

RENSHAPE® 474 US

Version 1.1 Revision Date: 12/16/2022 SDS Number: 400001012909 Date of last issue: 05/25/2018
Date of first issue: 05/25/2018

Print Date 02/14/2023

SECTION 1. IDENTIFICATION

Product name : RENSHAPE® 474 US

Manufacturer or supplier's details

Company name of supplier : Huntsman Advanced Materials Americas LLC
Address : P.O. Box 4980
The Woodlands,
TX 77387
United States of America (USA)
Telephone : Non-Emergency: (800) 257-5547
E-mail address : Global_Product_EHS_AdMat@huntsman.com
Emergency telephone number : Chemtrec: (800) 424-9300 or (703) 527-3887

Recommended use of the chemical and restrictions on use

Recommended use : Article

SECTION 2. HAZARDS IDENTIFICATION**GHS classification in accordance with the OSHA Hazard Communication Standard (29 CFR 1910.1200)**

Not a hazardous substance or mixture.

GHS label elements

Not a hazardous substance or mixture.

Other hazards

Handling and/or processing of this material may generate a dust which can cause mechanical irritation of the eyes, skin, nose and throat.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Hazardous components

Chemical name	CAS-No.	Concentration (% w/w)
calcium carbonate	471-34-1	5 - 10
silicon dioxide	7631-86-9	1 - 5
aluminium oxide	1344-28-1	1 - 5
disodium oxide	1313-59-3	1 - 5
titanium dioxide	13463-67-7	0.1 - 1

RENSHAPE® 474 US

Version	Revision Date:	SDS Number:	Date of last issue:
1.1	12/16/2022	400001012909	05/25/2018
			Date of first issue: 05/25/2018

Print Date 02/14/2023

quartz (SiO₂)

14808-60-7

0.1 - 1

The specific chemical identity and/or exact percentage (concentration) of composition may be withheld as a trade secret.

SECTION 4. FIRST AID MEASURES

- General advice : No hazards which require special first aid measures.
- Move out of dangerous area.
Consult a physician.
Show this safety data sheet to the doctor in attendance.
Treat symptomatically.
Get medical attention if symptoms occur.
- If inhaled : Get medical attention if symptoms occur.
- If inhaled, remove to fresh air.
Get medical attention if symptoms occur.
- In case of skin contact : Get medical attention if symptoms occur.
- If skin irritation persists, call a physician.
If on skin, rinse well with water.
If on clothes, remove clothes.
- In case of eye contact : Get medical attention if irritation occurs.
- Immediately flush eye(s) with plenty of water.
Remove contact lenses.
Keep eye wide open while rinsing.
If eye irritation persists, consult a specialist.
- If swallowed : Get medical attention if symptoms occur.
- Keep respiratory tract clear.
Never give anything by mouth to an unconscious person.
If symptoms persist, call a physician.
Take victim immediately to hospital.
- Most important symptoms and effects, both acute and delayed : None known.
- Protection of first-aiders : First Aid responders should pay attention to self-protection and use the recommended protective clothing
If potential for exposure exists refer to Section 8 for specific personal protective equipment.
No action shall be taken involving any personal risk or without suitable training.
- Notes to physician : Treat symptomatically.

RENSHAPE® 474 US

Version	Revision Date:	SDS Number:	Date of last issue: 05/25/2018
1.1	12/16/2022	400001012909	Date of first issue: 05/25/2018

Print Date 02/14/2023

SECTION 5. FIREFIGHTING MEASURES

- | | | |
|---|---|---|
| Suitable extinguishing media | : | Water spray
Alcohol-resistant foam
Carbon dioxide (CO ₂)
Dry chemical |
| Unsuitable extinguishing media | : | Exercise caution when using a high volume water jet as it may scatter and spread fire |
| Specific hazards during firefighting | : | No information available. |
| Hazardous combustion products | : | Metal oxides |
| Specific extinguishing methods | : | Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. |
| Further information | : | No action shall be taken involving any personal risk or without suitable training. |
| Special protective equipment for firefighters | : | Wear self-contained breathing apparatus for firefighting if necessary. |

