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Safety Data Sheet



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1. Identification

Product Name: AS9100 System Safety Yellow Revision Date: 9/12/2014

Product Identifier: AS9144425 Supercedes Date: New SDS

Product Use/Class: Anti Slip/Epoxy

Supplier: Rust-Oleum Corporation Manufacturer: Rust-Oleum Corporation 11 Hawthorn Parkway 11 Hawthorn Parkway

Vernon Hills, IL 60061 Vernon Hills, IL 60061

USA

USA

Preparer: Regulatory Department

Emergency Telephone: 24 Hour Hotline: 847-367-7700

2. Hazard Identification

EMERGENCY OVERVIEW: May cause allergic skin reaction; effects may be permanent. KEEP OUT OF REACH OF CHILDREN. Causes skin irritation. Harmful to aquatic life with long lasting effects. Causes Serious Eye Irritation. Harmful if swallowed. Causes eye irritation. Flammable liquid and vapor. Causes nose and throat irritation. Harmful if inhaled. May affect the brain or nervous system causing dizziness, headache or nausea. Vapor Harmful. Causes Eye, Skin, Nose, and Throat Irritation. May cause eye, skin, or respiratory tract irritation. Harmful if inhaled. Use ventilation necessary to keep exposures below recommended exposure limits, if any.

Harmful if swallowed.

Classification

Symbol(s) of Product







Signal Word Danger

Possible Hazards

21% of the mixture consists of ingredient(s) of unknown acute toxicity

GHS HAZARD STATEMENTS

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Flammable Liquid, category 2	H225	Highly flammable liquid and vapour.
Acute Toxicity, Oral, category 5	H303	May be harmful if swallowed.
Acute Toxicity, Dermal, category 5	H313	May be harmful in contact with skin.
Skin Irritation, category 2	H315	Causes skin irritation.
Eye Irritation, category 2	H319	Causes serious eye irritation.
Acute Toxicity, Inhalation, category 4	H332	Harmful if inhaled.
STOT, single exposure, category 3, RTI	H335	May cause respiratory irritation.
STOT, single exposure, category 3, NE	H336	May cause drowsiness or dizziness.
Organic Peroxide, categories C, D	H242	Heating may cause a fire.
Aspiration Hazard, category 2	H305	May be harmful if swallowed and enters airways.
Eye Irritation, category 2B	H320	Causes eye irritation.

H302

GHS PRECAUTIONARY STATEMENTS

Acute Toxicity, Oral, category 4

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P102 Keep out of reach of children.

P103 Read label before use.

P202 Do not handle until all safety precautions have been read and understood.

P234 Keep only in original container.

P260 Do not breathe dust/fume/gas/mist/vapours/spray.
P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P262 Do not get in eyes, on skin, or on clothing.

P264 Wash ... thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.
P271 Use only outdoors or in a well-ventilated area.

P273 Avoid release to the environment.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P281 Use personal protective equipment as required.

P285 In case of inadequate ventilation wear respiratory protection.

P351 Rinse cautiously with water for several minutes.

P374 Fight fire with normal precautions from a reasonable distance.

P402 Store in a dry place.

P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

P240 Ground/bond container and receiving equipment.

P241 Use explosion-proof electrical/ventilating/lighting/.../ equipment.

P242 Use only non-sparking tools.

P243 Take precautionary measures against static discharge.

P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin

with water/shower.

P370+P378 In case of fire: Use ... for extinction.
P403+P235 Store in a well-ventilated place. Keep cool.
P501 Dispose of contents/container to ...
P321 Specific treatment (see ... on this label).

P352 Wash with plenty of soap and water.
P362 Take off contaminated clothing and wash before reuse.
P332+P313 If skin irritation occurs: Get medical advice/attention.

P332+P313 If skin irritation occurs: Get medical advice/attention.
P305+P351+P338 If skin irritation occurs: Get medical advice/attention.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if

present and easy to do. Continue rinsing.

P337+P313 If eye irritation persists: Get medical advice/attention.

P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for

breathing.

P405 Store locked up.

P403+P233 Store in a well-ventilated place. Keep container tightly closed. P220 Keep/Store away from clothing/.../combustible materials.

P410 Protect from sunlight.

P420 Store away from other materials.

