

SAFETY DATA SHEET

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Version 1.0 Revision Date: 10/03/2020 SDS Number: 215000001106 Date of last issue: -
Country / Language: US / EN

SECTION 1. IDENTIFICATION

Product name : 181
Product code : 00000000002469913

Manufacturer or supplier's details

Company : LANXESS Corporation
Product Safety & Regulatory Affairs
111 RIDC Park West Drive
15275-1112 Pittsburgh, United States of America

Responsible Department : +1800LANXESS

Emergency telephone number : Chemtrec (800) 424-9300
International (703) 527-3887
Lanxess Emergency Phone (800) 410-3063

Recommended use of the chemical and restrictions on use

Recommended use : inorganic pigment

SECTION 2. HAZARDS IDENTIFICATION

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

Eye irritation : Category 2A
Carcinogenicity : Category 1A
Specific target organ toxicity : Category 2
- repeated exposure (Inhalation)

GHS label elements

Hazard pictograms : 

Signal word : Danger

Hazard statements : Causes serious eye irritation.
May cause cancer.
May cause damage to organs through prolonged or repeated exposure if inhaled.

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Precautionary statements : **Prevention:**
Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.
Wash skin thoroughly after handling.
Wear protective gloves/ protective clothing/ eye protection/ face protection.

Response:
IF IN EYES: Rinse cautiously with water for several minutes.
Remove contact lenses, if present and easy to do. Continue rinsing.
IF exposed or concerned: Get medical advice/ attention.
If eye irritation persists: Get medical advice/ attention.

Storage:
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)
quartz (SiO ₂)	14808-60-7	>= 5 - < 10
aluminium oxide	1344-28-1	>= 1 - < 5
magnesium oxide	1309-48-4	>= 1 - < 5
calcium oxide (Solution)	1305-78-8	>= 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 : If inhaled, remove to fresh air.
Get medical attention.
If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel.
Maintain open airway.
Loosen tight clothing such as a collar, tie, belt or waistband.

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- In case of skin contact : Wash off with soap and water.
Remove contaminated clothing and shoes.
Get medical attention if symptoms occur.
- In case of eye contact : Get medical attention.
In case of contact, flush eyes with plenty of water for at least 20 minutes. Use fingers to ensure that eyelids are separated and that the eye is being irrigated.
Remove contact lenses.
- If swallowed : Rinse mouth with water.
Do not induce vomiting unless directed to do by medical personnel.
Get medical attention if symptoms occur.

Most important symptoms and effects, both acute and delayed

- Symptoms : Eye: Causes irritation with symptoms of reddening, tearing, stinging, and swelling.
May cause respiratory tract irritation with symptoms of coughing, sore throat and runny nose.
Adverse effects from repeated exposure may include carcinogenic effects
- Effects : Causes serious eye irritation.
May cause cancer.
May cause damage to organs through prolonged or repeated exposure if inhaled.
- Notes to physician : Treat symptomatically.

SECTION 5. FIREFIGHTING MEASURES

- Suitable extinguishing media : In case of fire, use water spray (fog), foam or dry chemical.
- Unsuitable extinguishing media : None known.
- Specific hazards during fire-fighting : Toxic and irritating gases/fumes may be given off during burning or thermal decomposition.
- Hazardous combustion products : Metal oxides
- Further information : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire.
No action shall be taken involving any personal risk or without suitable training.
- Special protective equipment : Fire-fighters should wear appropriate protective equipment

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for firefighters 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.
Put on appropriate personal protection equipment.
Do not touch or walk through spilled material.
Evacuate personnel to safe areas.
Keep unnecessary and unprotected personnel from entering.
Provide adequate ventilation.
Avoid breathing dust.
- 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.
- 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.

SECTION 7. HANDLING AND STORAGE

- Advice on safe handling : Avoid contact with skin and eyes.
Do not breathe vapours/dust.
Remove contaminated clothing and protective equipment before entering eating areas.
Workers should wash hands and face before eating, drinking and smoking.
Put on appropriate personal protection equipment.
Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed.
- 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 container closed when not in use.
Containers that have been opened must be carefully resealed and kept upright to prevent leakage.
Do not store in unlabeled containers.
Use appropriate container to avoid environmental contamination.
Empty containers retain residue and can be dangerous.
Do not reuse container.
- Further information on storage : No decomposition if stored and applied as directed.

