

SAFETY DATA SHEET



6414

Version 1.0 Revision Date: 11/25/2020 SDS Number: 203000002278 Date of last issue: -
Country / Language: US / EN

SECTION 1. IDENTIFICATION

Product name : 6414
Product code : 00000000005549639

Manufacturer or supplier's details

Company : LANXESS Corporation
Product Safety & Regulatory Affairs
111 RIDC Park West Drive
Pittsburgh, Pennsylvania 15275-1112

Responsible Department : (800) LANXESS
(412) 809-1000
lanxesshes@lanxess.com

Emergency telephone : CHEMTREC (800) 424-9300 or
(703) 527-3887 (Outside U.S.A) and mention CCN12916.
Lanxess Emergency Phone (800) 410-3063.

Recommended use of the chemical and restrictions on use


Recommended use : Colorants (pigments and dyestuffs), inorganic

SECTION 2. HAZARDS IDENTIFICATION

GHS classification in accordance with the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Specific target organ toxicity : Category 3 (Respiratory system)
- single exposure

GHS label elements

Hazard pictograms : 

Signal Word : Warning

Hazard Statements : May cause respiratory irritation.

Precautionary Statements : **Prevention:**
Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray.
Use only outdoors or in a well-ventilated area.

Response:
IF INHALED: Remove person to fresh air and keep comfortable

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for breathing. Call a POISON CENTER/ doctor if you feel unwell.

Storage:

Store in a well-ventilated place. Keep container tightly closed. Store locked up.

Disposal:

Dispose of contents/ container to an approved waste disposal plant.

Other hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Components

| Chemical name | CAS-No. | Concentration (% w/w) |
|--------------------|------------|-----------------------|
| titanium dioxide | 13463-67-7 | >= 50 - < 70 |
| Aluminum hydroxide | 21645-51-2 | >= 1 - < 5 |

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

SECTION 4. FIRST AID MEASURES

- If inhaled : Move to fresh air.
Get medical attention if symptoms occur.
- In case of skin contact : Wash off with plenty of water.
Continue to rinse for at least 10 minutes.
Wash contaminated clothing before re-use.
- In case of eye contact : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids.
If easy to do, remove contact lens, if worn.
Continue to rinse for at least 10 minutes.
Get medical attention if symptoms appear.
- If swallowed : Get medical attention if symptoms occur.

Most important symptoms and effects, both acute and delayed

- Symptoms : May cause irritation with symptoms of reddening and itching.
Eye: May cause irritation with symptoms of reddening, tearing and stinging.

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- Effects :
- : May cause respiratory tract irritation with symptoms of coughing, sore throat and runny nose.
 - : May cause mechanical irritation (abrasion).
 - : May cause respiratory irritation.
-

SECTION 5. FIRE-FIGHTING MEASURES

- Suitable extinguishing media : In case of fire, use water spray (fog), foam, dry chemical or CO₂.
- Unsuitable extinguishing media : None known.
- Specific hazards during fire fighting : No information available.
- Hazardous combustion products : The product itself does not burn.
- Further information : Standard procedure for chemical fires.
Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire.
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.
- Special protective equipment for fire-fighters : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
-

SECTION 6. ACCIDENTAL RELEASE MEASURES

- Personal precautions, protective equipment and emergency procedures : No action shall be taken involving any personal risk or without suitable training.
Keep unnecessary and unprotected personnel from entering.
Avoid breathing dust.
Use personal protective equipment.
Avoid dust formation.
- Environmental precautions : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.
- Methods and materials for containment and cleaning up : Move containers from spill area.
Vacuum or sweep up material and place in a designated, labeled waste container.
Dispose of wastes in an approved waste disposal facility.
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SECTION 7. HANDLING AND STORAGE

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

Workers should wash hands and face before eating, drinking and smoking.

Conditions for safe storage : Store in accordance with local regulations.
Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink.
Keep containers tightly closed in a dry, cool and well-ventilated place.
Electrical installations / working materials must comply with the technological safety standards.

Do not store near sources of heat (furnaces, kilns, boilers, etc.).
Exposure to excessive heat may cause this product to become unstable (slowly auto-oxidize) which generates additional heat. Under certain circumstances this heat generation may be sufficient to cause combustible materials to ignite. Do not store near strong oxidizers, sources of heat, or near flammable or combustible materials.

