

SAFETY DATA SHEET



Vazo™ 64

Version	Revision Date:	SDS Number:	Date of last issue: 10/18/2022
11.2	04/14/2023	1331034-00051	Date of first issue: 02/27/2017

SECTION 1. IDENTIFICATION

Product name : Vazo™ 64

SDS-Identcode : 130000027350

Manufacturer or supplier's details

Company name of supplier : The Chemours Company FC, LLC

Address : 1007 Market Street
Wilmington, DE 19801 United States of America (USA)

Telephone : 1-844-773-CHEM (outside the U.S. 1-302-773-1000)

Emergency telephone : Medical emergency: 1-866-595-1473 (outside the U.S. 1-302-773-2000) ; Transport emergency: +1-800-424-9300 (outside the U.S. +1-703-527-3887)

Recommended use of the chemical and restrictions on use

Recommended use : Intermediate

Restrictions on use : For industrial use only.

SECTION 2. HAZARDS IDENTIFICATION

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


Self-reactive chemicals : Type C

Combustible dust

Acute toxicity (Oral) : Category 4

Acute toxicity (Inhalation) : Category 4

GHS label elements

Hazard pictograms : 

Signal Word : Danger

Hazard Statements : H242 Heating may cause a fire.
May form combustible dust concentrations in air.
H302 + H332 Harmful if swallowed or if inhaled.

Precautionary Statements : **Prevention:**

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P210 Keep away from heat, sparks, open flame and hot surfaces. No smoking.
P220 Keep away from clothing and other combustible materials.
P234 Keep only in original container.
P261 Avoid breathing dust, fume, gas, mist, vapors or spray.
P264 Wash skin thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P271 Use only outdoors or in a well-ventilated area.
P280 Wear protective gloves, eye protection and face protection.

Response:

P301 + P312 + P330 IF SWALLOWED: Call a doctor if you feel unwell. Rinse mouth.

P304 + P340 + P312 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a doctor if you feel unwell.

Storage:

P403 + P235 Store in a well-ventilated place. Keep cool.
P411 Store at temperatures not exceeding 24 °C/ 75 °F.
P420 Store away from other materials.

Disposal:

P501 Dispose of contents and container to an approved waste disposal plant.

Other hazards

Risk of explosion if heated under confinement.
Dust contact with the eyes can lead to mechanical irritation.
Contact with dust can cause mechanical irritation or drying of the skin.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture	:	Substance
Substance name	:	2,2'-Dimethyl-2,2'-azodipropionitrile
CAS-No.	:	78-67-1

Components

Chemical name	CAS-No.	Concentration (% w/w)
2,2'-Dimethyl-2,2'-azodipropionitrile	78-67-1	>= 90 - <= 100
Methacrylonitrile	126-98-7	>= 0.1 - < 0.2
Isobutyronitrile	78-82-0	>= 0.1 - < 1

Actual concentration is withheld as a trade secret

SECTION 4. FIRST AID MEASURES

General advice	:	In the case of accident or if you feel unwell, seek medical advice immediately. When symptoms persist or in all cases of doubt seek medical advice.
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- | | |
|---|---|
| If inhaled | : If inhaled, remove to fresh air.
If not breathing, give artificial respiration.
If breathing is difficult, give oxygen.
Get medical attention if symptoms occur. |
| In case of skin contact | : Wash with water and soap.
Get medical attention if symptoms occur. |
| In case of eye contact | : If in eyes, rinse well with water.
Get medical attention if irritation develops and persists. |
| If swallowed | : If swallowed, DO NOT induce vomiting unless directed to do so by medical personnel.
Get medical attention.
Rinse mouth thoroughly with water.
Never give anything by mouth to an unconscious person. |
| Most important symptoms and effects, both acute and delayed | : Eye contact may provoke the following symptoms
Irritation
tearing
Redness
Discomfort
Ingestion may provoke the following symptoms:
Weakness
Tremors
Convulsions
Gastrointestinal disturbance
Contact with dust can cause mechanical irritation or drying of the skin.
Dust contact with the eyes can lead to mechanical irritation.
Harmful if swallowed or if inhaled. |
| Protection of first-aiders | : First Aid responders should pay attention to self-protection, and use the recommended personal protective equipment when the potential for exposure exists (see section 8). |
| Notes to physician | : Treat symptomatically and supportively. |