SECTION 6. ACCIDENTAL RELEASE MEASURES

- | | | |
|---|---|---|
| Personal precautions, protective equipment and emergency procedures | : | Use personal protective equipment.
Avoid dust formation.
Avoid breathing dust.
Refer to protective measures listed in sections 7 and 8. |
| Environmental precautions | : | Prevent product from entering drains.
Prevent further leakage or spillage if safe to do so.
If the product contaminates rivers and lakes or drains inform respective authorities. |
| Methods and materials for containment and cleaning up | : | Keep in suitable, closed containers for disposal. |

SECTION 7. HANDLING AND STORAGE

- | | | |
|---|---|--|
| Advice on protection against fire and explosion | : | Avoid dust formation.
Provide appropriate exhaust ventilation at places where dust is formed. |
| Advice on safe handling | : | Avoid formation of respirable particles.
Do not breathe vapours/dust. |

RENSHAPE® 474 US

Version 1.1 Revision Date: 12/16/2022 SDS Number: 400001012909 Date of last issue: 05/25/2018
 Date of first issue: 05/25/2018

Print Date 02/14/2023

Avoid contact with skin and eyes.
 For personal protection see section 8.
 Smoking, eating and drinking should be prohibited in the application area.
 Dispose of rinse water in accordance with local and national regulations.

- Conditions for safe storage : Keep container tightly closed in a dry and well-ventilated place.
 Observe label precautions.
 Keep in properly labelled containers.
- Materials to avoid : For incompatible materials please refer to Section 10 of this SDS.
- Further information on storage stability : Stable under normal conditions.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
calcium carbonate	471-34-1	TWA (Respirable)	5 mg/m ³ (Calcium carbonate)	NIOSH REL
		TWA (total)	10 mg/m ³ (Calcium carbonate)	NIOSH REL
silicon dioxide	7631-86-9	TWA (Dust)	20 Million particles per cubic foot (Silica)	OSHA Z-3
		TWA (Dust)	80 mg/m ³ / %SiO ₂ (Silica)	OSHA Z-3
		TWA (Respirable dust)	0.05 mg/m ³ (Silica)	NIOSH REL
		TWA	6 mg/m ³ (Silica)	NIOSH REL
		PEL (respirable)	0.05 mg/m ³	OSHA CARC
aluminium oxide	1344-28-1	TWA (total dust)	15 mg/m ³	OSHA Z-1
		TWA (respirable fraction)	5 mg/m ³	OSHA Z-1
		TWA (Respirable particulate matter)	1 mg/m ³ (Aluminium)	ACGIH

RENSHAPE® 474 US

Version
1.1Revision Date:
12/16/2022SDS Number:
400001012909Date of last issue: 05/25/2018
Date of first issue: 05/25/2018

Print Date 02/14/2023

		TWA (Total dust)	10 mg/m3	OSHA P0
		TWA (respirable dust fraction)	5 mg/m3	OSHA P0
titanium dioxide	13463-67-7	TWA (total dust)	15 mg/m3	OSHA Z-1
		TWA (Total dust)	10 mg/m3	OSHA P0
		TWA (Respirable particulate matter)	2.5 mg/m3 (Titanium dioxide)	ACGIH
		TWA (Respirable particulate matter)	0.2 mg/m3 (Titanium dioxide)	ACGIH
quartz (SiO ₂)	14808-60-7	TWA (respirable)	10 mg/m3 / %SiO ₂ +2	OSHA Z-3
		TWA (respirable)	250 mppcf / %SiO ₂ +5	OSHA Z-3
		TWA (Respirable particulate matter)	0.025 mg/m3 (Silica)	ACGIH
		TWA (Respirable dust)	0.05 mg/m3	OSHA Z-1
		TWA (Respirable dust)	0.05 mg/m3 (Silica)	NIOSH REL
		TWA (respirable dust fraction)	0.1 mg/m3	OSHA P0
		PEL (respirable)	0.05 mg/m3	OSHA CARC

Personal protective equipment

Respiratory protection

: **W A R N I N G !** This product contains quartz, which has been classified by IARC as carcinogenic for humans (Group 1), and which can cause silicosis and lung cancer following exposure to respirable dust. It is therefore important to take particular care to avoid inhalation exposure when mechanically processing cured material (e.g. grinding, sanding, sawing).