Further information on storage stability : Keep in a dry place.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredients with workplace control parameters

| Components | CAS-No. | Value type (Form of exposure) | Control parameters / Permissible concentration | Basis |
|--------------------|------------|----------------------------------|---|----------|
| titanium dioxide | 13463-67-7 | TWA (total dust) | 15 mg/m ³ | OSHA Z-1 |
| | | TWA | 10 mg/m ³ (Titanium dioxide) | ACGIH |
| Amorphous Silica | 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 |
| Aluminum hydroxide | 21645-51-2 | TWA (Respirable particulate mat- | 1 mg/m ³ (Aluminum) | ACGIH |

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|------------------|-----------|-------------------------------------|----------|----------|
| | | ter) | | |
| Iron (III) Oxide | 1309-37-1 | TWA (Respirable particulate matter) | 5 mg/m3 | ACGIH |
| | | TWA (Fumes) | 10 mg/m3 | OSHA Z-1 |
| | | TWA (total dust) | 15 mg/m3 | OSHA Z-1 |
| | | TWA (respirable fraction) | 5 mg/m3 | OSHA Z-1 |

Engineering measures : Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

Personal protective equipment

Respiratory protection : Dust-protection mask if there is a risk of dust formation.

The following respirator is recommended if airborne concentrations exceed the appropriate standard/guideline.
NIOSH approved, air-purifying particulate respirator with N-95 filters.

Hand protection
Material : Gloves

Eye protection : Safety glasses with side-shields

Skin and body protection : Wear suitable protective clothing.

Hygiene measures : General industrial hygiene practice.
When using do not eat, drink or smoke.
Wash face, hands and any exposed skin thoroughly after handling.
Wash contaminated clothing before reusing.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : powder

Physical state : solid

Color : gray

Odor : odorless

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Odor Threshold : No data available

pH : No data available

Melting point/range : No data available

Boiling point/boiling range : (1,013 hPa)
Not applicable

Flash point : No data available

Evaporation rate : No data available

Self-ignition : Autoignition temperature
Not applicable

Burning number : No data available

Upper explosion limit / Upper flammability limit : No data available

Lower explosion limit / Lower flammability limit : No data available

Vapor pressure : Not applicable

Relative density : No data available

Density : No data available

Solubility(ies)
Water solubility : insoluble
insoluble

Solubility in other solvents : No data available

Partition coefficient: n-octanol/water : No data available

Decomposition temperature : > 248 °F / > 120 °C

Viscosity
Viscosity, dynamic : Not applicable

Viscosity, kinematic : No data available

Explosive properties : No data available

Oxidizing properties : No data available

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SECTION 10. STABILITY AND REACTIVITY

- Reactivity : No specific test data related to reactivity available for this product or its ingredients.
- Chemical stability : The product is chemically stable.
- Possibility of hazardous reactions : No dangerous reaction known under conditions of normal use.
- Conditions to avoid : Excessive temperatures. At temperatures greater than 176 F (80 C), this product may become unstable and slowly auto-oxidize into Fe₂O₃ which generates additional heat. Under certain conditions this heat may be sufficient to cause combustible materials to ignite.
- Incompatible materials : No specific data.
- Hazardous decomposition products : No decomposition if stored and applied as directed.
-

SECTION 11. TOXICOLOGICAL INFORMATION

The most important known symptoms and effects are described in Section 2 and/or Section 4.

Information on likely routes of exposure

Inhalation
Eye contact
Skin contact

Acute toxicity

Not classified based on available information.

Components:

titanium dioxide:

- Acute oral toxicity : LD₅₀ (Rat): > 2,000 mg/kg
Method: OECD Test Guideline 401
GLP: yes
Assessment: The substance or mixture has no acute oral toxicity
Remarks: Dosage caused no mortality
- Acute inhalation toxicity : LC₅₀ (Rat, male): > 6.82 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Assessment: The substance or mixture has no acute inhalation toxicity
Remarks: Dosage caused no mortality
- Acute dermal toxicity : LD₅₀ (Rabbit): > 5,000 mg/kg
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Aluminum hydroxide:

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

Skin corrosion/irritation

Not classified based on available information.

