

W0. Introduction

W0.1

(W0.1) Give a general description of and introduction to your organization.

W. R. Grace & Co. is engaged in the production and sale of specialty chemicals and specialty materials on a global basis through two reportable business segments: Grace Catalysts Technologies, which includes catalysts and related products and technologies used in refining, petrochemical and other chemical manufacturing applications; and Grace Materials Technologies, which includes specialty materials, including silica-based and silica-alumina-based materials, used in consumer/pharma, chemical process, and coatings applications.

W. R. Grace & Co. delivers value through performance. Our catalysts and specialized silicas improve the products and processes of many of the world's best companies. Through world-class knowhow, collaboration, and experience, we help customers in 70 countries achieve some of their most important goals, from high-performing products and high-productivity manufacturing, to improved efficiency, sustainability, and profitability.

W-CH0.1a

(W-CH0.1a) Which activities in the chemical sector does your organization engage in?

- Specialty inorganic chemicals
- Other, please specify (Specialty Materials)

W0.2

(W0.2) State the start and end date of the year for which you are reporting data.

	Start date	End date
Reporting year	January 1 2021	December 31 2021

W0.3

(W0.3) Select the countries/areas in which you operate.

- Brazil
- Canada
- Germany
- Malaysia
- Philippines
- Republic of Korea
- Spain
- Sweden
- United States of America

W0.4

(W0.4) Select the currency used for all financial information disclosed throughout your response.

- USD

W0.5

(W0.5) Select the option that best describes the reporting boundary for companies, entities, or groups for which water impacts on your business are being reported.

- Companies, entities or groups over which operational control is exercised

W0.6

(W0.6) Within this boundary, are there any geographies, facilities, water aspects, or other exclusions from your disclosure?

- Yes

W0.6a

(W0.6a) Please report the exclusions.

Exclusion	Please explain
Remediation sites	We are unable to collect water usage data from our remediation sites, however this is expected to be immaterial to our overall water use and risk.
Global Sales Offices	We are unable to collect water usage data from our global sales offices, however this is expected to be immaterial to our overall water use and risk.
Warehouses	We are unable to collect water usage data from our warehouses, however this is expected to be immaterial to our overall water use and risk.

W0.7

(W0.7) Does your organization have an ISIN code or another unique identifier (e.g., Ticker, CUSIP, etc.)?

Indicate whether you are able to provide a unique identifier for your organization.	Provide your unique identifier
Yes, an ISIN code	38388F1084

W1. Current state

W1.1

(W1.1) Rate the importance (current and future) of water quality and water quantity to the success of your business.

	Direct use importance rating	Indirect use importance rating	Please explain
Sufficient amounts of good quality freshwater available for use	Vital	Vital	Sufficient amounts of good quality freshwater is of vital importance for the production of all of our products, and we recognize water of suitable quality and volume is a finite resource. For Grace, a majority of our processes require access to fresh water for the manufacturing of our products. Water is used in steam generation, washing, slurring, transport, treatment, as a reaction medium, and incorporated into products. Indirectly, freshwater is also very important for the production of raw materials and other indirect materials across our value chain. We do not anticipate water becoming any less important for either our direct or indirect use in the future. We do not anticipate our future fresh water use to change significantly.
Sufficient amounts of recycled, brackish and/or produced water available for use	Important	Important	We consider recycled water to be important to our direct business operations and our supply chain as we recognize the importance of conserving water. Recycled water is used both directly to minimize freshwater use within our operations and indirectly to support the production of raw materials across our value chain. In the future we see the availability of recycled water as remaining important for direct and indirect uses as we seek to bolster our water stewardship efforts. We do not anticipate our future recycled water use to change significantly.

W1.2

(W1.2) Across all your operations, what proportion of the following water aspects are regularly measured and monitored?

