

RENSHAPE® 5440 US

Version 1.1 Revision Date: 06/08/2021 SDS Number: 400001008025 Date of last issue: 10/20/2016
Date of first issue: 10/20/2016

Print Date 02/14/2023

SECTION 1. IDENTIFICATION

Product name : RENSHAPE® 5440 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 of person responsible for the SDS : 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**Hazardous components**

Chemical name	CAS-No.	Concentration (% w/w)
limestone	1317-65-3	20 - 30
calcium distearate	1592-23-0	1 - 5
silicon dioxide	7631-86-9	1 - 5

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 : Do not leave the victim unattended.

RENSHAPE® 5440 US

Version	Revision Date:	SDS Number:	Date of last issue:
1.1	06/08/2021	400001008025	10/20/2016
			Date of first issue: 10/20/2016

Print Date 02/14/2023

If inhaled	:	If unconscious, place in recovery position and seek medical advice. If symptoms persist, call a physician.
In case of eye contact	:	Remove contact lenses. Protect unharmed eye. If eye irritation persists, consult a specialist.
If swallowed	:	Keep respiratory tract clear. Do not give milk or alcoholic beverages. 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.

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
Hazardous combustion products	:	Carbon oxides
Further information	:	Standard procedure for chemical fires. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
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	:	Avoid dust formation.
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.
---	---	---

RENSHAPE® 5440 US

Version 1.1 Revision Date: 06/08/2021 SDS Number: 400001008025 Date of last issue: 10/20/2016
 Date of first issue: 10/20/2016

Print Date 02/14/2023

- 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 : Electrical installations / working materials must comply with the technological safety standards.
- Materials to avoid : No materials to be especially mentioned.
- Further information on storage stability : No decomposition if stored and applied as directed.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION**Components with workplace control parameters**

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
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 (respirable dust fraction)	5 mg/m ³	OSHA P0
calcium distearate	1592-23-0	TWA (Inhalable particulate matter)	10 mg/m ³	ACGIH
		TWA (Respirable particulate matter)	3 mg/m ³	ACGIH
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

RENSHAPE® 5440 US

Version 1.1 Revision Date: 06/08/2021 SDS Number: 400001008025 Date of last issue: 10/20/2016
 Date of first issue: 10/20/2016

Print Date 02/14/2023

		TWA	6 mg/m3 (Silica)	NIOSH REL
--	--	-----	---------------------	-----------

Personal protective equipment

Respiratory protection : No personal respiratory protective equipment normally required.

Hand protection

Material : butyl-rubber

Break through time : > 8 h

Material : Solvent-resistant gloves (butyl-rubber)

Material : Nitrile rubber

Material : Neoprene gloves

Material : PVC

Material : butyl-rubber

Break through time : 10 - 480 min

Material : Solvent-resistant gloves (butyl-rubber)

Material : Nitrile rubber

Material : Neoprene gloves

Material : PVC

Eye protection : Safety glasses

Skin and body protection : Protective suit

Hygiene measures : General industrial hygiene practice.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : Solid form

Colour : light brown

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.

RENSHAPE® 5440 US

Version	Revision Date:	SDS Number:	Date of last issue: 10/20/2016
1.1	06/08/2021	400001008025	Date of first issue: 10/20/2016

Print Date 02/14/2023

Lower explosion limit / Lower flammability limit : No data is available on the product itself.

Vapour pressure : < 0.0001 hPa (68 °F / 20 °C)

Relative vapour density : No data is available on the product itself.

Relative density : 0.55

Density : 0.55 g/cm³ (77 °F / 25 °C)

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

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 : > 392 °F / > 200 °C

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 decomposition if stored and applied as directed.

Chemical stability : No decomposition if stored and applied as directed.

Possibility of hazardous reactions : Stable under recommended storage conditions.
No hazards to be specially mentioned.

Conditions to avoid : Avoid dust formation.

Hazardous decomposition products : Nitrogen oxides (NO_x)
Carbon oxides
Burning produces noxious and toxic fumes.

RENSHAP® 5440 US

Version	Revision Date:	SDS Number:	Date of last issue: 10/20/2016
1.1	06/08/2021	400001008025	Date of first issue: 10/20/2016

Print Date 02/14/2023

SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure : No data is available on the product itself.

Acute toxicity

Acute oral toxicity - Product : LD50 (Rat): > 5,000 mg/kg

Components:

silicon dioxide:

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

Components:

silicon dioxide:

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

Acute toxicity (other routes of administration) : No data available

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:

RENSHAPE® 5440 US

Version	Revision Date:	SDS Number:	Date of last issue: 10/20/2016
1.1	06/08/2021	400001008025	Date of first issue: 10/20/2016

Print Date 02/14/2023

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

Assessment: No data available

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

Components:

silicon dioxide:

Genotoxicity in vivo : Application Route: Inhalation
Dose: 50 mg/m³
Result: negative

Germ cell mutagenicity-
Assessment : No data available

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

Carcinogenicity -
Assessment : No data available

IARC

No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH

No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

RENSHAPE® 5440 US

Version	Revision Date:	SDS Number:	Date of last issue: 10/20/2016
1.1	06/08/2021	400001008025	Date of first issue: 10/20/2016

Print Date 02/14/2023

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

No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

Reproductive toxicity

Effects on fertility : No data available

Components:

silicon dioxide:

Effects on foetal development

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

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

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

Reproductive toxicity - Assessment : No data available

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

RENSHAPE® 5440 US

Version	Revision Date:	SDS Number:	Date of last issue: 10/20/2016
1.1	06/08/2021	400001008025	Date of first issue: 10/20/2016