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age stability

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
diiron trioxide (Dust and fume)	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
quartz (SiO ₂)	14808-60-7	TWA (respirable fraction)	5 mg/m3	OSHA Z-1
		TWA (Respirable dust)	0.05 mg/m3	OSHA Z-1
		TWA (respirable)	10 mg/m3 / %SiO ₂ +2	OSHA Z-3
		TWA (respirable)	250 mppcf / %SiO ₂ +5	OSHA Z-3
		TWA (Respirable particulate matter)	0.025 mg/m3 (Silica)	ACGIH
aluminium oxide	1344-28-1	PEL (respirable)	0.05 mg/m3	OSHA CARC
		TWA (total dust)	15 mg/m3	OSHA Z-1
		TWA (respirable fraction)	5 mg/m3	OSHA Z-1
magnesium oxide	1309-48-4	TWA (Respirable particulate matter)	1 mg/m3 (Aluminium)	ACGIH
		TWA (Inhalable particulate matter)	10 mg/m3	ACGIH
calcium oxide (Solution)	1305-78-8	TWA (fume, total particulate)	15 mg/m3	OSHA Z-1
		TWA	2 mg/m3	ACGIH
		TWA	5 mg/m3	OSHA Z-1

Engineering measures : If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other

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engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

Personal protective equipment

Respiratory protection : Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Recommended:
to be reviewed

Hand protection
Material

: Gloves

Eye protection

: Wear safety glasses with side shields or goggles.

Skin and body protection

: Wear suitable protective clothing.

Hygiene measures

: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

: powder

Colour

: red

Odour

: odourless

Odour Threshold

: No data available

pH

: 4 - 8
Concentration: 5 %

Melting point/range

: > 1,832 °F / > 1,000 °C

Boiling point/boiling range

: No data available

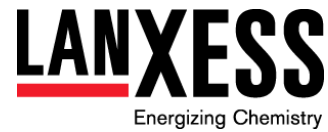
Flash point

: No data available

Evaporation rate

: No data available

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Self-ignition : No data available

Burning number : No data available

Upper explosion limit / Upper flammability limit : No data available

Lower explosion limit / Lower flammability limit : No data available

Vapour pressure : No data available

Relative density : 4 - 5

Density : No data available

Bulk density : 300 - 1,000 kg/m³

Solubility(ies)
Water solubility : slightly soluble

Solubility in other solvents : No data available

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

Decomposition temperature : No data available

Viscosity
Viscosity, dynamic : No data available

Viscosity, kinematic : No data available

Explosive properties : No data available

Oxidizing properties : No data available

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 : Under normal conditions of storage and use, hazardous reactions will not occur.

Conditions to avoid : No data available

Incompatible materials : No specific data.

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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
Ingestion
Skin contact
Eye contact

Acute toxicity

Not classified based on available information.

Components:**aluminium oxide:**

Acute oral toxicity : LD50 (Rat): > 5,000 mg/kg
Method: OECD Test Guideline 401

magnesium oxide:

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

calcium oxide (Solution):

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

Acute dermal toxicity : LD50 (Rabbit, male and female): > 5,000 mg/kg
Method: OECD Test Guideline 402
GLP: yes

Skin corrosion/irritation

Not classified based on available information.

Components:**aluminium oxide:**

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

calcium oxide (Solution):

Result : Irritating to skin.

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Serious eye damage/eye irritation

Causes serious eye irritation.

Components:**aluminium oxide:**

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

calcium oxide (Solution):

Result	:	Risk of serious damage to eyes.
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Respiratory or skin sensitisation**Skin sensitisation**

Not classified based on available information.

Respiratory sensitisation

Not classified based on available information.

Components:**aluminium oxide:**

Test Type	:	Draize Test
Exposure routes	:	Skin contact
Species	:	Guinea pig
Result	:	Did not cause sensitisation on laboratory animals.

Germ cell mutagenicity

Not classified based on available information.

Components:**aluminium oxide:**

Genotoxicity in vitro	:	Test system: Bacteria
		Method: OECD Test Guideline 471
		Result: negative

Carcinogenicity

May cause cancer.

IARC	Group 1: Carcinogenic to humans quartz (SiO ₂) (Silica dust, crystalline)	14808-60-7
OSHA	OSHA specifically regulated carcinogen quartz (SiO ₂) (crystalline silica)	14808-60-7

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aluminium oxide:

Exposure routes : Inhalation
Target Organs : Lungs
Assessment : May cause damage to organs through prolonged or repeated exposure.