Components:

titanium dioxide:

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

Aluminum hydroxide:

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

Serious eye damage/eye irritation

Not classified based on available information.

Components:

titanium dioxide:

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

Aluminum hydroxide:

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

Respiratory or skin sensitization

Skin sensitization

Not classified based on available information.

Respiratory sensitization

Not classified based on available information.

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Components:

titanium dioxide:

Test Type : Buehler Test
Routes of exposure : Skin contact
Species : Guinea pig
Method : OECD Test Guideline 406
Result : Did not cause sensitization on laboratory animals.
GLP : yes

Test Type : Local lymph node assay (LLNA)
Routes of exposure : Skin contact
Species : Mouse
Method : OECD Test Guideline 429
Result : Did not cause sensitization on laboratory animals.

Aluminum hydroxide:

Test Type : Maximization Test
Routes of exposure : Skin contact
Species : Guinea pig
Method : OECD Test Guideline 406
Result : Did not cause sensitization on laboratory animals.
GLP : yes

Germ cell mutagenicity

Not classified based on available information.

Components:

titanium dioxide:

Genotoxicity in vitro : Test system: Bacteria
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 471
Result: negative
GLP: yes

Test system: Chinese hamster ovary cells
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 473
Result: negative
GLP: yes

Test system: mouse lymphoma cells
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 476
Result: negative
GLP: yes

Test system: Chinese hamster fibroblasts
Metabolic activation: without metabolic activation

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Method: OECD Test Guideline 487
Result: negative
GLP: no

Genotoxicity in vivo : Test Type: Micronucleus test
Species: Mouse (male and female)
Application Route: Oral
Method: OECD Test Guideline 474
Result: negative

Aluminum hydroxide:

Genotoxicity in vitro : Test Type: In vitro mammalian cell gene mutation test
Test system: mouse lymphoma cells
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 476
Result: negative
GLP: yes

Genotoxicity in vivo : Test Type: Micronucleus test
Species: Rat (male)
Cell type: Bone marrow
Application Route: Oral
Method: OECD Test Guideline 474
Result: negative
GLP: yes

Carcinogenicity

Not classified based on available information.

Components:

titanium dioxide:

Remarks : In lifetime inhalation studies of rats, airborne respirable-sized titanium dioxide particles were shown to cause lung tumors at concentrations associated with substantial particle lung burdens and pulmonary overload. Mice and hamsters did not develop lung tumors under similar testing conditions.

Carcinogenicity - Assessment : Not classifiable as a human carcinogen.

IARC Group 2B: Possibly carcinogenic to humans
titanium dioxide 13463-67-7

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 ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

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Reproductive toxicity

Not classified based on available information.

Components:

Aluminum hydroxide:

Effects on fertility : Test Type: Fertility/early embryonic development
Species: Rat, male and female
Application Route: Oral
Dose: 0 - 40 - 200 milligram per kilogram
General Toxicity Parent: NOAEL: 200 mg/kg body weight
Fertility: NOAEL: >= 1,000 mg/kg body weight
Early Embryonic Development: NOAEL: >= 1,000 mg/kg body weight
Method: OECD Test Guideline 422
Result: No effects on fertility and early embryonic development were detected.
GLP: yes
Remarks: Test results on an analogous product

Effects on fetal development : Test Type: Pre-natal
Species: Rat, female
Application Route: Oral
Dose: 0 - 192 - 384 milligram per kilogram
General Toxicity Maternal: NOAEL: >= 768 mg/kg body weight
Developmental Toxicity: NOAEL: >= 768 mg/kg body weight
Method: OECD Test Guideline 414
Result: negative
GLP: No information available.

STOT-single exposure

May cause respiratory irritation.

Components:

titanium dioxide:

Assessment : May cause respiratory irritation.

Aluminum hydroxide:

Assessment : May cause respiratory irritation.

STOT-repeated exposure

Not classified based on available information.

Repeated dose toxicity

Product:

Remarks : Long-term exposure to high concentrations of dust containing iron oxide can cause a benign condition termed "pulmonary siderosis". This condition is not associated with any physical

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impairment of lung function.