P411+P235 Store at temperatures not exceeding ...°C/...°F. Keep cool. P302+P350 IF ON SKIN: Gently wash with plenty of soap and water.

P330 Rinse mouth.

P301+P312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.

3. Composition/Information On Ingredients

HAZARDOUS SUBSTANCES

<u>Chemical Name</u>	CAS-No.	Wt.% Range	GHS Symbols	GHS Statements
Aluminum Oxide	1344-28-1	25-50		
Crystalline Silica	14808-60-7	10-25	GHS07	H302
Bisphenol A Epoxy Resin	25068-38-6	2.5-10		
Wollastonite	13983-17-0	2.5-10		
Carbon Black	1333-86-4	2.5-10	GHS02	H251
Titanium Dioxide	13463-67-7	2.5-10		
Methyl n-Amyl Ketone	110-43-0	1.0-2.5	GHS02	H226

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Solvent Naptha, Light Aromatic	64742-95-6	1.0-2.5		
Propylene Glycol Monomethyl Ether	107-98-2	1.0-2.5	GHS02-GHS06	H226-310
Xylene	1330-20-7	1.0-2.5	GHS02	H226
Ethylbenzene	100-41-4	0.1-1.0	GHS02-GHS07	H225-332

The text for GHS Hazard Statements shown above (if any) is given in the "16. Other Information" section.

4. First-aid Measures

FIRST AID - EYE CONTACT: Immediately flush eyes with plenty of water for at least 15 minutes holding eyelids open. Get medical attention. Do NOT allow rubbing of eyes or keeping eyes closed.

FIRST AID - SKIN CONTACT: Wash skin with soap and water. Remove contaminated clothing. Get medical attention if irritation develops or persists.

FIRST AID - INHALATION: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get immediate medical attention. Do NOT use mouth-to-mouth resuscitation. If you experience difficulty in breathing, leave the area to obtain fresh air. If continued difficulty is experienced, get medical assistance immediately.

FIRST AID - INGESTION: Aspiration hazard: Do not induce vomiting or give anything by mouth because this material can enter the lungs and cause severe lung damage. Get immediate medical attention. If swallowed, get medical attention.

5. Fire-fighting Measures

EXTINGUISHING MEDIA:

Alcohol Film Forming Foam, Carbon Dioxide, Dry Chemical, Dry Sand, Water Fog

UNUSUAL FIRE AND EXPLOSION HAZARDS: Isolate from heat, electrical equipment, sparks and open flame. Vapors can travel to a source of ignition and flash back. Vapors may form explosive mixtures with air. No unusual fire or explosion hazards noted. Closed containers may explode when exposed to extreme heat due to buildup of steam. Keep containers tightly closed.

SPECIAL FIREFIGHTING PROCEDURES: Water may be used to cool closed containers to prevent pressure buildup and possible autoignition or explosion. Evacuate area and fight fire from a safe distance. Use water spray to keep fire-exposed containers cool. Containers may explode when heated.

6. Accidental Release Measures

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED: Contain spilled liquid with sand or earth. DO NOT use combustible materials such as sawdust. Eliminate all ignition sources; use explosion-proof equipment. Place material in a container and dispose of according to local, provincial, state and federal regulations. Remove all sources of ignition, ventilate area and remove with inert absorbent and non-sparking tools. Dispose of according to local, state (provincial) and federal regulations. Do not incinerate closed containers. Ventilate area, isolate spilled material, and remove with inert absorbent. Dispose of contaminated absorbent, container, and unused contents in accordance with local, state, and federal regulations.

7. Handling and Storage

HANDLING: Wash thoroughly after handling. Wash hands before eating. Use only with adequate ventilation. Follow all MSDS/label precautions even after container is emptied because it may retain product residues. Remove contaminated clothing and launder before reuse. Avoid breathing fumes, vapors, or mist. Avoid contact with eyes, skin and clothing.

STORAGE: Keep containers tightly closed. Isolate from heat, electrical equipment, sparks and open flame. Keep away from heat, sparks, flame and sources of ignition. Keep container closed when not in use. Product should be stored in tightly sealed containers and protected from heat, moisture, and foreign materials. Store in a dry, well ventilated place. Keep container tightly closed when not in use. Avoid excess heat. Do not store above 120 ° F. Store large quantities in buildings designed and protected for storage of NFPA Class II combustible liquids.

