethylbenzene	-	161	low
1,2,4-Trimethylbenzene	-	243	low
Xylene, mixed isomers	-	8.1 to 25.9	low

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Section 12. Ecological information

Mobility in soil

Soil/water partition coefficient (Koc)

: Not available.

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. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. 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	IATA	IMDG
UN number	UN1263	UN1263	UN1263	UN1263	UN1263
UN proper shipping name	PAINT RELATED MATERIAL	PAINT RELATED MATERIAL	PAINT RELATED MATERIAL	PAINT RELATED MATERIAL	PAINT RELATED MATERIAL. Marine pollutant (Light Aliphatic Hydrocarbon, Fuller's Earth)
Transport hazard class(es)	3	3	3	3	3
	FLAMMARIE LIGHT	3	3	3/	1
Packing group	III	III	III	III	III
Environmental hazards	No.	No.	No.	No.	Yes.
Additional information	This product may be re-classified as "Combustible Liquid," unless transported by vessel or aircraft. Non-bulk packages (less than or equal to 119 gal) of	Product classified as per the following sections of the Transportation of Dangerous Goods Regulations: 2.18-2.19 (Class 3).	-	The environmentally hazardous substance mark may appear if required by other transportation regulations.	The marine pollutant mark is not required when transported in sizes of ≤5 L or ≤5 kg. Emergency schedules F-E, S-E

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Section 14. Transport information | Combustible liquids are not regulated as hazardous materials. | ERG No. | ERG No. | 128 | 128 | 128 | 128 |

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 : Not available.

Ship type : Not available.

Pollution category : 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 and birth defects or other reproductive harm.

International regulations

International lists

: Australia inventory (AICS): Not determined. China inventory (IECSC): Not determined. Japan inventory (ENCS): Not determined. Japan inventory (ISHL): Not determined. Korea inventory (KECI): Not determined.

New Zealand Inventory of Chemicals (NZIoC): Not determined.

Philippines inventory (PICCS): Not determined.

Taiwan Chemical Substances Inventory (TCSI): Not determined.

Thailand inventory: Not determined. Turkey inventory: Not determined. Vietnam inventory: Not determined.

Section 16. Other information

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



The customer is responsible for determining the PPE code for this material. For more information on HMIS® Personal Protective Equipment (PPE) codes, consult the HMIS® Implementation Manual.

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Section 16. Other information

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 and the associated label are not required on SDSs or products leaving a facility 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 trademark and service mark of the American Coatings Association, Inc.

Procedure used to derive the classification

Classification	Justification
FLAMMABLE LIQUIDS - Category 3 CARCINOGENICITY - Category 1A	On basis of test data Calculation method
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3	Calculation method
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3	Calculation method
SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) (central nervous	Calculation method
system (CNS), lungs) - Category 1 ASPIRATION HAZARD - Category 1	Calculation method

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Key to abbreviations : ATE = Acute Toxicity Estimate

BCF = Bioconcentration Factor

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

IATA = International Air Transport Association

IBC = Intermediate Bulk Container

IMDG = International Maritime Dangerous Goods

LogPow = logarithm of the octanol/water partition coefficient

MARPOL = International Convention for the Prevention of Pollution From Ships, 1973

as modified by the Protocol of 1978. ("Marpol" = marine pollution)

N/A = Not available SGG = Segregation Group UN = United Nations

Indicates information that has changed from previously issued version.

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 the manufacturer, including but not limited to the incorporation of products not specified by the manufacturer, or the use or addition of products in proportions not specified by the manufacturer. 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 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.

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