Components:

titanium dioxide:

Species : Rat, male and female
NOAEL : > 1,000 mg/kg
Application Route : Oral
Exposure time : 90 d
Number of exposures : daily
Method : OECD Test Guideline 408
Remarks : Subchronic toxicity

Species : Rat, male
NOEL : 24000 mg/kg
Application Route : Oral
Exposure time : 29 d
Number of exposures : 7 days/week
Method : OECD Test Guideline 407
Remarks : Subchronic toxicity

Species : Rat, male and female
Application Route : Inhalation
Test atmosphere : dust/mist
Exposure time : 2 yr
Number of exposures : 6 hours/day
Dose : 10 mg/m³
Remarks : Chronic toxicity

Aluminum hydroxide:

Species : Rat, male
NOAEL : >= 302 mg/kg
Application Route : Oral
Exposure time : 28 d
Number of exposures : daily
Dose : 302 mg Al/kg bw/d
Method : OECD Test Guideline 407
GLP : No information available.
Remarks : Subacute toxicity

Aspiration toxicity

Not classified based on available information.

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SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Components:

titanium dioxide:

- Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): > 100 mg/l
Exposure time: 96 h
Method: OECD Test Guideline 203
Remarks: Fresh water
- LC50 (Cyprinodon variegatus (sheepshead minnow)): > 10,000 mg/l
Exposure time: 96 h
Method: OECD Test Guideline 203
Remarks: salt water
- Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): > 100 mg/l
Exposure time: 48 h
Method: OECD Test Guideline 202
Remarks: Fresh water
- LC50 (Acartia tonsa): > 10,000 mg/l
Exposure time: 48 h
- Toxicity to algae/aquatic plants : EC50 (Pseudokirchneriella subcapitata (microalgae)): > 100 mg/l
End point: Growth rate
Exposure time: 72 h
Method: OECD Test Guideline 201
- NOEC (Pseudokirchneriella subcapitata (microalgae)): >= 100 mg/l
End point: Growth rate
Exposure time: 72 h
Method: OECD Test Guideline 201
- Toxicity to microorganisms : EC50 (adapted and activated sludge micro-organism): > 1,000 mg/l
Exposure time: 3 h
Test Type: Respiration inhibition
Method: OECD Test Guideline 209
GLP: yes
Remarks: Fresh water

Aluminum hydroxide:

- Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): > 100 mg/l
Exposure time: 96 h
Analytical monitoring: yes

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Method: OECD Test Guideline 203
GLP: yes
Remarks: nominal concentration

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): > 100 mg/l
Exposure time: 48 h
Analytical monitoring: yes
Method: OECD Test Guideline 202
GLP: yes
Remarks: nominal concentration

Toxicity to algae/aquatic plants : ErC50 (Pseudokirchneriella subcapitata (green algae)): > 100 mg/l
End point: Growth rate
Exposure time: 72 h
Analytical monitoring: yes
Method: OECD Test Guideline 201
GLP: yes
Remarks: nominal concentration

NOEC (Pseudokirchneriella subcapitata (green algae)): >= 100 mg/l
End point: Growth rate
Exposure time: 72 h
Analytical monitoring: yes
Method: OECD Test Guideline 201
GLP: yes
Remarks: nominal concentration

Persistence and degradability

Components:

titanium dioxide:

Biodegradability : Remarks: The methods for determining biodegradability are not applicable to inorganic substances.

Aluminum hydroxide:

Biodegradability : Remarks: The methods for determining biodegradability are not applicable to inorganic substances.

Bioaccumulative potential

Components:

Aluminum hydroxide:

Partition coefficient: n-octanol/water : Remarks: Not applicable

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Mobility in soil

No data available

Other adverse effects

Product:

Additional ecological information : Ecotoxicological data are not available.
No known significant effects or critical hazards.

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

RCRA - Resource Conservation and Recovery Authorization Act : If discarded in its purchased form, this product would not be a hazardous waste either by listing or by characteristic. However, under RCRA, it is the responsibility of the product user to determine at the time of disposal, whether a material containing the product or derived from the product should be classified as a hazardous waste. (40 CFR 261.20-24)

Waste from residues : The generation of waste should be avoided or minimized wherever possible.
This material and its container must be disposed of in a safe way.
Empty containers retain product residue; observe all precautions for product.
Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.
Waste disposal should be in accordance with existing federal, state, provincial and/or local environmental controls.