Hand protection

Remarks

: 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.
The suitability for a specific workplace should be discussed with the producers of the protective gloves.

RENSHAPE® 474 US

Version	Revision Date:	SDS Number:	Date of last issue:
1.1	12/16/2022	400001012909	05/25/2018
			Date of first issue: 05/25/2018

Print Date 02/14/2023

- | | |
|--------------------------|---|
| Eye protection | : Eye wash bottle with pure water
Tightly fitting safety goggles
Wear face-shield and protective suit for abnormal processing problems. |
| Skin and body 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.
Choose body protection according to the amount and concentration of the dangerous substance at the work place. |
| Hygiene measures | : When using do not eat or drink.
When using do not smoke.
Wash hands before breaks and at the end of workday. |

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

- | | |
|--|---|
| Appearance | : solid |
| Colour | : grey |
| Odour | : No data is available on the product itself. |
| Odour Threshold | : No data is available on the product itself. |
| pH | : No data is available on the product itself. |
| Melting point/freezing point | : No data is available on the product itself. |
| Boiling point | : No data is available on the product itself. |
| Flash point | : Not applicable |
| Evaporation rate | : No data is available on the product itself. |
| Flammability (solid, gas) | : No data is available on the product itself. |
| Flammability (liquids) | : No data is available on the product itself. |
| Upper explosion limit / Upper flammability limit | : No data is available on the product itself. |
| Lower explosion limit / Lower flammability limit | : No data is available on the product itself. |
| Vapour pressure | : No data is available on the product itself. |
| Relative vapour density | : No data is available on the product itself. |
| Relative density | : 0.8 |
| Density | : No data is available on the product itself. |

RENSHAPE® 474 US

Version	Revision Date:	SDS Number:	Date of last issue:
1.1	12/16/2022	400001012909	05/25/2018
			Date of first issue: 05/25/2018

Print Date 02/14/2023

Solubility(ies)	
Water solubility	: insoluble
Solubility in other solvents	: No data is available on the product itself.
Partition coefficient: n-octanol/water	: No data is available on the product itself.
Auto-ignition temperature	: No data is available on the product itself.
Decomposition temperature	: No data is available on the product itself.
Self-Accelerating decomposition temperature (SADT)	: No data is available on the product itself.
Viscosity	: No data is available on the product itself.
Explosive properties	: No data is available on the product itself.
Oxidizing properties	: No data is available on the product itself.
Particle size	: No data is available on the product itself.

SECTION 10. STABILITY AND REACTIVITY

Reactivity	: No dangerous reaction known under conditions of normal use.
Chemical stability	: Stable under normal conditions.
Possibility of hazardous reactions	: Dust may form explosive mixture in air.
Conditions to avoid	: None known.
Incompatible materials	: None known.
Hazardous decomposition products	: No decomposition if stored and applied as directed.

SECTION 11. TOXICOLOGICAL INFORMATION**Acute toxicity****Components:****calcium carbonate:**

Acute oral toxicity	: LD50 (Rat, female): > 2,000 mg/kg Method: OECD Test Guideline 420 Assessment: The substance or mixture has no acute oral toxicity
Acute inhalation toxicity	: LC50 (Rat): > 3 mg/l Exposure time: 4 h

RENSHAPE® 474 US

Version	Revision Date:	SDS Number:	Date of last issue:
1.1	12/16/2022	400001012909	05/25/2018
			Date of first issue: 05/25/2018

Print Date 02/14/2023

Test atmosphere: dust/mist
Method: OECD Test Guideline 403
Assessment: The substance or mixture has no acute inhalation toxicity

Acute dermal toxicity : LD50 (Rat): > 2,000 mg/kg
Method: OECD Test Guideline 402
Assessment: The substance or mixture has no acute dermal toxicity

silicon dioxide:

Acute oral toxicity : LD50 (Rat): > 5,000 mg/kg
Method: OECD Test Guideline 401

Acute inhalation toxicity : LC50 (Rat, male and female): > 58.8 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Method: OECD Test Guideline 403

Acute dermal toxicity : LD50 (Rabbit): > 5,000 mg/kg

aluminium oxide:

