



# **RENSHAPE® 473 US**

Version Revision Date: SDS Number: Date of last issue: -

1.0 05/25/2018 400001012870 Date of first issue: 05/25/2018

#### **SECTION 1. IDENTIFICATION**

Product name : RENSHAPE® 473 US

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#### 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

: MSDS@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 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

#### Hazardous components

Chemical name	CAS-No.	Concentration (% w/w)	
calcium distearate	1592-23-0	1 - 5	
silicon dioxide	7631-86-9	1 - 5	
aluminium oxide	1344-28-1	1 - 5	
quartz (SiO2)	14808-60-7	0.1 - 1	
titanium dioxide	13463-67-7	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**





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General advice : No hazards which require special first aid measures.

If inhaled : Get medical attention if symptoms occur.

In case of skin contact : Get medical attention if symptoms occur.

In case of eye contact : Get medical attention if irritation occurs.

If swallowed : Get medical attention if symptoms occur.

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

: No data is available on the product itself.

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.

Ensure adequate ventilation.

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.





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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.

Avoid exposure - obtain special instructions before use.

For personal protection see section 8.

Smoking, eating and drinking should be prohibited in the

application area.

Provide sufficient air exchange and/or exhaust in work rooms. 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 distearate	1592-23-0	TWA (Inhalable fraction)	10 mg/m3	ACGIH
		TWA (Respirable fraction)	3 mg/m3	ACGIH
silicon dioxide	7631-86-9	TWA (Dust)	20 Million particles per cubic foot (Silica)	OSHA Z-3
		TWA (Dust)	80 mg/m3 / %SiO2 (Silica)	OSHA Z-3
aluminium oxide	1344-28-1	TWA (total dust)	15 mg/m3	OSHA Z-1
		TWA (respirable	5 mg/m3	OSHA Z-1





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		fraction)		1
		TWA (Respirable fraction)	1 mg/m3 (Aluminium)	ACGIH
quartz (SiO2)	14808-60-7	TWA (respirable)	10 mg/m3 / %SiO2+2	OSHA Z-3
		TWA (respirable)	250 mppcf / %SiO2+5	OSHA Z-3
	64	TWA (Respirable fraction)	0.025 mg/m3 (Silica)	ACGIH
	a	TWA (Respirable dust)	0.05 mg/m3	OSHA Z-1
titanium dioxide	13463-67-7	TWA (total dust)	15 mg/m3	OSHA Z-1
		TWA	10 mg/m3 (Titanium dioxide)	ACGIH

#### Personal protective equipment

Respiratory protection : In the case of dust or aerosol formation use respirator with an

approved filter.

Dust safety masks are recommended when the dust

concentration is more than 10 mg/m3.

Respiratory protection : WARNING! 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

particular care to avoid inhalation exposure when mechanically processing cured material (e.g. grinding,

sanding, sawing).

Hand protection

Remarks : The suitability for a specific workplace should be discussed

with the producers of the protective gloves.

Eye protection : Eye wash bottle with pure water

Tightly fitting safety goggles

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.

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





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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.

Freezing point : No data is available on the product itself.

Melting point : No data is available on the product itself.

Boiling point : No data is available on the product itself.

Flash point : No data is available on the product itself.

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 - 0.84

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-

Auto-ignition temperature

octanol/water

: No data is available on the product itself.

: No data is available on the product itself.

Thermal decomposition : 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 : Dust may form explosive mixture in air.

reactions

Conditions to avoid : None known.

Incompatible materials : None known.

