

RENSHAPE® 5166 US

Version 1.3 Revision Date: 12/16/2022 SDS Number: 400001014977 Date of last issue: 07/16/2018
Date of first issue: 06/19/2015

Print Date 02/14/2023

SECTION 1. IDENTIFICATION

Product name : RENSHAPE® 5166 US

Manufacturer or supplier's detailsCompany name of supplier : Huntsman Advanced Materials Americas LLC
Address : P.O. Box 4980The 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

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Hazardous components

Chemical name	CAS-No.	Concentration (% w/w)
aluminium hydroxide	21645-51-2	30 - 50
limestone	1317-65-3	10 - 20
silicon dioxide	7631-86-9	1 - 5
aluminium oxide	1344-28-1	1 - 5

RENSHAPE® 5166 US

Version 1.3 Revision Date: 12/16/2022 SDS Number: 400001014977 Date of last issue: 07/16/2018
Date of first issue: 06/19/2015

Print Date 02/14/2023

SECTION 4. FIRST AID MEASURES

- General advice : Treat symptomatically.
Get medical attention if symptoms occur.
- If inhaled : If inhaled, remove to fresh air.
Get medical attention if symptoms occur.
- In case of skin contact : Wash with water and soap as a precaution.
- In case of eye contact : Rinse thoroughly with plenty of water, also under the eyelids.
Remove contact lenses.
If eye irritation persists, consult a specialist.
- If swallowed : Keep respiratory tract clear.
Never give anything by mouth to an unconscious person.
If symptoms persist, call a physician.
- Most important symptoms and effects, both acute and delayed : None known.
- Notes to physician : Treat symptomatically.

SECTION 5. FIREFIGHTING MEASURES

- Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
- Unsuitable extinguishing media : High volume water jet
- Specific hazards during firefighting : No information available.
- Hazardous combustion products : Metal oxides
- Specific extinguishing methods : Standard procedure for chemical fires.
- 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 : Avoid dust formation.
Refer to protective measures listed in sections 7 and 8.

RENSHAPE® 5166 US

Version 1.3 Revision Date: 12/16/2022 SDS Number: 400001014977 Date of last issue: 07/16/2018
 Date of first issue: 06/19/2015

Print Date 02/14/2023

emergency procedures

Environmental precautions : No special environmental precautions required.

Methods and materials for containment and cleaning up : Pick up and arrange disposal without creating dust.
 Sweep up and shovel.
 Keep in suitable, closed containers for disposal.

SECTION 7. HANDLING AND STORAGE

Advice on protection against fire and explosion : Provide appropriate exhaust ventilation at places where dust is formed.

Advice on safe handling : For personal protection see section 8.
 Smoking, eating and drinking should be prohibited in the application area.

Conditions for safe storage : No special storage conditions required.
 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
aluminium hydroxide	21645-51-2	TWA (Respirable particulate matter)	1 mg/m ³ (Aluminium)	ACGIH
limestone	1317-65-3	TWA (total dust)	15 mg/m ³	OSHA Z-1
		TWA (respirable fraction)	5 mg/m ³	OSHA Z-1
		TWA (Respirable)	5 mg/m ³ (Calcium carbonate)	NIOSH REL
		TWA (total)	10 mg/m ³ (Calcium carbonate)	NIOSH REL
		TWA (Total dust)	15 mg/m ³	OSHA P0
		TWA	5 mg/m ³	OSHA P0

RENSHAPE® 5166 USVersion
1.3Revision Date:
12/16/2022SDS Number:
400001014977Date of last issue: 07/16/2018
Date of first issue: 06/19/2015

Print Date 02/14/2023

		(respirable dust fraction)		
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
		TWA (Total dust)	10 mg/m ³	OSHA P0
		TWA (respirable dust fraction)	5 mg/m ³	OSHA P0

Personal protective equipment

Respiratory protection : General and local exhaust ventilation is recommended to maintain vapor exposures below recommended limits. Where concentrations are above recommended limits or are unknown, appropriate respiratory protection should be worn. Follow OSHA respirator regulations (29 CFR 1910.134) and use NIOSH/MSHA approved respirators. Protection provided by air purifying respirators against exposure to any hazardous chemical is limited. Use a positive pressure air supplied respirator if there is any potential for uncontrolled release, exposure levels are unknown, or any other circumstance where air purifying respirators may not provide adequate protection.

Hand protection

Material : butyl-rubber
Break through time : > 8 h

Material : butyl-rubber
Break through time : 10 - 480 min

Material : Solvent-resistant gloves (butyl-rubber)
Material : Nitrile rubber
Material : Neoprene gloves
Material : PVC

RENSHAPÉ® 5166 US

Version	Revision Date:	SDS Number:	Date of last issue:
1.3	12/16/2022	400001014977	07/16/2018
			Date of first issue: 06/19/2015

Print Date 02/14/2023

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

Eye protection : Safety glasses with side-shields

Skin and body protection : Choose body protection according to the amount and concentration of the dangerous substance at the work place.

