

**RENSHAPE® 472 US**

Version 1.1      Revision Date: 12/14/2022      SDS Number: 400001012847      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® 472 US

**Manufacturer or supplier's details**Company 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**

No hazard pictogram, no signal word, no hazard statement(s), no precautionary statement(s) required

**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)
Glass, oxide, chemicals	65997-17-3	10 - 20
silicon dioxide	7631-86-9	1 - 5
aluminium oxide	1344-28-1	1 - 5

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**SECTION 4. FIRST AID MEASURES**

- General advice : No hazards which require special first aid measures.
- 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.
- Wash with water and soap as a precaution.
- In case of eye contact : Get medical attention if irritation occurs.
- Rinse thoroughly with plenty of water, also under the eyelids.  
Remove contact lenses.  
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.
- Most important symptoms and effects, both acute and delayed : None known.
- Protection of first-aiders : No special precautions are necessary for first aid responders.  
No action shall be taken involving any personal risk or without suitable training.
- Notes to physician : Treat symptomatically.

**SECTION 5. FIREFIGHTING MEASURES**

- Suitable extinguishing media : Water spray  
Alcohol-resistant foam  
Carbon dioxide (CO2)  
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 : Carbon oxides

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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 : Avoid dust formation.  
Refer to protective measures listed in sections 7 and 8.

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
silicon dioxide	7631-86-9	TWA (Dust)	20 Million particles per cubic	OSHA Z-3

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			foot (Silica)	
		TWA (Dust)	80 mg/m3 / %SiO2 (Silica)	OSHA Z-3
		TWA (Respirable dust)	0.05 mg/m3 (Silica)	NIOSH REL
		TWA	6 mg/m3 (Silica)	NIOSH REL
		PEL (respirable)	0.05 mg/m3	OSHA CARC
aluminium oxide	1344-28-1	TWA (total dust)	15 mg/m3	OSHA Z-1
		TWA (respirable fraction)	5 mg/m3	OSHA Z-1
		TWA (Respirable particulate matter)	1 mg/m3 (Aluminium)	ACGIH
		TWA (Total dust)	10 mg/m3	OSHA P0
		TWA (respirable dust fraction)	5 mg/m3	OSHA P0

**Personal protective equipment**

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.

Eye protection

: Safety glasses with side-shields

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

: General industrial hygiene practice.

**SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

Appearance

: solid

Colour

: light grey

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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	: 0.88
Density	: No data is available on the product itself.
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.

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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:****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

**Skin corrosion/irritation****Components:****Glass, oxide, chemicals:**

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

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**silicon dioxide:**

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

**Serious eye damage/eye irritation****Components:****silicon dioxide:**

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

**Respiratory or skin sensitisation****Components:****Glass, oxide, chemicals:**

Exposure routes	:	Skin
Species	:	Other
Result	:	Does not cause skin sensitisation.

**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

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Frequency of Treatment	: 7 daily
Method	: OECD Test Guideline 453
Result	: negative

<b>IARC</b>	Group 1: Carcinogenic to humans silicon dioxide (Silica dust, crystalline)	7631-86-9
	Group 2A: Probably carcinogenic to humans Glass, oxide, chemicals (glass)	65997-17-3
	Group 2B: Possibly carcinogenic to humans Glass, oxide, chemicals (special-purpose fibres)	65997-17-3
<b>OSHA</b>	OSHA specifically regulated carcinogen silicon dioxide (crystalline silica)	7631-86-9
<b>NTP</b>	Known to be human carcinogen silicon dioxide (Silica, Crystalline (Respirable Size))	7631-86-9

**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
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	Species: Rabbit Application Route: Oral General Toxicity Maternal: NOAEL: 1,600 mg/kg body weight Method: OECD Test Guideline 414 Result: No teratogenic effects
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	Species: Rat Application Route: Oral General Toxicity Maternal: NOAEL: 1,350 mg/kg body weight Method: OECD Test Guideline 414 Result: No teratogenic effects
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**STOT - single exposure**

No data available

**STOT - repeated exposure**

No data available



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**Repeated dose toxicity****Components:****Glass, oxide, chemicals:**

Species	: Rat, male
LOEC	: 2.4 mg/m3
Test atmosphere	: dust/mist
Exposure time	: 2,160 h
Number of exposures	: 6 h
Method	: Directive 67/548/EEC, Annex, B.29

**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:****Glass, oxide, chemicals:**

Toxicity to fish	: LC50 (Brachydanio rerio (zebrafish)): > 1,000 mg/l Exposure time: 96 h Test Type: Other guidelines Test substance: Fresh water Method: OECD Test Guideline 203
Toxicity to daphnia and other aquatic invertebrates	: EC50 (Daphnia magna (Water flea)): > 1,000 mg/l Exposure time: 72 h Test Type: semi-static test Test substance: Fresh water Method: OECD Test Guideline 202
Toxicity to algae/aquatic plants	: EgC50 (Selenastrum capricornutum (green algae)): > 1,000 mg/l

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Exposure time: 72 h  
Test Type: semi-static test  
Method: OECD Test Guideline 201

**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

**Bioaccumulative potential**

No data available

**Mobility in soil**

No data available

**Other adverse effects****Product:**

Ozone-Depletion Potential : Regulation: 40 CFR Protection of Environment; Part 82

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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.

**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** : 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 %
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This product does not contain any hazardous air pollutants (HAP) >=0.1%, as defined by the U.S. Clean Air Act Section 112 (40 CFR 61

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**California Prop. 65**

This product contains a chemical that is at or below California Propositions 65's "safe harbor level" as determined via a risk assessment. Therefore, the chemical is not required to be listed as a Prop 65 chemical on the SDS or label.

**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
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), 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

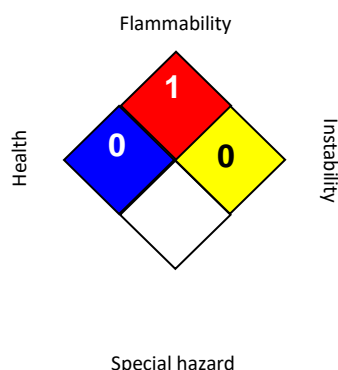
**US. Toxic Substances Control Act (TSCA) Section 12(b) Export Notification (40 CFR 707, Subpt D)**

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

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**SECTION 16. OTHER INFORMATION****Further information****NFPA 704:****HMIS® IV:**

<b>HEALTH</b>		<b>0</b>
<b>FLAMMABILITY</b>		<b>1</b>
<b>PHYSICAL HAZARD</b>		<b>0</b>

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

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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.

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.

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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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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.