Print Date 02/14/2023

Repeated dose toxicity - : No data available
Assessment

Aspiration toxicity

No data available

Experience with human exposure

General Information: No data available

Inhalation: No data available

Skin contact: No data available

Eye contact: No data available

Ingestion: No data available

Toxicology, Metabolism, Distribution

No data available

Neurological effects

No data available

Further information**Product:**

Remarks: No data available

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

limestone:

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

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

Components:

RENSHAPE® 5440 US

Version	Revision Date:	SDS Number:	Date of last issue:
1.1	06/08/2021	400001008025	10/20/2016
			Date of first issue: 10/20/2016

Print Date 02/14/2023

silicon dioxide:

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

Components:

silicon dioxide:

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

M-Factor (Acute aquatic toxicity) : No data available

Toxicity to fish (Chronic toxicity) : No data available

Components:

limestone:

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

M-Factor (Chronic aquatic toxicity) : No data available

Toxicity to microorganisms : No data available

Toxicity to soil dwelling organisms : No data available

Plant toxicity : No data available

Sediment toxicity : No data available

Toxicity to terrestrial organisms : No data available

Ecotoxicology Assessment
Acute aquatic toxicity : No data available

Chronic aquatic toxicity : No data available

Toxicity Data on Soil : No data available

Other organisms relevant to the environment : No data available

RENSHAPE® 5440 US

Version	Revision Date:	SDS Number:	Date of last issue: 10/20/2016
1.1	06/08/2021	400001008025	Date of first issue: 10/20/2016

Print Date 02/14/2023

Persistence and degradability

Biodegradability : No data available

Biochemical Oxygen Demand (BOD) : No data available

Chemical Oxygen Demand (COD) : No data available

BOD/COD : No data available

ThOD : No data available

BOD/ThOD : No data available

Dissolved organic carbon (DOC) : No data available

Physico-chemical removability : No data available

Stability in water : No data available

Photodegradation : No data available

Impact on Sewage Treatment : No data available

Bioaccumulative potential

Bioaccumulation : No data available

Components:

limestone:

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

Mobility in soil

Mobility : No data available

Distribution among environmental compartments : No data available

Stability in soil : No data available

Other adverse effects

Environmental fate and pathways : No data available

Results of PBT and vPvB assessment : No data available

Endocrine disrupting : No data available

RENSHAPE® 5440 US

Version	Revision Date:	SDS Number:	Date of last issue: 10/20/2016
1.1	06/08/2021	400001008025	Date of first issue: 10/20/2016

Print Date 02/14/2023

potential

Adsorbed organic bound
halogens (AOX) : No data available**Hazardous to the ozone layer**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).

Additional ecological : No data available

information - Product

Global warming potential : No data available
(GWP)**SECTION 13. DISPOSAL CONSIDERATIONS****Disposal methods**Contaminated packaging : Empty containers should be taken to an approved waste
handling site for recycling or disposal.**SECTION 14. TRANSPORT INFORMATION****International Regulations****IATA**

Not regulated as dangerous goods

IMDG

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**DOT Classification**

Not regulated as dangerous goods

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

Components	CAS-No.	Component RQ (lbs)	Calculated product RQ (lbs)
------------	---------	-----------------------	--------------------------------

RENSHAPE® 5440 US

Version	Revision Date:	SDS Number:	Date of last issue:
1.1	06/08/2021	400001008025	10/20/2016
			Date of first issue: 10/20/2016

Print Date 02/14/2023

1,1-dichloroethylene	75-35-4	100	*
acrylonitrile	107-13-1	100	*

*: Calculated RQ exceeds reasonably attainable upper limit.

SARA 311/312 Hazards : No SARA Hazards**SARA 313** : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

This product does not contain any hazardous air pollutants (HAP), 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 acrylonitrile, 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
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), TSCA (USA)

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

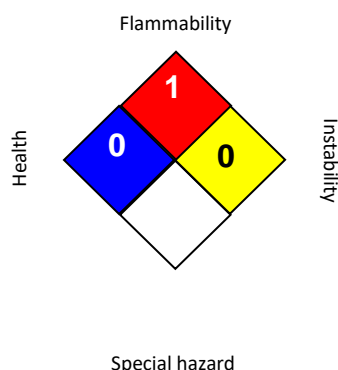
This product meets the 40 CFR §710.3(d) article definition and is therefore exempt from TSCA 5(a) requirements

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

RENSHAPE® 5440 USVersion
1.1Revision Date:
06/08/2021SDS Number:
400001008025Date of last issue: 10/20/2016
Date of first issue: 10/20/2016

Print Date 02/14/2023

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	: 06/08/2021
ACGIH	: USA. ACGIH Threshold Limit Values (TLV)
NIOSH REL	: USA. NIOSH Recommended Exposure Limits
OSHA P0	: USA. OSHA - TABLE Z-1 Limits for Air Contaminants - 1910.1000
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 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.

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

RENSHAPE® 5440 US

Version	Revision Date:	SDS Number:	Date of last issue: 10/20/2016
1.1	06/08/2021	400001008025	Date of first issue: 10/20/2016

Print Date 02/14/2023

behaviour should be determined by the user and made known to handlers, processors and end users.

The trademarks above are the property of Huntsman Corporation or an affiliate thereof.

NO PERSON OR ORGANIZATION EXCEPT A DULY AUTHORIZED HUNTSMAN EMPLOYEE IS AUTHORIZED TO PROVIDE OR MAKE AVAILABLE DATA SHEETS FOR HUNTSMAN PRODUCTS. DATA SHEETS FROM UNAUTHORIZED SOURCES MAY CONTAIN INFORMATION THAT IS NO LONGER CURRENT OR ACCURATE.