	% of sites/facilities/operations	Please explain
Water withdrawals – total volumes	51-75	Grace internally monitors its water withdrawals primarily through invoices sent by third-party providers or through direct readings obtained at the point of withdrawal. Additionally, many sites have flow meters which can be accessed as needed (daily or otherwise) to obtain and verify flow data. Water withdrawals from public utilities are monitored at a frequency applicable to the billing cycle of that water utility. In instances where water withdrawals data exceeds a period of 3 months, water withdrawal is estimated. Where data is unavailable applicable estimates are made. In cases where water withdrawal is from surface or ground water, withdrawal data is obtained on a monthly basis from in line water flow meters. Data gaps for both public utilities and surface or ground water are addressed through engineering estimation where required.
Water withdrawals – volumes by source	26-50	Water withdrawals from public utilities are monitored at a frequency applicable to the billing cycle of that water utility. In instances where water withdrawals data exceeds a period of 3 months, water withdrawal is estimated. Where data is unavailable applicable estimates are made. In cases where water withdrawal is from surface or ground water, withdrawal data is obtained on a monthly basis from in line water flow meters. Data gaps for both public utilities and surface or ground water are addressed through engineering estimation where required.
Entrained water associated with your metals & mining sector activities - total volumes [only metals and mining sector]	<Not Applicable>	<Not Applicable>
Produced water associated with your oil & gas sector activities - total volumes [only oil and gas sector]	<Not Applicable>	<Not Applicable>
Water withdrawals quality	26-50	Grace maintains compliance with all of its operational permits and applicable regulations. Where water is supplied from third party sources such as water utilities, water quality is monitored by those entities. Where water is withdrawn from ground or surface water, water quality parameters are monitored as a raw material input to ensure water is of sufficient quality to meet product requirements.
Water discharges – total volumes	51-75	This is the first year Grace implemented a company-wide survey for water use at each of our facility, including total discharge volume. This effort will continue on an annual basis. Water discharges from facilities are monitored through either or both (where applicable) public owned treatment works or effluent flow meters at discharge points. Measurement frequency is determined by permit obligations or operational requirements and may range from daily to monthly. Data gaps for both publicly owned treatment works or other receiving bodies is estimated according to applicable regulatory guidance and internal procedures.
Water discharges – volumes by destination	26-50	Water discharges from facilities are monitored through either or both (where applicable) public owned treatment works or effluent flow meters at discharge points. Measurement frequency is determined by permit obligations or operational requirements and may range from daily to monthly. Data gaps for both publicly owned treatment works or other receiving bodies is estimated according to applicable regulatory guidance and internal procedures.
Water discharges – volumes by treatment method	51-75	Water discharges from facilities are monitored through either or both (where applicable) public owned treatment works or effluent flow meters at discharge points. Measurement frequency is determined by permit obligations or operational requirements and may range from daily to monthly. Data gaps for both publicly owned treatment works or other receiving bodies is estimated according to applicable regulatory guidance and internal procedures.
Water discharge quality – by standard effluent parameters	51-75	Grace complies with all operating and discharge permits pursuant to national, federal, state, and local regulations. We regularly monitor discharge water quality to maintain compliance with our permits. Water discharge quality parameters are monitored at intervals specified by all operating and discharge permits and are specific to each facility. The monitoring frequency set by the relevant permits may range from hourly to annually. The specific method for monitoring each water quality parameter will be established by the appropriate regulatory body and specified in the operating permit. For example, at some facilities we monitor discharge through on-site meters.
Water discharge quality – temperature	1-25	Grace complies with all operating and discharge permits pursuant to national, federal, state, and local regulations. We regularly monitor discharge water quality to maintain compliance with our permits.
Water consumption – total volume	26-50	Water consumption is calculated on an annual basis using the following formula: Consumption = Withdrawal (all sources) – Discharge (all receptors). Prior water consumption data assumed reported consumption to be 100% water withdrawal whenever stormwater cannot be separated from wastewater volume. This avoided negative consumption values but limited comparability of the data set. Going forward consumption will not be modified and raw calculated values will be reported for all facilities.
Water recycled/reused	Less than 1%	This is the first year Grace implemented a company-wide survey for water use at each of our facility, including water recycled/reused This effort will continue on an annual basis. The volume of water recycled is based on either engineering estimation or direct measurement. Data is aggregated on an annual basis.
The provision of fully-functioning, safely managed WASH services to all workers	26-50	Grace complies with all local, state, and federal regulations regarding the provision of fully-functioning, safely managed WASH services to all workers. We manage any changes to regulations on an annual basis and as new ones arise.

W1.2b

(W1.2b) What are the total volumes of water withdrawn, discharged, and consumed across all your operations, and how do these volumes compare to the previous reporting year?

	Volume (megaliters/year)	Comparison with previous reporting year	Please explain
Total withdrawals	17992.15	Higher	Grace's total withdrawal volume increased by 13% in 2021 from 2020. In 2021, Grace acquired its South Haven and Tyrone facilities, and their associated water withdrawal has been included in our 2021 water inventory. We plan to back-cast the 2020 water withdrawal at these facilities to be reported in next year's CDP submission.
Total discharges	16831.31	Higher	Grace's total withdrawal volume increased by 19% in 2021 from 2020. In 2021, Grace acquired its South Haven and Tyrone facilities, and their associated water discharge has been included in our 2021 water inventory. We plan to back-cast the 2020 water withdrawal at these facilities to be reported in next year's CDP submission.
Total consumption	1160.84	Lower	In 2021, Grace's water consumption decreased by 31% compared with 2020. In prior years, we assumed that water consumption was 100% water withdrawal whenever stormwater cannot be separated from wastewater volume. This avoided negative consumption values but limited comparability of the data set. Beginning 2021 consumption will not be modified, and raw calculated values will be reported for all facilities.

W1.2d

(W1.2d) Indicate whether water is withdrawn from areas with water stress and provide the proportion.

	Withdrawals are from areas with water stress	% withdrawn from areas with water stress	Comparison with previous reporting year	Identification tool	Please explain
Row 1	Yes	1-10	About the same	WRI Aqueduct	Grace utilized the WRI Aqueduct tool to approximate the level of Baseline water stress at each of its facilities globally. Areas with a baseline water stress score above 3.0 (High to Very High) were identified as being within water stressed areas. We then took the total water withdrawn from those areas and divided it by total water use to obtain the % withdrawn from areas with water stress. Based on known data deficiencies in water withdrawal in prior years this should be viewed as a conservative estimate. We expect this value to remain relatively unchanged moving forward but may shift as data collection methods continue to improve. In 2021, 8% or approximately 1,439 megaliters of Grace's total withdrawals were from water-stressed areas.

W1.2h

(W1.2h) Provide total water withdrawal data by source.