8. Exposure Controls/Personal Protection

Chemical Name	CAS-No.	Weight % Less Than	ACGIH TLV- TWA	ACGIH TLV- STEL	OSHA PEL-TWA	OSHA PEL- CEILING
Aluminum Oxide	1344-28-1	40.0	1 mg/m3 [Respirable]	N.E.	5 mg/m3 [Respirable]	N.E.
Crystalline Silica	14808-60-7	25.0	0.025 mg/m3 [Respirable Dust]	N.E.	0.1 mg/m3 [Respirable Dust]	N.E.
Bisphenol A Epoxy Resin	25068-38-6	10.0	N.E.	N.E.	N.E.	N.E.
Wollastonite	13983-17-0	5.0	15 mg/m3 (Total Dust)	N.E.	5 mg/m3 (Respirable Dust)	N.E.
Titanium Dioxide	13463-67-7	5.0	10 mg/m3	N.E.	15 mg/m3 [Total Dust]	N.E.

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Carbon Black	1333-86-4	5.0	3 mg/m3 (Inhalable Dust)	N.E.	3.5 mg/m3	N.E.
Propylene Glycol Monomethyl Ether	107-98-2	5.0	50 ppm	100 ppm	N.E.	N.E.
Solvent Naptha, Light Aromatic	64742-95-6	5.0	N.E.	N.E.	N.E.	N.E.
Methyl n-Amyl Ketone	110-43-0	5.0	50 ppm	N.E.	100 ppm	N.E.
Xylene	1330-20-7	5.0	100 ppm	150 ppm	100 ppm	N.E.
Ethylbenzene	100-41-4	1.0	20 ppm	125 ppm	100 ppm	N.E.

PERSONAL PROTECTION

ENGINEERING CONTROLS: Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Prevent build-up of vapors by opening all doors and windows to achieve cross-ventilation

RESPIRATORY PROTECTION: A respiratory protection program that meets OSHA 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use. A NIOSH/MSHA approved air purifying respirator with an organic vapor cartridge or canister may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits.

Protection provided by air purifying respirators is limited. Use a positive pressure air supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or in any other circumstances where air purifying respirators may not provide adequate protection.

SKIN PROTECTION: Use impervious gloves to prevent skin contact and absorption of this material through the skin. Nitrile or Neoprene gloves may afford adequate skin protection. Use gloves to prevent prolonged skin contact.

EYE PROTECTION: Use safety eyewear designed to protect against splash of liquids.

OTHER PROTECTIVE EQUIPMENT: Refer to safety supervisor or industrial hygienist for further information regarding personal protective equipment and its application. Refer to safety supervisor or industrial hygienist for further guidance regarding types of personal protective equipment and their applications.

HYGIENIC PRACTICES: Wash thoroughly with soap and water before eating, drinking or smoking. Remove contaminated clothing immediately and launder before reuse.

9. Physical and Chemical Properties

Appearance: Liquid **Physical State:** Liquid **Odor Threshold:** Odor: Solvent Like N.E. Relative Density: 0.120pH: N.A. Freeze Point, °C: N.D. Viscosity: N.D.

Solubility in Water: Negligible

Decompostion Temp., °C: No Information water: No Information

Partition Coefficient, n-octanol/

Boiling Range, °C: 0 - N.D. Explosive Limits, vol%: N.A. - N.A.

Flammability: Supports Combustion Flash Point, °C: 27

Evaporation Rate: Slower than Ether Auto-ignition Temp., °C: No Information

Vapor Density: Heavier than Air Vapor Pressure: N.D.

(See "Other information" Section for abbreviation legend)

10. Stability and Reactivity

CONDITIONS TO AVOID: Avoid all possible sources of ignition. Avoid temperatures above 120 ° F. Avoid contact with strong acid and strong bases.

INCOMPATIBILITY: Incompatible with strong oxidizing agents, strong acids and strong alkalies.

HAZARDOUS DECOMPOSITION: By open flame, carbon monoxide and carbon dioxide. When heated to decomposition, it emits acrid smoke and irritating fumes. Contains solvents which may form carbon monoxide, carbon dioxide, and formaldehyde.