Acute oral toxicity : LD50 (Rat, male and female): > 10,000 mg/kg
Method: OECD Test Guideline 401

Acute inhalation toxicity : LC50 (Rat, male and female): > 2.3 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Method: OECD Test Guideline 403
Assessment: The substance or mixture has no acute inhalation toxicity

titanium dioxide:

Acute oral toxicity : LD50 (Rat, female): > 5,000 mg/kg
Method: OECD Test Guideline 425
Assessment: The substance or mixture has no acute oral toxicity

Acute inhalation toxicity : LC50 (Rat, male and female): 3.43 - 5.09 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Method: OECD Test Guideline 403
Assessment: The substance or mixture has no acute inhalation toxicity

Acute dermal toxicity : LD50 Dermal (Rabbit): > 10,000 mg/kg

Skin corrosion/irritation**Components:****calcium carbonate:**

Species : Rabbit
Assessment : No skin irritation

RENSHAPE® 474 US

Version	Revision Date:	SDS Number:	Date of last issue: 05/25/2018
1.1	12/16/2022	400001012909	Date of first issue: 05/25/2018

Print Date 02/14/2023

Method	:	OECD Test Guideline 404
Result	:	No skin irritation

silicon dioxide:

Species	:	Rabbit
Assessment	:	No skin irritation
Method	:	OECD Test Guideline 404
Result	:	No skin irritation

disodium oxide:

Result	:	Causes burns.
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titanium dioxide:

Species	:	Rabbit
Assessment	:	No skin irritation
Method	:	OECD Test Guideline 404
Result	:	Normally reversible injuries

Serious eye damage/eye irritation**Components:****calcium carbonate:**

Species	:	Rabbit
Result	:	No eye irritation
Assessment	:	No eye irritation
Method	:	OECD Test Guideline 405

silicon dioxide:

Species	:	Rabbit
Result	:	No eye irritation
Assessment	:	No eye irritation
Method	:	OECD Test Guideline 405

titanium dioxide:

Species	:	Rabbit
Result	:	Normally reversible injuries
Assessment	:	No eye irritation
Method	:	OECD Test Guideline 405

Respiratory or skin sensitisation**Components:****titanium dioxide:**

Test Type	:	Local lymph node assay (LLNA)
Exposure routes	:	Skin
Species	:	Mouse
Assessment	:	Does not cause skin sensitisation.
Method	:	OECD Test Guideline 429
Result	:	Does not cause skin sensitisation.

Exposure routes	:	Skin
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RENSHAPE® 474 US

Version	Revision Date:	SDS Number:	Date of last issue:
1.1	12/16/2022	400001012909	05/25/2018
			Date of first issue: 05/25/2018

Print Date 02/14/2023

Species	:	Guinea pig
Assessment	:	Does not cause skin sensitisation.
Method	:	OECD Test Guideline 406
Result	:	Does not cause skin sensitisation.
Assessment	:	No skin irritation, No eye irritation Does not cause skin sensitisation., Does not cause respiratory sensitisation.

Germ cell mutagenicity**Components:****calcium carbonate:**

Genotoxicity in vitro	:	Metabolic activation: with and without metabolic activation Method: OECD Test Guideline 471 Result: negative Concentration: 0 - 250 µg/L Metabolic activation: with and without metabolic activation Method: OECD Test Guideline 476 Result: negative
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silicon dioxide:

Genotoxicity in vitro	:	Metabolic activation: with and without metabolic activation Method: OECD Test Guideline 473 Result: negative Metabolic activation: with and without metabolic activation Method: OECD Test Guideline 476 Result: negative Metabolic activation: with and without metabolic activation Method: OECD Test Guideline 471 Result: negative
Genotoxicity in vivo	:	Application Route: Inhalation Dose: 50 mg/m3 Result: negative

titanium dioxide:

Genotoxicity in vitro	:	Test Type: Ames test Concentration: 100 - 200 µg/plate Metabolic activation: with and without metabolic activation Method: OECD Test Guideline 471 Result: negative Test Type: In vitro mammalian cell gene mutation test Concentration: 31 - 500 µg/L Metabolic activation: with and without metabolic activation Method: OECD Test Guideline 476 Result: negative Test Type: Chromosome aberration test in vitro Concentration: 125 - 2500 µg/L
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RENSHAPE® 474 US