	Relevance	Volume (megaliters/year)	Comparison with previous reporting year	Please explain
Fresh surface water, including rainwater, water from wetlands, rivers, and lakes	Relevant	978.86	Higher	Fresh surface water is used in direct operations at a number of plants, therefore it is relevant. In 2021, withdrawals from surface water increased by 12% from 2020 due to normalization of our production operations post COVID-19 pandemic. In 2021, Grace acquired its South Haven and Tyrone facilities, and their associated water withdrawal has been included in our 2021 water inventory. We plan to back-cast the 2020 water withdrawal at these facilities to be reported in next year's CDP submission.
Brackish surface water/Seawater	Not relevant	<Not Applicable>	<Not Applicable>	
Groundwater – renewable	Relevant	3007.2	Higher	Renewable groundwater is used in direct operations at a number of plants, therefore it is relevant. In 2021, withdrawals from groundwater increased by 19% from 2020. In 2021, Grace acquired its South Haven and Tyrone facilities, and their associated water withdrawal has been included in our 2021 water inventory. We plan to back-cast the 2020 water withdrawal at these facilities to be reported in next year's CDP submission.
Groundwater – non-renewable	Relevant	4980.49	Higher	Non-renewable groundwater is used in direct operations at a number of our plants, therefore it is relevant. In 2020, withdrawals from non-renewable groundwater increased by 34% from last year. In 2021, Grace acquired its South Haven and Tyrone facilities, and their associated water withdrawal has been included in our 2021 water inventory. We plan to back-cast the 2020 water withdrawal at these facilities to be reported in next year's CDP submission.
Produced/Entrained water	Not relevant	<Not Applicable>	<Not Applicable>	Produced/entrained water is not used in direct operations at any of our plants, therefore it is not relevant.
Third party sources	Relevant	9025.61	Higher	Water from third party sources is used in direct operations at a number of plants, therefore it is relevant. In 2020, withdrawals from third party sources increased by 3% from last year. In 2021, Grace acquired its South Haven and Tyrone facilities, and their associated water withdrawal has been included in our 2021 water inventory. We plan to back-cast the 2020 water withdrawal at these facilities to be reported in next year's CDP submission.

W1.2i

(W1.2i) Provide total water discharge data by destination.

	Relevance	Volume (megaliters/year)	Comparison with previous reporting year	Please explain
Fresh surface water	Relevant	8810.04	Much higher	A number of facilities discharge to fresh surface water; therefore this destination is relevant. In 2021, discharge to freshwater decreased by 30% compared to 2020.
Brackish surface water/seawater	Relevant	5219.27	This is our first year of measurement	A number of our facilities discharge to brackish surface water; therefore this destination is relevant.
Groundwater	Relevant	24	Much lower	For this reporting period, Grace underwent its first company-wide inventory of water use. A number of facilities discharge to groundwater; therefore this destination is relevant. In 2021, discharge to freshwater decreased by 87% compared to 2020.
Third-party destinations	Relevant	2778	Much higher	A number of facilities discharge third-party destinations; therefore this destination is relevant. In 2021, discharge to third parties increased by 111% compared to 2020.

W1.2j

(W1.2) Within your direct operations, indicate the highest level(s) to which you treat your discharge.

	Relevance of treatment level to discharge	Volume (megaliters/year)	Comparison of treated volume with previous reporting year	% of your sites/facilities/operations this volume applies to	Please explain
Tertiary treatment	Not relevant	<Not Applicable>	<Not Applicable>	<Not Applicable>	Tertiary treatment is not relevant to Grace's business as it is not required by regulatory requirements applicable to our facilities.
Secondary treatment	Relevant	109.76	Much higher	11-20	The level of treatment is dictated by regulatory requirements at each facility. In 2021, discharged water that underwent secondary treatment increased by 253% from 2020.
Primary treatment only	Relevant	15466.46	Higher	41-50	The level of treatment is dictated by regulatory requirements at each facility. In 2021, discharged water that underwent primary treatment increased by 97% from 2020.
Discharge to the natural environment without treatment	Not relevant	<Not Applicable>	<Not Applicable>	<Not Applicable>	
Discharge to a third party without treatment	Relevant	614.66	Lower	Please select	In 2021, water discharged to a third-party without treatment decreased by 57% from 2020.
Other	Relevant	640.43	Higher	Please select	In 2021, water discharged that underwent other treatment increased by 21% from 2020.

W1.3

(W1.3) Provide a figure for your organization's total water withdrawal efficiency.

	Revenue	Total water withdrawal volume (megaliters)	Total water withdrawal efficiency	Anticipated forward trend
Row 1	251260000	17992.15	139649.79171472	

W-CH1.3

(W-CH1.3) Do you calculate water intensity for your activities in the chemical sector?

Yes

W-CH1.3a

(W-CH1.3a) For your top five products by production weight/volume, provide the following water intensity information associated with your activities in the chemical sector.

Product type

Specialty inorganic chemicals

Product name

All chemical products

Water intensity value (m3)

0.04

Numerator: water aspect

Total water withdrawals

Denominator

Other, please specify (Metric Ton (MT))

Comparison with previous reporting year

Higher

Please explain

The metric is used to monitor the water intensity of our products with respect to assessing our overall water risk and ensuring compliance with our operating permits. In 2021, the water withdrawal intensity increased by 13% from 2020.

W1.4

(W1.4) Do you engage with your value chain on water-related issues?

Yes, our suppliers

Yes, our customers or other value chain partners

W1.4a

(W1.4a) What proportion of suppliers do you request to report on their water use, risks and/or management information and what proportion of your procurement spend does this represent?

Row 1

% of suppliers by number

1-25

% of total procurement spend

26-50

Rationale for this coverage

Annually, Grace engages with our suppliers through the Grace Supplier Code of Conduct, sustainability assessments conducted through EcoVadis, and townhalls. Scope of Engagement: The Grace Supplier Code of Conduct, which includes expectations for environmental responsibility, apply to all Grace suppliers. Grace selects suppliers for an EcoVadis assessment based on their strategic importance to our business.