HAZARDOUS POLYMERIZATION: Will not occur under normal conditions.

STABILITY: This product is stable under normal storage conditions.

11. Toxicological information

EFFECTS OF OVEREXPOSURE - EYE CONTACT: Causes Serious Eye Irritation

EFFECTS OF OVEREXPOSURE - SKIN CONTACT: Prolonged or repeated skin contact may cause irritation. Causes skin irritation. Allergic reactions are possible.

EFFECTS OF OVEREXPOSURE - INHALATION: Harmful if inhaled. Avoid breathing fumes, spray, vapors, or mist. May cause

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headaches and dizziness. High vapor concentrations are irritating to the eyes, nose, throat and lungs. High gas, vapor, mist or dust concentrations may be harmful if inhaled. Prolonged or excessive inhalation may cause respiratory tract irritation.

EFFECTS OF OVEREXPOSURE - INGESTION: Harmful if swallowed. Aspiration hazard if swallowed; can enter lungs and cause damage.

EFFECTS OF OVEREXPOSURE - CHRONIC HAZARDS: IARC lists Ethylbenzene as a possible human carcinogen (group 2B). Contains Calcium Silicate (Wollastonite), which is an IARC 3 Agent "unclassifiable as to carcinogenicity to humans" via inhalation. Inhalation exposure to Calcium Silicate is not anticipated through brush application nor normal use. Calcium Silicate is NOT classified as a carcinogen by NIOSH, ACGIH, NTP nor OSHA. Overexposure to xylene in laboratory animals has been associated with liver abnormalities, kidney, lung, spleen, eye and blood damage as well as reproductive disorders. Effects in humans, due to chronic overexposure, have included liver, cardiac abnormalities and nervous system damage. Contains Titanium Dioxide. Titanium Dioxide is listed as a Group 2B-"Possibly carcinogenic to humans" by IARC. No significant exposure to Titanium Dioxide is thought to occur during the use of products in which Titanium Dioxide is bound to other materials, such as in paints during brush application or drying. Risk of overexposure depends on duration and level of exposure to dust from repeated sanding of surfaces or spray mist and the actual concentration of Titanium Dioxide in the formula. (Ref: IARC Monograph, Vol. 93, 2010)Contains carbon black. Chronic inflammation, lung fibrosis, and lung tumors have been observed in some rats experimentally exposed for long periods of time to excessive concentrations of carbon black and several insoluble fine dust particles. Tumors have not been observed in other animal species (i.e., mouse and hamster) under similar circumstances and study conditions. Epidemiological studies of North American workers show no evidence of clinically significant adverse health effects due to occupational exposure to carbon black.

Carbon black is listed as a Group 2B-"Possibly carcinogenic to humans" by IARC and is proposed to be listed as A4- "not classified as a human carcinogen" by the American Conference of Governmental Industrial Hygienists. Significant exposure is not anticipated during brush application or drying. Risk of overexposure depends on duration and level of exposure to dust from repeated sanding of surfaces or spray mist and the actual concentration of carbon black in the formula. Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage. High concentrations may lead to central nervous system effects (drowsiness, dizziness, nausea, headaches, paralysis, and blurred vision) and/or damage.

PRIMARY ROUTE(S) OF ENTRY: Eye Contact, Ingestion, Inhalation, Skin Absorption, Skin Contact

ACUTE TOXICITY VALUES

The acute effects of this product have not been tested. Data on individual components are tabulated below:

CAS-No.	Chemical Name	Oral LD50	Dermal LD50	Vapor LC50
1344-28-1	Aluminum Oxide	>5000 mg/kg Rat	N.I.	N.I.
14808-60-7	Crystalline Silica	500 mg/kg Rat	N.I.	N.I.
13463-67-7	Titanium Dioxide	>10000 mg/kg Rat	N.I.	N.I.
64742-95-6	Solvent Naptha, Light Aromatic	N.I.	>2000 mg/kg Rabbit	N.I.
107-98-2	Propylene Glycol Monomethyl Ether	5200 mg/kg Rat	13 g/kg Rabbit	54.6 mg/L Rat
1330-20-7	Xylene	4300 mg/kg Rat	N.I.	47635 mg/L Rat
100-41-4	Ethylbenzene	3500 mg/kg Rat	15354 mg/kg Rabbit	17.2 mg/L Rat

N.I. - No Information

12. Ecological Information

ECOLOGICAL INFORMATION: Product is a mixture of listed components. Product is a mixture of listed components.