Hygiene measures : General industrial hygiene practice.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : solid

Colour : light cream

Odour : odourless

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 : Method: closed cup

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 : 1.7 (77 °F / 25 °C)

Density : 1.7 g/cm³ (77 °F / 25 °C)

Solubility(ies)
Water solubility : insoluble (68 °F / 20 °C)

RENSHAPÉ® 5166 US

Version	Revision Date:	SDS Number:	Date of last issue: 07/16/2018
1.3	12/16/2022	400001014977	Date of first issue: 06/19/2015

Print Date 02/14/2023

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	:	No hazards to be specially mentioned. Dust may form explosive mixture in air.
Conditions to avoid	:	None known.
Incompatible materials	:	None known.
Hazardous decomposition products	:	aluminium oxide

SECTION 11. TOXICOLOGICAL INFORMATION**Acute toxicity****Components:****aluminium hydroxide:**

Acute oral toxicity	:	LD50 (Rat, female): > 2,000 mg/kg Method: OECD Test Guideline 423 Assessment: The substance or mixture has no acute oral toxicity
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limestone:

Acute oral toxicity	:	LD50 (Rat): 6,450 mg/kg
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silicon dioxide:

Acute oral toxicity	:	LD50 (Rat): > 5,000 mg/kg
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RENSHAPE® 5166 US

Version 1.3 Revision Date: 12/16/2022 SDS Number: 400001014977 Date of last issue: 07/16/2018
Date of first issue: 06/19/2015

Print Date 02/14/2023

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

Skin corrosion/irritation**Components:****silicon dioxide:**

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

Serious eye damage/eye irritation**Components:****limestone:**

Species : Rabbit
Result : Mechanical irritation of the eyes is possible.
Assessment : No eye irritation

silicon dioxide:

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

Respiratory or skin sensitisation**Components:****limestone:**

Exposure routes : Skin
Species : Guinea pig
Method : OECD Test Guideline 406
Result : Does not cause skin sensitisation.

RENSHAPE® 5166 US

Version 1.3 Revision Date: 12/16/2022 SDS Number: 400001014977 Date of last issue: 07/16/2018
 Date of first issue: 06/19/2015

Print Date 02/14/2023

Germ cell mutagenicity**Components:****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

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

IARC Group 1: Carcinogenic to humans
 silicon dioxide 7631-86-9
 (Silica dust, crystalline)

OSHA No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.

NTP Known to be human carcinogen
 silicon dioxide 7631-86-9
 (Silica, Crystalline (Respirable Size))

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

RENSHAP[®] 5166 US

Version 1.3 Revision Date: 12/16/2022 SDS Number: 400001014977 Date of last issue: 07/16/2018
Date of first issue: 06/19/2015

Print Date 02/14/2023

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

STOT - single exposure

No data available

STOT - repeated exposure

No data available

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

Species : Rat, male and female
NOEC : 4000 - 4500 mg/m³
Application Route : Ingestion
Test atmosphere : dust/mist
Exposure time : 13 Weeks
Number of exposures : 7 d
Method : OECD Test Guideline 413

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:****aluminium hydroxide:**

Toxicity to fish : LC50 : > 10,000 mg/l
Exposure time: 96 h

Toxicity to daphnia and other : EC50: > 10,000 mg/l
aquatic invertebrates Exposure time: 48 h

RENSHAPE® 5166 US

Version 1.3 Revision Date: 12/16/2022 SDS Number: 400001014977 Date of last issue: 07/16/2018
Date of first issue: 06/19/2015

Print Date 02/14/2023

limestone:

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

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : EC50 (Daphnia magna (Water flea)): > 350 mg/l
Exposure time: 125 d
Test Type: semi-static test
Test substance: Fresh water

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
Method: OECD Test Guideline 202

Toxicity to daphnia and other aquatic invertebrates : EL50 (Daphnia magna (Water flea)): >= 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.

Persistence and degradability

No data available

RENSHAPE® 5166 US

Version 1.3 Revision Date: 12/16/2022 SDS Number: 400001014977 Date of last issue: 07/16/2018
Date of first issue: 06/19/2015

Print Date 02/14/2023

Bioaccumulative potential**Components:****limestone:**

Partition coefficient: n-octanol/water : log Pow: < 1

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 as hazardous waste in compliance with local and
national regulations.
Dispose of contents/ container to an approved waste disposal
plant.

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

RENSHAPE® 5166 US

Version 1.3 Revision Date: 12/16/2022 SDS Number: 400001014977 Date of last issue: 07/16/2018
Date of first issue: 06/19/2015

Print Date 02/14/2023

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

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

SARA 311/312 Hazards : No SARA Hazards

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

aluminium oxide 1344-28-1 >= 1 - < 5 %

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, quartz (SiO₂), 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
AIIIC : Exemptions from the obligation to register
NZIoC : Exemptions from the obligation to register
ENCS : Exemptions from the obligation to register
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

AIIIC (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

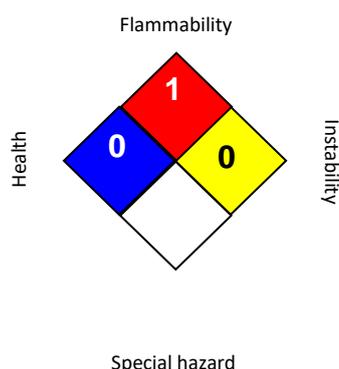
US. Toxic Substances Control Act (TSCA) Section 12(b) Export Notification (40 CFR 707, Subpt D)

RENSHAPÉ® 5166 US

Version 1.3 Revision Date: 12/16/2022 SDS Number: 400001014977 Date of last issue: 07/16/2018
 Date of first issue: 06/19/2015

Print Date 02/14/2023

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		0
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)
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

The information and recommendations in this publication are to the best of our knowledge, information and belief accurate at the date of publication, NOTHING HEREIN IS TO BE CONSTRUED AS A WARRANTY, EXPRESS OR OTHERWISE.

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.

RENSHAPE® 5166 US

Version	Revision Date:	SDS Number:	Date of last issue: 07/16/2018
1.3	12/16/2022	400001014977	Date of first issue: 06/19/2015

Print Date 02/14/2023

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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