Impact of the engagement and measures of success

In our supply chain, Grace engages with suppliers on sustainability issues, through its Responsible Sourcing Program. We assess the sustainability performance of our suppliers through EcoVadis, is evidence-based and requires suppliers to provide document verification of policies, practices and management systems, and performance related to a number of environmental issues, including water-related topics. As of the end of 2021, suppliers representing approximately 70% of Grace direct spend have completed or provided to Grace an EcoVadis scorecard, which includes a variety of water-related topics, including water risk, wastewater management and efficiency, water consumption and impacts on groundwater. Through the EcoVadis platform, Grace may assign corrective actions for water risks and management.

Comment

W1.4b

(W1.4b) Provide details of any other water-related supplier engagement activity.

Type of engagement

Incentivizing for improved water management and stewardship

Details of engagement

Water management and stewardship action is integrated into your supplier evaluation

% of suppliers by number

1-25

% of total procurement spend

26-50

Rationale for the coverage of your engagement

Annually, Grace engages with our suppliers through the Grace Supplier Code of Conduct, sustainability assessments conducted through EcoVadis, and townhalls. Scope of Engagement: The Grace Supplier Code of Conduct, which includes expectations for environmental responsibility, apply to all Grace suppliers. Grace selects suppliers for an EcoVadis assessment based on their strategic importance to our business.

Impact of the engagement and measures of success

In our supply chain, Grace engages with suppliers on sustainability issues, through its Responsible Sourcing Program. We assess the sustainability performance of our suppliers through EcoVadis, is evidence-based and requires suppliers to provide document verification of policies, practices and management systems, and performance related to a number of environmental issues, including water-related topics. As of the end of 2021, suppliers representing approximately 70% of Grace direct spend have completed or provided to Grace an EcoVadis scorecard, which includes a variety of water-related topics, including water risk, wastewater management and efficiency, water consumption and impacts on groundwater. Through the EcoVadis platform, Grace may assign corrective actions for water risks and management.

Comment

W1.4c

(W1.4c) What is your organization's rationale and strategy for prioritizing engagements with customers or other partners in its value chain?

Grace directly engages with its customers whose water related risks are a material factor in their ability to deliver value to consumers through technical expertise, collaboration, and the investigation and co-development of custom products designed specifically to reduce water consumption requirements. We measure success through significant reductions in water consumption for both Material Technology and Refining Technology customers.

W2. Business impacts

W2.1

(W2.1) Has your organization experienced any detrimental water-related impacts?

Yes

W2.1a

(W2.1a) Describe the water-related detrimental impacts experienced by your organization, your response, and the total financial impact.

Country/Area & River basin

United States of America	Other, please specify (Calcasieu River Basin)
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Type of impact driver & Primary impact driver

Acute physical	Cyclone, hurricane, typhoon
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Primary impact

Increased operating costs

Description of impact

Grace was impacted by a severe winter storm in Gulf Coast. In February 2021, Winter Storm Uri caused widespread power, water, gas and other utility disruptions, resulting in extended downtime and significant damage at our 4 manufacturing plants in the region.

Primary response

Amend the Business Continuity Plan

Total financial impact

15000000

Description of response

During the three months ended March 31, 2021, Winter Storm Uri caused widespread manufacturing disruption across Texas and Louisiana. Grace operates four manufacturing facilities in the region. All sites experienced interruptions, with extended downtime at three plants ranging from 8 to 24 days. All Grace sites have resumed operations; however, operating costs are expected to remain higher than normal while some maintenance and repair activity is ongoing. Most customers have restarted operations and returned to normal operating rates.

W2.2

(W2.2) In the reporting year, was your organization subject to any fines, enforcement orders, and/or other penalties for water-related regulatory violations?

Yes, enforcement orders or other penalties

W2.2b

(W2.2b) Provide details for all significant fines, enforcement orders and/or other penalties for water-related regulatory violations in the reporting year, and your plans for resolving them.

Type of penalty

Enforcement order

Financial impact

0

Country/Area & River basin

United States of America	Other, please specify (Calcasieu River Basin)
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Type of incident

Effluent limit exceedances

Description of penalty, incident, regulatory violation, significance, and resolution

The facility self-reported the TSS violations to the authorities and have implemented several short-term actions, with some long-term actions on-going.

Type of penalty

Enforcement order

Financial impact

0

Country/Area & River basin

Germany	Other, please specify (Roer)
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Type of incident

Other, please specify (Elevated sulfate level due to heavy rain event)

Description of penalty, incident, regulatory violation, significance, and resolution

The facility informed the authorities. No corrective actions were required since incident was not caused by Grace.

Type of penalty

Enforcement order

Financial impact

0

Country/Area & River basin

United States of America	Other, please specify (Willamette River)
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Type of incident

Effluent limit exceedances

Description of penalty, incident, regulatory violation, significance, and resolution

A written notice of violation was issued, but no fine was assessed.

W3. Procedures

W-CH3.1

(W-CH3.1) How does your organization identify and classify potential water pollutants associated with its activities in the chemical sector that could have a detrimental impact on water ecosystems or human health?