Version	Revision Date:	SDS Number:	Date of last issue: 05/25/2018
1.1	12/16/2022	400001012909	Date of first issue: 05/25/2018

Print Date 02/14/2023

Metabolic activation: with and without metabolic activation
 Method: OECD Test Guideline 473
 Result: negative

Genotoxicity in vivo : Test Type: Micronucleus test
 Species: Mouse (males)
 Application Route: Inhalation
 Exposure time: 5 consecutive days
 Dose: 0.8, 7.2, and 28.5 mg/m³
 Method: OECD Test Guideline 474
 Result: negative

Test Type: Micronucleus test
 Species: Rat (male and female)
 Application Route: Oral
 Exposure time: once
 Dose: 500, 1000, and 2000 mg/kg bw
 Method: OECD Test Guideline 474
 Result: negative

Germ cell mutagenicity - Assessment : Tests on bacterial or mammalian cell cultures did not show mutagenic effects., Animal testing did not show any mutagenic effects.

Carcinogenicity
Components:
silicon dioxide:

Species : Rat, male and female
 Application Route : Oral
 Exposure time : 103 weeks
 Dose : 1800 - 3200 mg/kg
 Frequency of Treatment : 7 daily
 Method : OECD Test Guideline 453
 Result : negative

titanium dioxide:

Species : Rat, male and female
 Application Route : Oral
 Exposure time : 103 weeks
 Dose : 0, 25000, 50000 ppm
 Frequency of Treatment : 7 days/week
 NOAEL : > 50.000 ppm
 Method : No information available.
 Remarks : Titanium Dioxide: based on the results of chronic inhalation studies (with positive results only in a single species - rat), IARC has concluded that: "There is inadequate evidence in humans for the carcinogenicity of titanium dioxide." but that : "There is sufficient evidence in experimental animals for carcinogenicity of titanium dioxide". IARCs overall evaluation was that "titanium dioxide is possibly carcinogenic to humans (Group 2B)."

Huntsman has examined all of the available animal carcinogenicity and mechanistic data together with workplace

RENSHAPE® 474 US

Version	Revision Date:	SDS Number:	Date of last issue:
1.1	12/16/2022	400001012909	05/25/2018
			Date of first issue: 05/25/2018

Print Date 02/14/2023

epidemiology data for titanium dioxide and concludes that the weight of scientific evidence indicates that there is no causative link between titanium dioxide exposure and cancer risk in humans and that workplace exposures in compliance with applicable exposure standards will not result in lung cancer or chronic respiratory diseases in humans.

Carcinogenicity - Assessment : Not classifiable as a human carcinogen.

quartz (SiO₂):

Species : Rat
 Application Route : Inhalation
 Exposure time : 24 month(s)
 Dose : 1 mg/m³
 Frequency of Treatment : 6 hour
 Result : positive
 Target Organs : Lungs

Species : Mouse
 Application Route : Inhalation
 Exposure time : 24 month(s)
 Dose : 1.95 mg/m³
 Frequency of Treatment : 8 hour
 Result : negative

Carcinogenicity - Assessment : Positive evidence from human epidemiological studies (inhalation)

IARC	Group 1: Carcinogenic to humans silicon dioxide (Silica dust, crystalline)	7631-86-9
	Group 1: Carcinogenic to humans quartz (SiO ₂) (Silica dust, crystalline)	14808-60-7
	Group 2B: Possibly carcinogenic to humans titanium dioxide	13463-67-7

OSHA	OSHA specifically regulated carcinogen silicon dioxide (crystalline silica)	7631-86-9
	OSHA specifically regulated carcinogen quartz (SiO ₂) (crystalline silica)	14808-60-7

NTP	Known to be human carcinogen silicon dioxide (Silica, Crystalline (Respirable Size))	7631-86-9
	Known to be human carcinogen quartz (SiO ₂) (Silica, Crystalline (Respirable Size))	14808-60-7

RENSHAPE® 474 US

Version	Revision Date:	SDS Number:	Date of last issue:
1.1	12/16/2022	400001012909	05/25/2018
			Date of first issue: 05/25/2018