Repeated dose toxicity

Product:

Remarks : to be reviewed

Components:

magnesium oxide:

Species : Rat
NOAEL : < 1,120 mg/m³
Application Route : Inhalation
Exposure time : 29 d
Remarks : Chronic toxicity

Aspiration toxicity

Not classified based on available information.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Components:

aluminium oxide:

Toxicity to fish : LC50 (Salmo trutta (brown trout)): > 100 mg/l
Exposure time: 96 h
Method: OECD Test Guideline 203
GLP: yes

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

Toxicity to algae/aquatic plants : EC50 (Pseudokirchneriella subcapitata (algae)): > 100 mg/l
Exposure time: 72 h
Method: OECD Test Guideline 201
GLP: yes

calcium oxide (Solution):

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 50.6 mg/l

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Exposure time: 96 h
Method: OECD Test Guideline 203
GLP: yes
Remarks: Fresh water

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 49.1 mg/l
Exposure time: 48 h
Method: OECD Test Guideline 202
GLP: yes

Toxicity to algae/aquatic plants : EC10 (Pseudokirchneriella subcapitata (microalgae)): 79.22 mg/l
Exposure time: 72 h
Method: OECD Test Guideline 201
GLP: yes

EC50 (Pseudokirchneriella subcapitata (microalgae)): 184.57 mg/l
Exposure time: 72 h
Method: OECD Test Guideline 201
GLP: yes

Toxicity to microorganisms : EC10 (activated sludge): 300.4 mg/l
Exposure time: 3 h
Method: OECD Test Guideline 209
GLP: yes

Persistence and degradability

Components:

aluminium oxide:

Biodegradability : Result: The methods for determining the biological degradability are not applicable to inorganic substances.

magnesium oxide:

Biodegradability : Result: The methods for determining the biological degradability are not applicable to inorganic substances.

Bioaccumulative potential

No data available

Mobility in soil

No data available

Other adverse effects

No data available

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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.

National Regulations

49 CFR

Not regulated as a dangerous good

Hazard and Handling Notes. : Not dangerous cargo, Risk of serious damage to eyes, Keep separated from foodstuffs

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 : Carcinogenicity

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Specific target organ toxicity (single or repeated exposure)
Serious eye damage or eye irritation

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

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

US State Regulations

Massachusetts Right To Know

diiron trioxide (Dust and fume)	1309-37-1	> 1
quartz (SiO ₂)	14808-60-7	5 - 10
aluminium oxide	1344-28-1	1 - 5

Massachusetts Right To Know

diiron trioxide (Dust and fume)	1309-37-1	
quartz (SiO ₂)	14808-60-7	
aluminium oxide	1344-28-1	

Pennsylvania Right To Know

diiron trioxide (Dust and fume)	1309-37-1	> 1
quartz (SiO ₂)	14808-60-7	5 - 10
aluminium oxide	1344-28-1	1 - 5
magnesium oxide	1309-48-4	1 - 5
calcium oxide (Solution)	1305-78-8	1 - 3

Pennsylvania Right To Know

diiron trioxide (Dust and fume)	1309-37-1	
quartz (SiO ₂)	14808-60-7	
aluminium oxide	1344-28-1	
magnesium oxide	1309-48-4	
calcium oxide (Solution)	1305-78-8	
barium	7440-39-3	

California Prop. 65

WARNING: This product can expose you to chemicals including quartz (SiO₂), which is/are known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

TSCA inventory

TSCA : On TSCA Inventory

TSCA list

No substances are subject to a Significant New Use Rule.

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

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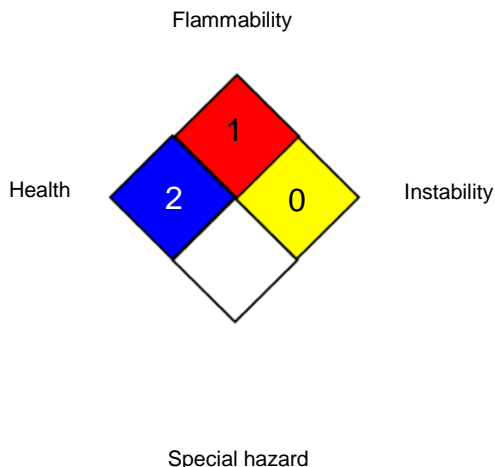


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SECTION 16. OTHER INFORMATION

Further information

NFPA 704:



HMIS® IV:

HEALTH	*	2
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.

Full text of other abbreviations

ACGIH : USA. ACGIH Threshold Limit Values (TLV)
OSHA CARC : OSHA Specifically Regulated Chemicals/Carcinogens
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 CARC / PEL : Permissible exposure limit (PEL)
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 Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisa-

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tion 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.