Risk characterization, management, and communication are important elements of Grace's global Product Stewardship Program. Our risk characterization and management program identifies, reduces, manages, and communicates the environmental, health, and safety impacts associated with our products throughout a product's lifecycle. Grace manages water risks from our products through risk characterization, management, and communication within our Product Stewardship Program. Risk characterization begins with an evaluation of the hazards associated with our products' ingredients. For example, we have pilot plants that test processes to better understand chemical hazards in production. Then we scale these test processes to a larger level and assess the potential, via engineering calculations and physical tests, for impacts to production. Every product's composition is defined, and reaction compounds, by-products, impurities, or other minor components are evaluated. Available information on physio-chemical, health hazard, and environmental effects is reviewed, and studies are commissioned to obtain additional data as appropriate. Exposure risks are assessed for manufacturing processes, handling, packaging, distribution, use, and disposal. Risks are characterized for workers making the product, customers using the product, and others who may be affected. Prior to the commercialization of a product, a risk management evaluation is performed. This evaluation assures that products can be safely produced, sold, and used in all intended applications. Grace communicates product safety information primarily through Safety Data Sheets and product labels. Additional communication methods such as training presentations and videos, safe use bulletins, and regulatory summaries are provided when appropriate to communicate risks adequately. Local and federal regulations also largely influence our operations and processes.

W-CH3.1a

(W-CH3.1a) Describe how your organization minimizes adverse impacts of potential water pollutants on water ecosystems or human health. Report up to ten potential pollutants associated with your activities in the chemical sector.

Potential water pollutant	Value chain stage	Description of water pollutant and potential impacts	Management procedures	Please explain
pH	Direct operations	pH as a water parameter can have substantial impacts on the health and sustainability of water ecosystems including vital benthic organisms, microbiomes, and vertebrates that form the basis of food chains. Extreme pH values pose risk to amphibian, reptilian, avian, and mammalian organisms who rely on water ecosystems. By ensuring compliance with our effluent discharge requirements, we implement the necessary primary and/or secondary treatment and monitoring systems and processes to ensure that our facilities operate within the discharge limits in our operating permits.	Compliance with effluent quality standards Measures to prevent spillage, leaching, and leakages	Grace maintains compliance with all local, state, federal, and regional effluent quality standards through the incorporation of management systems, management of change processes within our operational facilities, and robust incident reporting procedures. Facilities are equipped with a variety of administrative, treatment, and operational controls to modify pH parameters to permitted limits. Success is measured by achieving our goal of nothing out of place and receiving no regulatory citations (notices of violation) from regulatory agencies.

W3.3

(W3.3) Does your organization undertake a water-related risk assessment?

Yes, water-related risks are assessed

W3.3a

(W3.3a) Select the options that best describe your procedures for identifying and assessing water-related risks.

Value chain stage

Direct operations

Coverage

Full

Risk assessment procedure

Water risks are assessed in an environmental risk assessment

Frequency of assessment

Annually

How far into the future are risks considered?

More than 6 years

Type of tools and methods used

Tools on the market

Other

Tools and methods used

WRI Aqueduct

External consultants

Contextual issues considered

Water availability at a basin/catchment level

Water quality at a basin/catchment level

Access to fully-functioning, safely managed WASH services for all employees

Stakeholders considered

Customers

Employees

Local communities

Water utilities at a local level

Comment

Value chain stage

Supply chain

Coverage

Partial

Risk assessment procedure

Water risks are assessed as part of other company-wide risk assessment system

Frequency of assessment

Annually

How far into the future are risks considered?

Up to 1 year

Type of tools and methods used

Tools on the market

Tools and methods used

EcoVadis

Contextual issues considered

Water availability at a basin/catchment level

Water quality at a basin/catchment level

Stakeholders considered

Please select

Comment

W3.3b

(W3.3b) Describe your organization's process for identifying, assessing, and responding to water-related risks within your direct operations and other stages of your value chain.

In 2021, we continued our process for identifying our water-related risks within our direct operations to assess priority locations for water stewardship activities and set water risk reduction targets to respond to any identified issues. As part of this process, we review at-risk facilities within our direct operations through the use of the WRI Aqueduct tool and evaluate facilities for opportunities for water usage efficiency. Based on this review, water related risks would be considered as part of our Enterprise Risk Management system should they exceed relevant thresholds. These results help inform our future water strategy.

W4. Risks and opportunities

W4.1

(W4.1) Have you identified any inherent water-related risks with the potential to have a substantive financial or strategic impact on your business?

Yes, only within our direct operations

W4.1a

(W4.1a) How does your organization define substantive financial or strategic impact on your business?

At this time, WR Grace recognizes a 'substantive impact' in regard to water-related risks as one that may limit our ability to operate or grow our facilities or significantly affects our profitability or business strategy. We depend on readily available, clean water to maintain our global operations. We are committed to the responsible management of our water resources and acknowledge that significant changes in water availability could have a direct or indirect impact on our company and supply chain. We recognize water of suitable quality and volume is a finite resource.

W4.1b

(W4.1b) What is the total number of facilities exposed to water risks with the potential to have a substantive financial or strategic impact on your business, and what proportion of your company-wide facilities does this represent?

	Total number of facilities exposed to water risk	% company-wide facilities this represents	Comment
Row 1	6	1-25	

W4.1c

(W4.1c) By river basin, what is the number and proportion of facilities exposed to water risks that could have a substantive financial or strategic impact on your business, and what is the potential business impact associated with those facilities?