SECTION 5. FIRE-FIGHTING MEASURES

- | | |
|---------------------------------------|---|
| Suitable extinguishing media | : Water spray
Alcohol-resistant foam |
| Unsuitable extinguishing media | : High volume water jet |
| Specific hazards during fire fighting | : Avoid generating dust; fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard.
Do not use a solid water stream as it may scatter and spread fire.
The product burns violently.
Exposure to combustion products may be a hazard to health. |

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- Hazardous combustion products : Carbon oxides
Nitrogen oxides (NO_x)
- Specific extinguishing methods : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Use water spray to cool unopened containers.
Remove undamaged containers from fire area if it is safe to do so.
Evacuate area.
- Special protective equipment for fire-fighters : In the event of fire, wear self-contained breathing apparatus.
Use personal protective equipment.

SECTION 6. ACCIDENTAL RELEASE MEASURES

- Personal precautions, protective equipment and emergency procedures : Remove all sources of ignition.
Use personal protective equipment.
Follow safe handling advice (see section 7) and personal protective equipment recommendations (see section 8).
- Environmental precautions : Avoid release to the environment.
Prevent further leakage or spillage if safe to do so.
Retain and dispose of contaminated wash water.
Local authorities should be advised if significant spillages cannot be contained.
- Methods and materials for containment and cleaning up : Clear spills immediately.
Take any precaution to avoid mixing with combustibles.
Soak up with inert absorbent material.
Remove mechanically and with care (e.g. with clean polyethylene plastic shovel).
Avoid dispersal of dust in the air (i.e., clearing dust surfaces with compressed air).
Dust deposits should not be allowed to accumulate on surfaces, as these may form an explosive mixture if they are released into the atmosphere in sufficient concentration.
Isolate waste and do not reuse.
Local or national regulations may apply to releases and disposal of this material, as well as those materials and items employed in the cleanup of releases. You will need to determine which regulations are applicable.
Sections 13 and 15 of this SDS provide information regarding certain local or national requirements.

SECTION 7. HANDLING AND STORAGE

- Technical measures : Static electricity may accumulate and ignite suspended dust causing an explosion.
Provide adequate precautions, such as electrical grounding and bonding, or inert atmospheres.
- Local/Total ventilation : If sufficient ventilation is unavailable, use with local exhaust

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ventilation.
If advised by assessment of the local exposure potential, use only in an area equipped with explosion-proof exhaust ventilation.

Advice on safe handling : Do not breathe decomposition products.

Avoid breathing dust, fume, gas, mist, vapors or spray.
Do not swallow.
Avoid contact with eyes.
Avoid prolonged or repeated contact with skin.
Wash skin thoroughly after handling.
Handle in accordance with good industrial hygiene and safety practice, based on the results of the workplace exposure assessment
Non-sparking tools should be used.
Prevent pressure build-up
Keep container tightly closed.
Protect container from physical shock.
Protect from contamination.
Minimize dust generation and accumulation.
Keep container closed when not in use.
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
Keep away from clothing and other combustible materials.
Take precautionary measures against static discharges.
Do not eat, drink or smoke when using this product.
Keep only in original packaging.
Take care to prevent spills, waste and minimize release to the environment.

Conditions for safe storage : Keep in properly labeled containers.
Store in original container.
Keep tightly closed.
Keep in a dry, cool and well-ventilated place.
Protect from sunlight.
Adhere to recommended storage temperature.
Store in accordance with the particular national regulations.
Keep away from heat and sources of ignition.

Materials to avoid : Store away from other materials.