Print Date 02/14/2023

Reproductive toxicity**Components:****silicon dioxide:**

Effects on foetal development

: Species: Mouse
Application Route: Oral
General Toxicity Maternal: NOAEL: 1,340 mg/kg body weight
Method: OECD Test Guideline 414
Result: No teratogenic effects

Species: Rabbit
Application Route: Oral
General Toxicity Maternal: NOAEL: 1,600 mg/kg body weight
Method: OECD Test Guideline 414
Result: No teratogenic effects

Species: Rat
Application Route: Oral
General Toxicity Maternal: NOAEL: 1,350 mg/kg body weight
Method: OECD Test Guideline 414
Result: No teratogenic effects

titanium dioxide:

Effects on foetal development

: Species: Rat, male and female
Application Route: Oral
Dose: 100, 300, and 1000 mg/kg bw/
Duration of Single Treatment: 20 d
Frequency of Treatment: 7 days/week
General Toxicity Maternal: NOAEL: 1,000 mg/kg body weight
Developmental Toxicity: NOAEL: 1,000 mg/kg body weight
Method: OECD Test Guideline 414
Result: No adverse effects

Reproductive toxicity - Assessment : No evidence of adverse effects on sexual function and fertility, or on development, based on animal experiments.

STOT - single exposure

No data available

STOT - repeated exposure**Components:****quartz (SiO₂):**

Exposure routes : inhalation (dust/mist/fume)
Target Organs : Lungs
Assessment : May cause damage to organs through prolonged or repeated exposure.

Repeated dose toxicity**Components:****silicon dioxide:**

Species : Rat, male and female
NOEC : 4000 - 4500 mg/m³

RENSHAPE® 474 US

Version	Revision Date:	SDS Number:	Date of last issue: 05/25/2018
1.1	12/16/2022	400001012909	Date of first issue: 05/25/2018

Print Date 02/14/2023

Application Route	:	Ingestion
Test atmosphere	:	dust/mist
Exposure time	:	13 Weeks
Number of exposures	:	7 d
Method	:	OECD Test Guideline 413

titanium dioxide:

Species	:	Rat, male and female
NOEC	:	3500 mg/m3
Application Route	:	Ingestion
Test atmosphere	:	dust/mist
Exposure time	:	2 yr
Number of exposures	:	5 d
Method	:	Chronic toxicity

Species	:	Rat, male and female
NOEC	:	10 - 50 mg/m3
Application Route	:	Inhalation
Exposure time	:	2 yr
Number of exposures	:	6 hours/day, 5 days/week
Method	:	Chronic toxicity

Repeated dose toxicity - Assessment	:	No skin irritation, No eye irritation No adverse effect has been observed in chronic toxicity tests.
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Aspiration toxicity

No data available

Experience with human exposure

No data available

Toxicology, Metabolism, Distribution

No data available

Neurological effects

No data available

Further information

No data available

SECTION 12. ECOLOGICAL INFORMATION**Ecotoxicity****Components:****calcium carbonate:**

Toxicity to fish	:	LC50 : > 56,000 mg/l Exposure time: 96 h
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silicon dioxide:

Toxicity to fish	:	LL50 (Brachydanio rerio (zebrafish)): > 10,000 mg/l Exposure time: 96 h Test Type: static test Test substance: Fresh water
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RENSHAPE® 474 US

Version	Revision Date:	SDS Number:	Date of last issue:
1.1	12/16/2022	400001012909	05/25/2018
			Date of first issue: 05/25/2018

Print Date 02/14/2023

Method: OECD Test Guideline 202

Toxicity to daphnia and other aquatic invertebrates : EL50 (Daphnia magna (Water flea)): $\geq 1,000$ mg/l
 Exposure time: 24 h
 Test Type: static test
 Test substance: Fresh water
 Method: OECD Test Guideline 202

Toxicity to algae/aquatic plants : EL50 (Desmodesmus subspicatus (green algae)): $> 10,000$ mg/l
 Exposure time: 72 h
 Test Type: static test
 Test substance: Fresh water
 Method: OECD Test Guideline 201

aluminium oxide:

Toxicity to fish : LC50 (Fish): > 50 mg/l
 Exposure time: 96 h
 Test Type: static test
 Test substance: Fresh water

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): > 100 mg/l
 Exposure time: 48 h

Toxicity to algae/aquatic plants : IC50 (Selenastrum capricornutum (green algae)): > 100 mg/l
 Exposure time: 72 h

Ecotoxicology Assessment

Acute aquatic toxicity : This product has no known ecotoxicological effects.