Country/Area & River basin

United States of America	Other, please specify (Vince Bayou, Mississippi River Basin,)
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Number of facilities exposed to water risk

4

% company-wide facilities this represents

1-25

Production value for the metals & mining activities associated with these facilities

<Not Applicable>

% company's annual electricity generation that could be affected by these facilities

<Not Applicable>

% company's global oil & gas production volume that could be affected by these facilities

<Not Applicable>

% company's total global revenue that could be affected

21-30

Comment

WR Grace is engaged with the production and sale of specialty chemicals and specialty materials for various applications. We recognize business risks as we operate our business at a global scale. Multiple Grace facilities globally are located within 20 miles of a coast, placing them at risk from increased severity of hurricanes and weather events that could cause production interruptions. Key suppliers and associated distribution routes for raw materials and finished goods are located within 100 miles of a coast, increasing susceptibility to interruptions from severe weather events. During the three months ended March 31, 2021, Winter Storm Uri caused widespread manufacturing disruption across Texas and Louisiana. Grace operates four manufacturing facilities in the region. All sites experienced interruptions, with extended downtime at three plants ranging from 8 to 24 days. All Grace sites have resumed operations; however, operating costs are expected to remain higher than normal while some maintenance and repair activity is ongoing. Most customers have restarted operations and returned to normal operating rates.

Country/Area & River basin

Philippines	Other, please specify (Laguna de Bay)
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Number of facilities exposed to water risk

1

% company-wide facilities this represents

Less than 1%

Production value for the metals & mining activities associated with these facilities

<Not Applicable>

% company's annual electricity generation that could be affected by these facilities

<Not Applicable>

% company's global oil & gas production volume that could be affected by these facilities

<Not Applicable>

% company's total global revenue that could be affected

Less than 1%

Comment

Country/Area & River basin

Republic of Korea	Other, please specify (Yeosu)
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Number of facilities exposed to water risk

1

% company-wide facilities this represents

1-25

Production value for the metals & mining activities associated with these facilities

<Not Applicable>

% company's annual electricity generation that could be affected by these facilities

<Not Applicable>

% company's global oil & gas production volume that could be affected by these facilities

<Not Applicable>

% company's total global revenue that could be affected

1-10

Comment

Country/Area & River basin

Malaysia	Not known
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Number of facilities exposed to water risk

1

% company-wide facilities this represents

1-25

Production value for the metals & mining activities associated with these facilities

<Not Applicable>

% company's annual electricity generation that could be affected by these facilities

<Not Applicable>

% company's global oil & gas production volume that could be affected by these facilities

<Not Applicable>

% company's total global revenue that could be affected

1-10

Comment

W4.2

(W4.2) Provide details of identified risks in your direct operations with the potential to have a substantive financial or strategic impact on your business, and your response to those risks.

Country/Area & River basin

United States of America	Other, please specify (US Gulf Coast)
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Type of risk & Primary risk driver

Acute physical	Flood (coastal, fluvial, pluvial, groundwater)
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Primary potential impact

Increased operating costs

Company-specific description

Severe weather conditions that may be linked to climate change caused significant flooding events in some Grace facilities. These types of occurrences can negatively affect our manufacturing, supply chain, logistics, information technology, and communications functions. Similarly, they can strike major suppliers and customers, thus restricting or delaying our supply of raw materials or energy as well as reducing or deferring demand for our products and services. In the event of a major disruption, we may not be able to replace this business in a timely manner or at similar margins.

Timeframe

1-3 years

Magnitude of potential impact

Medium-high

Likelihood

More likely than not

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

15000000

Potential financial impact figure - minimum (currency)

<Not Applicable>

Potential financial impact figure - maximum (currency)

<Not Applicable>

Explanation of financial impact

The total estimated weather-related costs are expected to be approximately \$15 million, with \$8.5 million impacting the first quarter and approximately \$6.5 million expected in the second quarter. The weather-related costs were primarily due to lower fixed cost absorption during the downtime, increased costs to supply customers from other Grace manufacturing plants, and costs to repair plants impacted by the weather.

Primary response to risk

Please select

Description of response

During the three months ended March 31, 2021, Winter Storm Uri caused widespread manufacturing disruption across Texas and Louisiana. Grace operates four manufacturing facilities in the region. All sites experienced interruptions, with extended downtime at three plants ranging from 8 to 24 days. All Grace sites have resumed operations; however, operating costs are expected to remain higher than normal while some maintenance and repair activity is ongoing. Most customers have restarted operations and returned to normal operating rates.

Cost of response

15000000

Explanation of cost of response

For example, our response to Winter Storm Uri in 2021, we utilized these response actions to minimize impact to our operations and customers amounting to 15,000,000.

W4.2c

(W4.2c) Why does your organization not consider itself exposed to water risks in its value chain (beyond direct operations) with the potential to have a substantive financial or strategic impact?

	Primary reason	Please explain
Row 1	Risks exist, but no substantive impact anticipated	As of the end of 2021, suppliers representing approximately 70% of Grace direct spend have completed or provided to Grace an EcoVadis scorecard, which includes a variety of water-related topics, including water risk, wastewater management and efficiency, water consumption and impacts on groundwater. Through the EcoVadis platform, Grace may assign corrective actions for water risks and management. Based on reviews of these EcoVadis responses, we assess that while water risks in the value chain exist, they are not anticipated to have a substantive impact on our operations.

W4.3

(W4.3) Have you identified any water-related opportunities with the potential to have a substantive financial or strategic impact on your business?

Yes, we have identified opportunities, and some/all are being realized

W4.3a

(W4.3a) Provide details of opportunities currently being realized that could have a substantive financial or strategic impact on your business.