Recommended storage temperature : < 75 °F / < 24 °C

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredients with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
2,2'-Dimethyl-2,2'-azodipropiononitrile	78-67-1	TWA	5 mg/m ³ (Cyanide)	OSHA Z-1

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		C	4.7 ppm 5 mg/m ³ (Cyanide)	NIOSH REL
Methacrylonitrile	126-98-7	TWA	1 ppm	ACGIH
		TWA	1 ppm 3 mg/m ³	NIOSH REL
Isobutyronitrile	78-82-0	TWA	8 ppm 22 mg/m ³	NIOSH REL

Occupational exposure limits of decomposition products

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
Tetramethylsuccinonitrile	3333-52-6	TWA (Inhalable fraction and vapor)	0.5 mg/m ³	ACGIH
		TWA	0.5 ppm 3 mg/m ³	NIOSH REL
		TWA	0.5 ppm 3 mg/m ³	OSHA Z-1
		TWA	5 mg/m ³ (Cyanide)	OSHA Z-1
		C	4.7 ppm 5 mg/m ³ (Cyanide)	NIOSH REL
		C	5 mg/m ³ (Cyanide)	ACGIH

Engineering measures : Processing may form hazardous compounds (see section 10).
Minimize workplace exposure concentrations.
Apply measures to prevent dust explosions.
Ensure that dust-handling systems (such as exhaust ducts, dust collectors, vessels, and processing equipment) are designed in a manner to prevent the escape of dust into the work area (i.e., there is no leakage from the equipment).
If sufficient ventilation is unavailable, use with local exhaust ventilation.
If advised by assessment of the local exposure potential, use only in an area equipped with explosion-proof exhaust ventilation.

Personal protective equipment

Respiratory protection : General and local exhaust ventilation is recommended to maintain vapor exposures below recommended limits. Where concentrations are above recommended limits or are unknown, appropriate respiratory protection should be worn. Follow OSHA respirator regulations (29 CFR 1910.134) and use NIOSH/MSHA approved respirators. Protection provided by air purifying respirators against exposure to any hazardous chemical is limited. Use a positive pressure air supplied respirator if there is any potential for uncontrolled release, exposure levels are unknown, or any other circumstance

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where air purifying respirators may not provide adequate protection.

Hand protection
Material : Neoprene

Remarks : Choose gloves to protect hands against chemicals depending on the concentration specific to place of work. For special applications, we recommend clarifying the resistance to chemicals of the aforementioned protective gloves with the glove manufacturer. Wash hands before breaks and at the end of workday. Breakthrough time is not determined for the product. Change gloves often!

Eye protection : Wear the following personal protective equipment:
Safety goggles

Skin and body protection : Select appropriate protective clothing based on chemical resistance data and an assessment of the local exposure potential.
Wear the following personal protective equipment:
If assessment demonstrates that there is a risk of explosive atmospheres or flash fires, use flame retardant antistatic protective clothing.
Skin contact must be avoided by using impervious protective clothing (gloves, aprons, boots, etc).

Hygiene measures : If exposure to chemical is likely during typical use, provide eye flushing systems and safety showers close to the working place.
When using do not eat, drink or smoke.
Wash contaminated clothing before re-use.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : solid, crystalline

Color : white

Odor : odorless

Odor Threshold : No data available

pH : 7

Melting point/freezing point : 212 °F / 100 °C
Do not attempt to verify melting point; decomposition can be violent.