Hazardous decomposition

products

Hazardous decomposition

products

No hazardous decomposition products are known.

carbon monoxide

calcium oxide

#### SECTION 11. TOXICOLOGICAL INFORMATION

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

exposure

Acute toxicity

Components:

calcium distearate:

Acute oral toxicityComponents : LD50 (Rat): > 10,000 mg/kg

silicon dioxide:

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

toxicityComponents Method: OECD Test Guideline 401

aluminium oxide:

Acute oral : LD50 (Rat, male and female): > 10,000 mg/kg

toxicityComponents Method: OECD Test Guideline 401

titanium dioxide:

Acute oral : LD50 (Rat, female): > 5,000 mg/kg toxicityComponents Method: OECD Test Guideline 425

Assessment: The substance or mixture has no acute oral

toxicity

Components:

silicon dioxide:

Acute inhalation toxicity : LC50 (Rat, male and female): > 58.8 mg/l

Exposure time: 4 h





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Test atmosphere: dust/mist

Method: OECD Test Guideline 403

aluminium oxide:

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:

: LC50 (Rat, male and female): 3.43 - 5.09 mg/l Acute inhalation toxicity

Exposure time: 4 h

Test atmosphere: dust/mist

Method: OECD Test Guideline 403

Assessment: The substance or mixture has no acute

inhalation toxicity

Components:

silicon dioxide:

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

titanium dioxide:

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

Acute toxicity (other routes of : No data available

administration)

Skin corrosion/irritation

Components:

silicon dioxide: Species: Rabbit

Assessment: No skin irritation Method: OECD Test Guideline 404

Result: No skin irritation

aluminium oxide: Species: Rabbit

Assessment: No skin irritation Method: OECD Test Guideline 404

Result: No skin irritation

titanium dioxide: Species: Rabbit

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





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## Serious eye damage/eye irritation

#### Components:

silicon dioxide: Species: Rabbit

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

aluminium oxide: 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:

aluminium oxide: Exposure routes: Skin Species: Guinea pig

Result: Does not cause skin sensitisation.

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 Species: Guinea pig

Assessment: Does not cause skin sensitisation.

Method: OECD Test Guideline 406

Result: Does not cause skin sensitisation.

#### Components:

titanium dioxide:

Assessment: No skin irritation, No eye irritation

Does not cause skin sensitisation., Does not cause respiratory

sensitisation.

#### Germ cell mutagenicity

#### Components:

silicon dioxide:

Genotoxicity in vitro : Metabolic activation: with and without metabolic activation

Method: OECD Test Guideline 473





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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

titanium dioxide:

Genotoxicity in vitro : Test Type: Ames test

Concentration: 100 - 200 ug/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

Metabolic activation: with and without metabolic activation

Method: OECD Test Guideline 473

Result: negative

Components:

silicon dioxide:

Genotoxicity in vivo : Application Route: Inhalation

Dose: 50 mg/m3 Result: negative

titanium dioxide:

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

Components:

titanium dioxide:

Germ cell mutagenicity- : Tests on bacterial or mammalian cell cultures did not show





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Assessment mutagenic effects., Animal testing did not show any mutagenic

effects.

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

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

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 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.





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Product:

Carcinogenicity -Assessment : Not classifiable as a human carcinogen.

IARC

Group 1: Carcinogenic to humans

quartz (SiO2)

(Silica dust, crystalline)

Group 2B: Possibly carcinogenic to humans

titanium dioxide

ACGIH Suspected human carcinogen

quartz (SiO2)

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

quartz (SiO2)

(Silica, Crystalline (Respirable Size))

Reproductive toxicity

Components:

aluminium oxide:

Effects on fertility : Species: Rat, male and female

Application Route: Oral

Dose: 1000 milligram per kilogram Method: OECD Test Guideline 422

Result: Animal testing did not show any effects on fertility.

Components:

silicon dioxide:

Effects on foetal : Species: Mouse

development 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





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aluminium oxide:

Species: Rat

Application Route: Oral

General Toxicity Maternal: No observed adverse effect level:

266 mg/kg body weight

Method: OECD Test Guideline 414 Result: No teratogenic effects

titanium dioxide:

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: No observed adverse effect level:

1,000 mg/kg body weight

Developmental Toxicity: No observed adverse effect level:

1,000 mg/kg body weight

Method: OECD Test Guideline 414

Result: No adverse effects

## Components:

titanium dioxide:

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 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





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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

## Components:

titanium dioxide:

Repeated dose toxicity - : No skin irritation, No eye irritation

Assessment No adverse effect has been observed in chronic toxicity tests.