Type of opportunity

Products and services

Primary water-related opportunity

Reduced impact of product use on water resources

Company-specific description & strategy to realize opportunity

Water is the most important raw material used in the brewing process and is one of the scarcest natural resources on the planet. Water conservation is pertinent, especially in drought-stricken or water constrained geographies where sanctions or water use restrictions are often imposed. Water is necessary to produce beer and is used in several steps of the brewing process. On average, the quantity of water used to produce one hectoliter of beer varies between 3 and 3.5 hectoliters and about 10% of it is used during filtration and stabilization of beer. By extending filtration and stabilization cycles up to 20-25% (*), DARACLAR® 9000 HP silica helps to increase process efficiency and consequently reduce downtime and the total number of intermediate filtration cleaning cycles. This in turn drives process efficiency and water savings with NO compromise on beer quality and NO CAPEX. Since its launch in 2015, breweries have filtered over 180 million hectoliters of beer with DARACLAR® 9000 HP silica, which has saved up to 350 million liters of water in the filtration stabilization process. This represents enough water to fill up 154 Olympic-size swimming pools.

Estimated timeframe for realization

Current - up to 1 year

Magnitude of potential financial impact

Medium-high

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency)

<Not Applicable>

Potential financial impact figure – maximum (currency)

<Not Applicable>

Explanation of financial impact

This figure is a rough estimate of our 2021 revenue from Daraclae.

W5. Facility-level water accounting

W5.1

(W5.1) For each facility referenced in W4.1c, provide coordinates, water accounting data, and a comparison with the previous reporting year.

Facility reference number

Facility 1

Facility name (optional)

Curtis Bay

Country/Area & River basin

United States of America	Other, please specify (Patapsco River Basin)
--------------------------	--

Latitude

39.214629

Longitude

-76.570979

Located in area with water stress

No

Primary power generation source for your electricity generation at this facility

<Not Applicable>

Oil & gas sector business division

<Not Applicable>

Total water withdrawals at this facility (megaliters/year)

4497.98

Comparison of total withdrawals with previous reporting year

Lower

Withdrawals from fresh surface water, including rainwater, water from wetlands, rivers and lakes

0

Withdrawals from brackish surface water/seawater

0

Withdrawals from groundwater - renewable

0

Withdrawals from groundwater - non-renewable

0

Withdrawals from produced/entrained water

0

Withdrawals from third party sources

4497.98

Total water discharges at this facility (megaliters/year)

4776

Comparison of total discharges with previous reporting year

Lower

Discharges to fresh surface water

4776

Discharges to brackish surface water/seawater

0

Discharges to groundwater

0

Discharges to third party destinations

0

Total water consumption at this facility (megaliters/year)

-278.02

Comparison of total consumption with previous reporting year

Lower

Please explain

In prior years, we assumed that water consumption was 100% water withdrawal whenever stormwater cannot be separated from wastewater volume. This avoided negative consumption values but limited comparability of the data set. Beginning 2021 consumption will not be modified, and raw calculated values will be reported for all facilities.

Facility reference number

Facility 2

Facility name (optional)

Worms

Country/Area & River basin

Germany	Rhine
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Latitude

49.66342

Longitude

8.35778

Located in area with water stress

No

Primary power generation source for your electricity generation at this facility

<Not Applicable>

Oil & gas sector business division

<Not Applicable>

Total water withdrawals at this facility (megaliters/year)

3069.46

Comparison of total withdrawals with previous reporting year

Higher

Withdrawals from fresh surface water, including rainwater, water from wetlands, rivers and lakes

0

Withdrawals from brackish surface water/seawater

0

Withdrawals from groundwater - renewable

3007.2

Withdrawals from groundwater - non-renewable

0

Withdrawals from produced/entrained water

0

Withdrawals from third party sources

62.25

Total water discharges at this facility (megaliters/year)

2871.7

Comparison of total discharges with previous reporting year

Higher

Discharges to fresh surface water

2801.93

Discharges to brackish surface water/seawater

0

Discharges to groundwater

24

Discharges to third party destinations

45.78

Total water consumption at this facility (megaliters/year)

3.88

Comparison of total consumption with previous reporting year

Higher

Please explain

In prior years, we assumed that water consumption was 100% water withdrawal whenever stormwater cannot be separated from wastewater volume. This avoided negative consumption values but limited comparability of the data set. Beginning 2021 consumption will not be modified, and raw calculated values will be reported for all facilities.

Facility reference number

Facility 3

Facility name (optional)

Lake Charles

Country/Area & River basin

United States of America	Other, please specify (Calcasieu River Basin)
--------------------------	---

Latitude

30.157912

Longitude

-93.339482

Located in area with water stress

No

Primary power generation source for your electricity generation at this facility

<Not Applicable>

Oil & gas sector business division

<Not Applicable>

Total water withdrawals at this facility (megaliters/year)

4998.37

Comparison of total withdrawals with previous reporting year

Much higher

Withdrawals from fresh surface water, including rainwater, water from wetlands, rivers and lakes

0

Withdrawals from brackish surface water/seawater

0

Withdrawals from groundwater - renewable

0

Withdrawals from groundwater - non-renewable

4980.21

Withdrawals from produced/entrained water

0

Withdrawals from third party sources

18.16

Total water discharges at this facility (megaliters/year)

5219.27

Comparison of total discharges with previous reporting year

This is our first year of measurement

Discharges to fresh surface water

0

Discharges to brackish surface water/seawater

5219.27

Discharges to groundwater

0

Discharges to third party destinations

0

Total water consumption at this facility (megaliters/year)

-220.89

Comparison of total consumption with previous reporting year

This is our first year of measurement

Please explain

In prior years, we assumed that water consumption was 100% water withdrawal whenever stormwater cannot be separated from wastewater volume. This avoided negative consumption values but limited comparability of the data set. Beginning 2021 consumption will not be modified, and raw calculated values will be reported for all facilities.