Initial boiling point and boiling : No data available

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range

Flash point	:	Not applicable
Evaporation rate	:	Not applicable
Flammability (solid, gas)	:	May form explosive dust-air mixture.
Upper explosion limit / Upper flammability limit	:	No data available
Lower explosion limit / Lower flammability limit	:	0.02 %(V)
Vapor pressure	:	0.0081 hPa (77 °F / 25 °C)
Relative vapor density	:	Not applicable
Relative density	:	1.13 (77 °F / 25 °C)
Bulk density	:	400 kg/m ³
Solubility(ies)		
Water solubility	:	< 10 g/l
Solubility in other solvents	:	18 g/l (32 °F / 0 °C) Solvent: Methanol
		49.6 g/l (68 °F / 20 °C) Solvent: Methanol
		160.6 g/l (104 °F / 40 °C) Solvent: Methanol
		5.8 g/l (32 °F / 0 °C) Solvent: Ethanol
		20.4 g/l (68 °F / 20 °C) Solvent: Ethanol
		71.5 g/l (104 °F / 40 °C) Solvent: Ethanol
Partition coefficient: n-octanol/water	:	log Pow: 1.1 (77 °F / 25 °C)
Autoignition temperature	:	563 °F / 295 °C
Decomposition temperature	:	The product is a self-reactive substance or mixture classified as type C.
Self-Accelerating decomposition temperature (SADT)	:	122 °F / 50 °C

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Viscosity		
Viscosity, kinematic	:	Not applicable
Explosive properties	:	Extreme risk of explosion by shock, friction, fire or other sources of ignition.
Oxidizing properties	:	The substance or mixture is not classified as oxidizing.
Particle size	:	No data available

SECTION 10. STABILITY AND REACTIVITY

Reactivity	:	Heating may cause a fire.
Chemical stability	:	Follow precautionary advice and avoid incompatible materials and conditions
Possibility of hazardous reactions	:	May form explosive dust-air mixture. Oxidizing material can cause a reaction. Hazardous decomposition products will be formed at elevated temperatures. May explode under confinement.
Conditions to avoid	:	Heat, flames and sparks. Protect from contamination. Avoid shock and friction. Avoid dust formation. Temperatures greater than recommended storage temperature. Contact with incompatible substances can cause decomposition at or below SADT.
Incompatible materials	:	Oxidizing agents Avoid impurities (e.g. rust, dust, ash), risk of decomposition. Flammable materials

Hazardous decomposition products

Thermal decomposition	:	Tetramethylsuccinonitrile
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SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Inhalation
Skin contact
Ingestion
Eye contact

Acute toxicity

Harmful if swallowed or if inhaled.

Product:

Acute oral toxicity	:	Acute toxicity estimate: 495.19 mg/kg
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Method: Calculation method

Acute inhalation toxicity : Acute toxicity estimate: 1.5 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Method: Calculation method

Acute dermal toxicity : Acute toxicity estimate: > 5,000 mg/kg
Method: Calculation method

Components:

2,2'-Dimethyl-2,2'-azodipropiononitrile:

Acute oral toxicity : LD50 (Rat): > 300 - 2,000 mg/kg
Method: OECD Test Guideline 423

Acute inhalation toxicity : Acute toxicity estimate: 1.5 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Method: Expert judgment
Remarks: Based on national or regional regulation.

Acute dermal toxicity : LD50 (Rat): > 2,000 mg/kg
Method: OECD Test Guideline 402
Assessment: The substance or mixture has no acute dermal toxicity

Methacrylonitrile:

Acute oral toxicity : LD50 (Rat): 64 mg/kg
Method: OECD Test Guideline 401

Acute inhalation toxicity : LC50 (Rat): 1.09 mg/l
Exposure time: 4 h
Test atmosphere: vapor

Acute dermal toxicity : LD50 (Rat): 280 mg/kg

Isobutyronitrile:

Acute oral toxicity : LD50 (Rat): 50 mg/kg

Acute inhalation toxicity : LC50 (Rat): > 2 - 10 mg/l
Exposure time: 4 h
Test atmosphere: vapor

Acute dermal toxicity : LD50 (Rabbit): 200 mg/kg

Skin corrosion/irritation

Not classified based on available information.

Components:

2,2'-Dimethyl-2,2'-azodipropiononitrile:

Species : Rabbit

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Method	:	OECD Test Guideline 404
Result	:	No skin irritation

Serious eye damage/eye irritation

Not classified based on available information.