Chronic aquatic toxicity : This product has no known ecotoxicological effects.

titanium dioxide:

Toxicity to fish : LC50 (Cyprinodon variegatus (sheepshead minnow)): $> 10,000$ mg/l
 Exposure time: 96 h
 Test Type: semi-static test
 Test substance: Marine water
 Method: OECD Test Guideline 203

Plant toxicity : NOEC: $100,000$ mg/kg
 Exposure time: 480 h

Sediment toxicity : (Gammarus pulex (Amphipod)): $> 100,000$ mg/kg sediment dw
 Study: Acute
 Test Type: semi-static test
 Water: Fresh water
 Exposure duration: 28 d
 Method: ASTM Method, other

(Gammarus pulex (Amphipod)): $100,000$ mg/kg sediment dw
 Study: Chronic
 Test Type: semi-static test
 Water: Fresh water

RENSHAP[®] 474 US

Version	Revision Date:	SDS Number:	Date of last issue:
1.1	12/16/2022	400001012909	05/25/2018
			Date of first issue: 05/25/2018

Print Date 02/14/2023

Exposure duration: 28 d
Method: ASTM Method, other

(Gammarus pulex (Amphipod)): 14989 mg/kg sediment dw
Study: Acute
Test Type: semi-static test
Water: Marine water
Exposure duration: 10 d

Toxicity to terrestrial organisms : NOEC: 10,000 mg/kg
Exposure time: 672 h

Persistence and degradability

No data available

Bioaccumulative potential**Components:****titanium dioxide:**

Bioaccumulation : Species: Oncorhynchus mykiss (rainbow trout)
Bioconcentration factor (BCF): 19 - 352
Exposure time: 14 d
Test substance: Fresh water
Method: semi-static test
Remarks: Does not bioaccumulate.

Mobility in soil

No data available

Other adverse effects**Product:**

Ozone-Depletion Potential : Regulation: 40 CFR Protection of Environment; Part 82
Protection of Stratospheric Ozone - CAA Section 602 Class I
Substances
Remarks: This product neither contains, nor was
manufactured with a Class I or Class II ODS as defined by the
U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A +
B).

SECTION 13. DISPOSAL CONSIDERATIONS**Disposal methods**

Waste from residues : Dispose of contents and container in accordance with all local,
regional, national and international regulations.
Do not dispose of waste into sewer.
Do not contaminate ponds, waterways or ditches with
chemical or used container.

Contaminated packaging : Empty remaining contents.
Dispose of as unused product.
Do not re-use empty containers.

RENSHAP[®] 474 US

Version	Revision Date:	SDS Number:	Date of last issue: 05/25/2018
1.1	12/16/2022	400001012909	Date of first issue: 05/25/2018

Print Date 02/14/2023

SECTION 14. TRANSPORT INFORMATION**International Regulations****UNRTDG**

Not regulated as dangerous goods

IATA-DGR

Not regulated as dangerous goods

IMDG-Code

Not regulated as dangerous goods

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

Not applicable for product as supplied.

National Regulations**49 CFR**

Not regulated as dangerous goods

Special precautions for user

Not applicable

SECTION 15. REGULATORY INFORMATION**CERCLA Reportable Quantity**

This material does not contain any components with a CERCLA RQ.