13. Disposal Information

DISPOSAL INFORMATION: Dispose of material in accordance to local, state, and federal regulations and ordinances. Do not allow to enter waterways, wastewater, soil, storm drains or sewer systems.

14. Transport Information

	Domestic (USDOT)	International (IMDG)	<u>Air (IATA)</u>	TDG (Canada)
UN Number:	N.A.	1263	1263	N.A.
Proper Shipping Name:	Paint Products in Limited Quantities	Paint	Paint	Paint Products in Limited Quantities
Hazard Class:	N.A.	3	3	N.A.
Packing Group:	N.A.	III	III	N.A.
Limited Quantity:	Yes	Yes	Yes	Yes

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15. Regulatory Information

U.S. Federal Regulations:

CERCLA - SARA Hazard Category

This product has been reviewed according to the EPA 'Hazard Categories' promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:

Fire Hazard, Acute Health Hazard, Chronic Health Hazard

Sara Section 313:

This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendment and Reauthorization Act of 1986 and 40 CFR part 372:

 Chemical Name
 CAS-No.

 Aluminum Oxide
 1344-28-1

 Xylene
 1330-20-7

 Ethylbenzene
 100-41-4

Toxic Substances Control Act:

This product contains the following chemical substances subject to the reporting requirements of TSCA 12(B) if exported from the United States:

No TSCA components exist in this product.

Inventory Information

Country Value USA (TSCA) No Information Canada (DSL) No Information Mexico(INSQ) No Information Europe (EINECS) No Information Japan (ENCS) No Information Philippines (PICCS) No Information China (IECSC) No Information Australia (AICS) No Information Korea (KECI) No Information New Zealand (NZIOC) No Information

No Information

CALIFORNIA PROPOSITION 65:

Warning: This products contains a substance known to the State of California to cause cancer.

 Chemical Name
 CAS-No.

 Crystalline Silica
 14808-60-7

 Titanium Dioxide
 13463-67-7

 Carbon Black
 1333-86-4

 Ethylbenzene
 100-41-4

CALIFORNIA PROPOSITION 65 REPRODUCTIVE TOXINS

Warning: This product contains a substance known to the State of California to cause birth defects or other reproductive harm.

No Proposition 65 Reproductive Toxins exist in this product.

International Regulations:

CANADIAN WHMIS:

This SDS has been prepared in compliance with Controlled Product Regulations except for the use of the 16 headings.

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16. Other Information

HMIS RATINGS

Health: 2* Flammability: 3 Physical Hazard: 0 Personal Protection: X

CANADIAN WHMIS CLASS: B2 D2A

NFPA RATINGS

Health: 2 Flammability: 3 Instability 1

VOLATILE ORGANIC COMPOUNDS, g/L: 0

MSDS REVISION DATE: 9/12/2014

REASON FOR REVISION: No Information

Legend: N.A. - Not Applicable, N.E. - Not Established, N.D. - Not Determined

Text for GHS Hazard Statements shown in Section 3 describing each ingredient:

H225	Highly flammable liquid and vapour
H226	Flammable liquid and vapour.
H251	Self-heating: may catch fire.
H302	Harmful if swallowed.
H310	Fatal in contact with skin.
H332	Harmful if inhaled.

Icons for GHS Pictograms shown in Section 3 describing each ingredient:



Rust-Oleum Corporation believes, to the best of its knowledge, information and belief, the information contained herein to be accurate and reliable as of the date of this safety data sheet. However, because the conditions of handling, use, and storage of these materials are beyond our control, we assume no responsibility or liability for personal injury or property damage incurred by the use of these materials. Rust-Oleum Corporation makes no warranty, expressed or implied, regarding the accuracy or reliability of the data or results obtained from their use. All materials may present unknown hazards and should be used with caution. The information and recommendations in this material safety data sheet are offered for the users' consideration and examination. It is the responsibility of the user to determine the final suitability of this information and to comply with all applicable international, federal, state, and local laws and regulations.

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