Components:

2,2'-Dimethyl-2,2'-azodipropiononitrile:

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

Methacrylonitrile:

Species	:	Rabbit
Result	:	No eye irritation

Respiratory or skin sensitization

Skin sensitization

Not classified based on available information.

Respiratory sensitization

Not classified based on available information.

Components:

2,2'-Dimethyl-2,2'-azodipropiononitrile:

Test Type	:	Maximization Test
Routes of exposure	:	Skin contact
Species	:	Guinea pig
Method	:	OECD Test Guideline 406
Result	:	negative

Methacrylonitrile:

Assessment	:	Probability or evidence of skin sensitization in humans
Remarks	:	Based on national or regional regulation.

Germ cell mutagenicity

Not classified based on available information.

Components:

2,2'-Dimethyl-2,2'-azodipropiononitrile:

Genotoxicity in vitro	:	Test Type: Chromosome aberration test in vitro
		Method: OECD Test Guideline 473
		Result: negative

Methacrylonitrile:

Genotoxicity in vitro	:	Test Type: Chromosome aberration test in vitro
		Method: OECD Test Guideline 473
		Result: positive

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Test Type: In vitro mammalian cell gene mutation test
Method: OECD Test Guideline 476
Result: negative

Genotoxicity in vivo : Test Type: Mammalian erythrocyte micronucleus test (in vivo cytogenetic assay)
Species: Rat
Application Route: Intraperitoneal injection
Method: OECD Test Guideline 474
Result: negative

Germ cell mutagenicity - Assessment : Weight of evidence does not support classification as a germ cell mutagen.

Isobutyronitrile:

Genotoxicity in vitro : Test Type: Bacterial reverse mutation assay (AMES)
Result: negative

Test Type: In vitro mammalian cell gene mutation test
Method: OECD Test Guideline 476
Result: negative
Remarks: Based on data from similar materials

Test Type: Chromosome aberration test in vitro
Method: OECD Test Guideline 473
Result: negative

Carcinogenicity

Not classified based on available information.

Components:

Methacrylonitrile:

Species : Rat
Application Route : Ingestion
Exposure time : 2 Years
Result : negative

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

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.

Reproductive toxicity

Not classified based on available information.

Components:

2,2'-Dimethyl-2,2'-azodipropiononitrile:

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Effects on fertility : Test Type: Combined repeated dose toxicity study with the reproduction/developmental toxicity screening test
Species: Rat
Application Route: Ingestion
Method: OECD Test Guideline 422
Result: negative

Effects on fetal development : Test Type: Embryo-fetal development
Species: Rat
Application Route: Ingestion
Method: OECD Test Guideline 414
Result: negative

Methacrylonitrile:

Effects on fertility : Test Type: Combined repeated dose toxicity study with the reproduction/developmental toxicity screening test
Species: Rat
Application Route: Ingestion
Method: OECD Test Guideline 422
Result: negative

Effects on fetal development : Test Type: Combined repeated dose toxicity study with the reproduction/developmental toxicity screening test
Species: Rat
Application Route: Ingestion
Method: OECD Test Guideline 422
Result: negative

STOT-single exposure

Not classified based on available information.

Components:

Methacrylonitrile:

Routes of exposure : inhalation (vapor)
Target Organs : Central nervous system
Assessment : Shown to produce significant health effects in animals at concentrations of 10 mg/l/4h or less.

STOT-repeated exposure

Not classified based on available information.

Components:

Methacrylonitrile:

Routes of exposure : inhalation (vapor)
Assessment : No significant health effects observed in animals at concentrations of 1 mg/l/6h/d or less.