SARA 311/312 Hazards

: Carcinogenicity
Skin corrosion or irritation
Serious eye damage or eye irritation

SARA 313

: The following components are subject to reporting levels
established by SARA Title III, Section 313:

aluminium oxide	1344-28-1	>= 1 - < 5 %
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This product does not contain any hazardous air pollutants (HAP) $\geq 0.1\%$, as defined by the U.S. Clean Air Act Section 112 (40 CFR 61)

California Prop. 65

WARNING: This product can expose you to chemicals including silicon dioxide, titanium dioxide, quartz (SiO₂), carbon black, which is/are known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

The components of this product are reported in the following inventories:

DSL : Exemptions from the obligation to register

AIIC : Exemptions from the obligation to register

NZIoC : Exemptions from the obligation to register

ENCS : Exemptions from the obligation to register

RENSHAPE® 474 US

Version	Revision Date:	SDS Number:	Date of last issue:
1.1	12/16/2022	400001012909	05/25/2018
			Date of first issue: 05/25/2018

Print Date 02/14/2023

KECI	:	Exemptions from the obligation to register
PICCS	:	Exemptions from the obligation to register
IECSC	:	Exemptions from the obligation to register
TCSI	:	Exemptions from the obligation to register
TSCA	:	This product meets the 40 CFR §710.3(d) article definition and is therefore exempt from the TSCA Inventory

Inventories

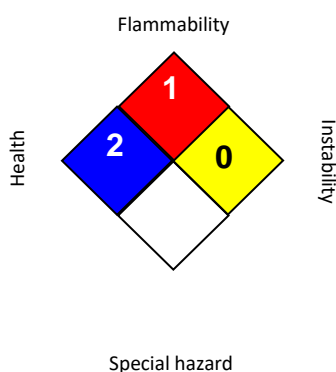
AIIC (Australia), DSL (Canada), IECSC (China), REACH (European Union), ENCS (Japan), ISHL (Japan), KECI (Korea), NZIoC (New Zealand), PICCS (Philippines), TCSI (Taiwan), TECI (Thailand), TSCA (USA)

TSCA - 5(a) Significant New Use Rule List of Chemicals

This product meets the 40 CFR §710.3(d) article definition and is therefore exempt from TSCA 5(a) requirements

US. Toxic Substances Control Act (TSCA) Section 12(b) Export Notification (40 CFR 707, Subpt D)

This product meets the 40 CFR §710.3(d) article definition and is therefore exempt from TSCA 12(b) requirements

SECTION 16. OTHER INFORMATION
Further information
NFPA 704:

HMIS® IV:

HEALTH	*	2
FLAMMABILITY		1
PHYSICAL HAZARD		0

HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. The "*" represents a chronic hazard, while the "/" represents the absence of a chronic hazard

Revision Date : 12/16/2022

ACGIH	:	USA. ACGIH Threshold Limit Values (TLV)
NIOSH REL	:	USA. NIOSH Recommended Exposure Limits
OSHA CARC	:	OSHA Specifically Regulated Chemicals/Carcinogens
OSHA P0	:	USA. Table Z-1-A Limits for Air Contaminants (1989 vacated values)

RENSHAPE® 474 US

Version	Revision Date:	SDS Number:	Date of last issue: 05/25/2018
1.1	12/16/2022	400001012909	Date of first issue: 05/25/2018

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OSHA Z-1	:	USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants
OSHA Z-3	:	USA. Occupational Exposure Limits (OSHA) - Table Z-3 Mineral Dusts
ACGIH / TWA	:	8-hour, time-weighted average
NIOSH REL / TWA	:	Time-weighted average concentration for up to a 10-hour workday during a 40-hour workweek
OSHA CARC / PEL	:	Permissible exposure limit (PEL)
OSHA P0 / TWA	:	8-hour time weighted average
OSHA Z-1 / TWA	:	8-hour time weighted average
OSHA Z-3 / TWA	:	8-hour time weighted average

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IN ALL CASES, IT IS THE RESPONSIBILITY OF THE USER TO DETERMINE THE APPLICABILITY OF SUCH INFORMATION AND RECOMMENDATIONS AND THE SUITABILITY OF ANY PRODUCT FOR ITS OWN PARTICULAR PURPOSE.

THE PRODUCT MAY PRESENT HAZARDS AND SHOULD BE USED WITH CAUTION. WHILE CERTAIN HAZARDS ARE DESCRIBED IN THIS PUBLICATION, NO GUARANTEE IS MADE THAT THESE ARE THE ONLY HAZARDS THAT EXIST.

Hazards, toxicity and behaviour of the products may differ when used with other materials and are dependent upon the manufacturing circumstances or other processes. Such hazards, toxicity and behaviour should be determined by the user and made known to handlers, processors and end users.

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