#### 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**

Ingestion: No data available





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#### SECTION 12. ECOLOGICAL INFORMATION

#### **Ecotoxicity**

Components:

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

aluminium oxide:

Toxicity to fish : LC50 (Fish): > 50 mg/l

Exposure time: 96 h
Test Type: static test
Test substance: Fresh water

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

Components:

silicon dioxide:

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

aluminium oxide:

Toxicity to daphnia and other

aquatic invertebrates

: EC50 (Daphnia magna (Water flea)): > 100 mg/l

Exposure time: 48 h

Components:

silicon dioxide:

Toxicity to algae : EL50 (Desmodesmus subspicatus (green algae)): > 10,000

ma/l

Exposure time: 72 h
Test Type: static test
Test substance: Fresh water
Method: OECD Test Guideline 201

aluminium oxide:

Toxicity to algae : IC50 (Selenastrum capricornutum (green algae)): > 100 mg/l

Exposure time: 72 h

M-Factor (Acute aquatic

toxicity)

: No data available





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Toxicity to fish (Chronic

toxicity)

: No data available

Toxicity to daphnia and other : No data available

aquatic invertebrates (Chronic toxicity)

M-Factor (Chronic aquatic

toxicity)

: No data available

Toxicity to microorganisms

: No data available

Toxicity to soil dwelling

organisms

: No data available

Components:

titanium dioxide:

Plant toxicity ; NOEC: 100,000 mg/kg

Exposure time: 480 h

Components:

titanium dioxide:

Sediment toxicity (Gammarus pulex (Amphipod)): > 100000 mg/kgsedimentdw

Study: Acute

Test Type: semi-static test Water: Fresh water Exposure duration: 28 d Method: ASTM Method, other

(Gammarus pulex (Amphipod)): 100000 mg/kgsedimentdw

Study: Chronic

Test Type: semi-static test Water: Fresh water Exposure duration: 28 d Method: ASTM Method, other

(Gammarus pulex (Amphipod)): 14989 mg/kgsedimentdw

Study: Acute

Test Type: semi-static test Water: Marine water Exposure duration: 10 d

Components:

titanium dioxide:

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

Ecotoxicology Assessment

Components:

aluminium oxide:

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





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Components:

aluminium oxide:

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

Toxicity Data on Soil : No data available

Other organisms relevant to

the environment

: No data available

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

#### 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.

Partition coefficient: n-

octanol/water

: No data available

## Mobility in soil





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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

potential

: No data available

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

information

: No data available

Global warming potential

(GWP)

: No data available

#### SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

Waste from residues : Do not dispose of waste into sewer.

Do not contaminate ponds, waterways or ditches with

chemical or used container.

Send to a licensed waste management company.

Dispose of as hazardous waste in compliance with local and

national regulations.

Dispose of contents/ container to an approved waste disposal

plant.

Contaminated packaging : Empty remaining contents.

Dispose of as unused product. Do not re-use empty containers.





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#### 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

#### EPCRA - Emergency Planning and Community Right-to-Know Act

#### **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), 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 quartz (SiO2), titanium dioxide, 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:

CH INV : Not in compliance with the inventory

DSL : All components of this product are on the Canadian DSL AICS : On the inventory, or in compliance with the inventory

NZIoC : Not in compliance with the inventory

ENCS : On the inventory, or in compliance with the inventory KECI : On the inventory, or in compliance with the inventory PICCS : On the inventory, or in compliance with the inventory IECSC : On the inventory, or in compliance with the inventory





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TCSI : On the inventory, or in compliance with the inventory TSCA : On the inventory, or in compliance with the inventory

#### Inventories

AICS (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

No substances are subject to a Significant New Use Rule.

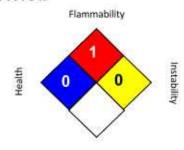
# US. Toxic Substances Control Act (TSCA) Section 12(b) Export Notification (40 CFR 707, Subpt D)

No substances are subject to TSCA 12(b) export notification requirements.

#### SECTION 16. OTHER INFORMATION

#### Further information

#### NFPA 704:



Special hazard.

#### HMIS® IV:



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)

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 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.





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