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Repeated dose toxicity

Components:

2,2'-Dimethyl-2,2'-azodipropiononitrile:

Species	: Rat
NOAEL	: 10 mg/kg
Application Route	: Ingestion
Exposure time	: 13 Weeks
Method	: OECD Test Guideline 408

Methacrylonitrile:

Species	: Rat
NOAEL	: 0.054 - 0.144 mg/l
Application Route	: inhalation (vapor)
Exposure time	: 91 Days

Aspiration toxicity

Not classified based on available information.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Components:

2,2'-Dimethyl-2,2'-azodipropiononitrile:

Toxicity to fish	: LC50 (Danio rerio (zebra fish)): > 100 mg/l Exposure time: 96 h Method: OECD Test Guideline 203
Toxicity to daphnia and other aquatic invertebrates	: EC50 (Daphnia magna (Water flea)): > 367 mg/l Exposure time: 48 h Method: OECD Test Guideline 202
Toxicity to algae/aquatic plants	: ErC50 (Pseudokirchneriella subcapitata (green algae)): 4.5 mg/l Exposure time: 72 h Method: OECD Test Guideline 201 NOEC (Pseudokirchneriella subcapitata (green algae)): 1.48 mg/l Exposure time: 72 h Method: OECD Test Guideline 201
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)	: NOEC (Daphnia magna (Water flea)): 2.2 mg/l Exposure time: 21 d
Toxicity to microorganisms	: EC50: > 1,000 mg/l Exposure time: 3 h Method: OECD Test Guideline 209

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Methacrylonitrile:

Toxicity to fish	:	LC50 (Danio rerio (zebra fish)): 354 mg/l Exposure time: 96 h Method: OECD Test Guideline 203
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia magna (Water flea)): 205 mg/l Exposure time: 48 h Method: OECD Test Guideline 202
Toxicity to algae/aquatic plants	:	EC50 (Selenastrum capricornutum (green algae)): 15.1 mg/l Exposure time: 72 h Method: OECD Test Guideline 201 NOEC (Selenastrum capricornutum (green algae)): 1 mg/l Exposure time: 72 h Method: OECD Test Guideline 201
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)	:	NOEC (Daphnia magna (Water flea)): 2.2 mg/l Exposure time: 21 d Method: OECD Test Guideline 211

Isobutyronitrile:

Toxicity to fish	:	LC50 (Pimephales promelas (fathead minnow)): > 100 mg/l Exposure time: 96 h
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia magna (Water flea)): > 100 mg/l Exposure time: 48 h Remarks: Based on data from similar materials
Toxicity to algae/aquatic plants	:	ErC50 (Pseudokirchneriella subcapitata (green algae)): > 100 mg/l Exposure time: 72 h Remarks: Based on data from similar materials

Persistence and degradability

Components:

2,2'-Dimethyl-2,2'-azodipropiononitrile:

Biodegradability	:	Result: Not readily biodegradable. Biodegradation: < 10 % Exposure time: 28 d Method: OECD Test Guideline 301B
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Methacrylonitrile:

Biodegradability	:	Result: Readily biodegradable. Biodegradation: 83 - 100 % Exposure time: 28 d Method: OECD Test Guideline 301C
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Isobutyronitrile:

Biodegradability	:	Result: Not readily biodegradable.
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BOD/COD : BOD/COD: 28 %

Bioaccumulative potential

Components:

2,2'-Dimethyl-2,2'-azodipropiononitrile:

Partition coefficient: n-octanol/water : log Pow: 1.1

Methacrylonitrile:

Partition coefficient: n-octanol/water : log Pow: 0.68

Isobutyronitrile:

Partition coefficient: n-octanol/water : log Pow: 0.46

Mobility in soil

No data available

Other adverse effects

No data available

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

Waste from residues : Dispose of in accordance with local regulations.
Do not dispose of waste into sewer.

Contaminated packaging : Empty containers should be taken to an approved waste handling site for recycling or disposal.
If not otherwise specified: Dispose of as unused product.