SECTION 14. TRANSPORT INFORMATION

International Regulations

IATA-DGR

Not regulated as a dangerous good

IMDG-Code

Not regulated as a dangerous good

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

Not applicable for product as supplied.

Domestic regulation

49 CFR

Not regulated as a dangerous good

Hazard and Handling Notes. : Not dangerous cargo, Keep separated from foodstuffs

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SECTION 15. REGULATORY INFORMATION

CERCLA Reportable Quantity

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

SARA 302 Extremely Hazardous Substances Threshold Planning Quantity

This material does not contain any components with a section 302 EHS TPQ.

SARA 311/312 Hazards : Specific target organ toxicity (single or repeated exposure)

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.

US State Regulations

Massachusetts Right To Know

| | | |
|------------------|------------|--------------|
| titanium dioxide | 13463-67-7 | >= 50 - < 70 |
| Amorphous Silica | 7631-86-9 | < 0.1 |
| Iron (III) Oxide | 1309-37-1 | > 1 |

Massachusetts Right To Know

| | |
|------------------|------------|
| titanium dioxide | 13463-67-7 |
| Amorphous Silica | 7631-86-9 |
| Iron (III) Oxide | 1309-37-1 |

Pennsylvania Right To Know

| | | |
|------------------------|------------|--------------|
| titanium dioxide | 13463-67-7 | >= 50 - < 70 |
| C.I. Pigment Yellow 42 | 51274-00-1 | > 1 |
| C.I. Pigment Black 11 | 1317-61-9 | > 1 |
| Amorphous Silica | 7631-86-9 | < 0.1 |
| Iron (III) Oxide | 1309-37-1 | > 1 |

Pennsylvania Right To Know

| | |
|------------------------|------------|
| titanium dioxide | 13463-67-7 |
| C.I. Pigment Yellow 42 | 51274-00-1 |
| C.I. Pigment Black 11 | 1317-61-9 |
| Amorphous Silica | 7631-86-9 |
| Iron (III) Oxide | 1309-37-1 |

California Prop. 65

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

TSCA inventory

TSCA : All substances listed as active on the TSCA inventory

TSCA list

No substances are subject to a Significant New Use Rule.

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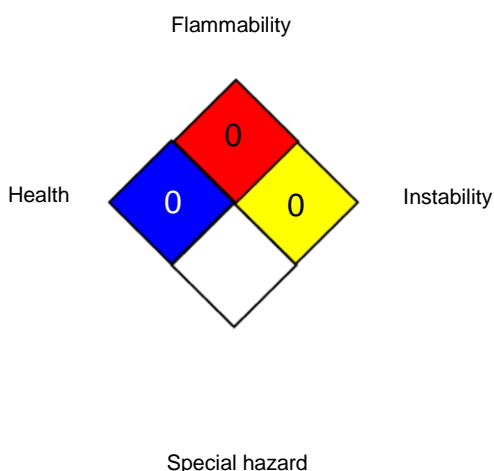
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No substances are subject to TSCA 12(b) export notification requirements.

SECTION 16. OTHER INFORMATION

Further information

NFPA 704:



HMIS® IV:

| | | |
|-----------------|---|---|
| HEALTH | / | 0 |
| FLAMMABILITY | | 0 |
| 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.

Full text of other abbreviations

- 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

AICS - Australian Inventory of Chemical Substances; ASTM - American Society for the Testing of Materials; bw - Body weight; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DOT - Department of Transportation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; EHS - Extremely Hazardous Substance; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; HMIS - Hazardous Materials Identification System; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing

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Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; MSHA - Mine Safety and Health Administration; n.o.s. - Not Otherwise Specified; NFPA - National Fire Protection Association; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; RCRA - Resource Conservation and Recovery Act; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RQ - Reportable Quantity; SADT - Self-Accelerating Decomposition Temperature; SARA - Superfund Amendments and Reauthorization Act; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

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The data contained in this Safety Data Sheet are based on our current knowledge and experience and describe the product only with regard to safety requirements. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered to be a guidance for processing and does not contain any warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text. It is the responsibility of the recipient of the product to ensure that any proprietary rights and existing laws and legislation are observed.