SECTION 14. TRANSPORT INFORMATION

International Regulations

UNRTDG

UN number : UN 3234
Proper shipping name : SELF-REACTIVE SOLID TYPE C, TEMPERATURE CONTROLLED
(2,2'-Azodi(isobutyronitrile))
Class : 4.1
Packing group : Not assigned by regulation
Labels : 4.1

IATA-DGR

Not permitted for transport

IMDG-Code

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UN number	: UN 3234
Proper shipping name	: SELF-REACTIVE SOLID TYPE C, TEMPERATURE CONTROLLED (2,2'-Azodi(isobutyronitrile))
Class	: 4.1
Packing group	: Not assigned by regulation
Labels	: 4.1
EmS Code	: F-F, S-K
Marine pollutant	: no

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

UN/ID/NA number	: UN 3234
Proper shipping name	: Self-reactive solid type C, temperature controlled (2,2'-Azodi(isobutyronitrile))
Class	: 4.1
Packing group	: Not assigned by regulation
Labels	: FLAMMABLE SOLID
ERG Code	: 150
Marine pollutant	: yes(2,2'-Azodi(isobutyronitrile))

Special precautions for user

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

SECTION 15. REGULATORY INFORMATION

CERCLA Reportable Quantity

Listed substances in the product are at low enough levels to not be expected to exceed the RQ

SARA 304 Extremely Hazardous Substances Reportable Quantity

Listed substances in the product are at low enough levels to not be expected to exceed the 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	: Self-reactive chemicals Combustible dust Acute toxicity (any route of exposure)
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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.
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US State Regulations

Pennsylvania Right To Know

2,2'-Dimethyl-2,2'-azodipropionitrile	78-67-1
Methacrylonitrile	126-98-7

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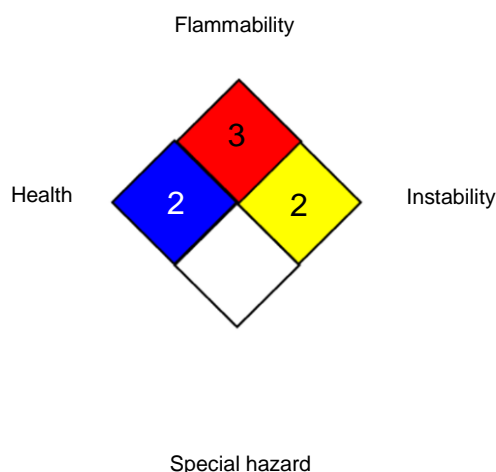
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2-[(Chloroimino)-3,5,5-trimethyl-1-(pyrrolidinyl)diazenyl]-2-methylpropanenitrile	Not Assigned
Isobutyronitrile	78-82-0
Tetramethylsuccinonitrile	3333-52-6

SECTION 16. OTHER INFORMATION

Further information

NFPA 704:



HMIS® IV:

HEALTH	/	2
FLAMMABILITY		3
PHYSICAL HAZARD		2

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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Before use read Chemours safety information.

For further information contact the local Chemours office or nominated distributors.

Full text of other abbreviations

ACGIH	: USA. ACGIH Threshold Limit Values (TLV)
NIOSH REL	: USA. NIOSH Recommended Exposure Limits
OSHA Z-1	: USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants
ACGIH / TWA	: 8-hour, time-weighted average
ACGIH / C	: Ceiling limit
NIOSH REL / TWA	: Time-weighted average concentration for up to a 10-hour workday during a 40-hour workweek
NIOSH REL / C	: Ceiling value not be exceeded at any time.
OSHA Z-1 / TWA	: 8-hour time weighted average

AIIC - Australian Inventory of Industrial Chemicals; 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

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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 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; TECI - Thailand Existing Chemicals 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

Sources of key data used to compile the Material Safety Data Sheet : Internal technical data, data from raw material SDSs, OECD eChem Portal search results and European Chemicals Agency, <http://echa.europa.eu/>

Revision Date : 04/14/2023

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and shall not be considered a warranty or quality specification of any type. The information provided relates only to the specific material identified at the top of this SDS and may not be valid when the SDS material is used in combination with any other materials or in any process, unless specified in the text. Material users should review the information and recommendations in the specific context of their intended manner of handling, use, processing and storage, including an assessment of the appropriateness of the SDS material in the user's end product, if applicable.

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