Facility reference number

Facility 4

Facility name (optional)

Rest of World

Country/Area & River basin

United States of America	Other, please specify (Unknown)
--------------------------	---------------------------------

Latitude

39.190405

Longitude

-76.900609

Located in area with water stress

Unknown

Primary power generation source for your electricity generation at this facility

<Not Applicable>

Oil & gas sector business division

<Not Applicable>

Total water withdrawals at this facility (megaliters/year)

5426.32

Comparison of total withdrawals with previous reporting year

Higher

Withdrawals from fresh surface water, including rainwater, water from wetlands, rivers and lakes

978.86

Withdrawals from brackish surface water/seawater

0

Withdrawals from groundwater - renewable

0

Withdrawals from groundwater - non-renewable

0.27

Withdrawals from produced/entrained water

0

Withdrawals from third party sources

4447.21

Total water discharges at this facility (megaliters/year)

3964.34

Comparison of total discharges with previous reporting year

Much higher

Discharges to fresh surface water

1232.11

Discharges to brackish surface water/seawater

0

Discharges to groundwater

0

Discharges to third party destinations

2732.23

Total water consumption at this facility (megaliters/year)

1659.76

Comparison of total consumption with previous reporting year

Lower

Please explain

This is Grace's first year of measurement. We plan to continue monitoring in the future. Water consumption value includes stormwater discharges.

W5.1a

(W5.1a) For the facilities referenced in W5.1, what proportion of water accounting data has been third party verified?

Water withdrawals – total volumes

% verified

Not verified

Verification standard used

<Not Applicable>

Please explain

Water withdrawals – volume by source

% verified

Not verified

Verification standard used

<Not Applicable>

Please explain

Water withdrawals – quality by standard water quality parameters

% verified

Not verified

Verification standard used

<Not Applicable>

Please explain

Water discharges – total volumes

% verified

Not verified

Verification standard used

<Not Applicable>

Please explain

Water discharges – volume by destination

% verified

Not verified

Verification standard used

<Not Applicable>

Please explain

Water discharges – volume by final treatment level

% verified

Not verified

Verification standard used

<Not Applicable>

Please explain

Water discharges – quality by standard water quality parameters

% verified

Not verified

Verification standard used

<Not Applicable>

Please explain

Water consumption – total volume

% verified

Not verified

Verification standard used

<Not Applicable>

Please explain

W6. Governance

W6.1

(W6.1) Does your organization have a water policy?

Yes, we have a documented water policy that is publicly available

W6.1a

(W6.1a) Select the options that best describe the scope and content of your water policy.

	Scope	Content	Please explain
Row 1	Company-wide	Description of business dependency on water Description of business impact on water Company water targets and goals Commitment to water stewardship and/or collective action	

W6.2

(W6.2) Is there board level oversight of water-related issues within your organization?

Yes

W6.2a

(W6.2a) Identify the position(s) (do not include any names) of the individual(s) on the board with responsibility for water-related issues.

Position of individual	Please explain
Board-level committee	The Corporate Responsibility Committee assists the Company's Board of Directors and management in addressing the Company's responsibilities as a global corporate citizen (including its responsibilities to its various stakeholders, such as shareholders, customers, employees and the communities in which the Company operates). The Committee addresses the Company's responsibilities in a wide range of areas, including affirmative action, equal employment opportunity and diversity initiatives; corporate contributions and community service programs; corporate training programs; sustainability; environmental, health and safety matters, and water-related issues as they rise to the level of importance that would have a substantive impact on the operations or finances of the company.

W6.2b

(W6.2b) Provide further details on the board's oversight of water-related issues.

	Frequency that water-related issues are a scheduled agenda item	Governance mechanisms into which water-related issues are integrated	Please explain
Row 1	Scheduled - some meetings	Monitoring implementation and performance Reviewing and guiding strategy Other, please specify (Ratifying water usage targets)	The Corporate Responsibility Committee in consultation with management and/or other Committees of the Board: (a) evaluate the Company's procedures, programs, policies and practices with respect to its responsibilities as a global corporate citizen, including the review and development of strategy with respect to water and its impact on operations and (b) in appropriate circumstances, recommend the amendment of the foregoing and/or the adoption of new procedures, programs, policies and/or practices.

W6.2d

(W6.2d) Does your organization have at least one board member with competence on water-related issues?

	Board member(s) have competence on water-related issues	Criteria used to assess competence of board member(s) on water-related issues	Primary reason for no board-level competence on water-related issues	Explain why your organization does not have at least one board member with competence on water-related issues and any plans to address board-level competence in the future
Row 1	No, and we do not plan to address this within the next two years	<Not Applicable>	Important but not an immediate priority	

W6.3

(W6.3) Provide the highest management-level position(s) or committee(s) with responsibility for water-related issues (do not include the names of individuals).

Name of the position(s) and/or committee(s)

Chief Sustainability Officer (CSO)

Responsibility

Assessing water-related risks and opportunities
Managing water-related risks and opportunities

Frequency of reporting to the board on water-related issues

Quarterly

Please explain

The Chief Sustainability Officer is responsible for assessing and conveying water related risks to the board of directors on an as needed basis. The CSO also chairs the Grace Sustainability Leadership Team (SLT) which is composed of business presidents and representatives of Integrated Supply chain. The SLT is responsible for the strategic development, planning, and oversight of water related issues throughout the organization.

W6.4

(W6.4) Do you provide incentives to C-suite employees or board members for the management of water-related issues?

	Provide incentives for management of water-related issues	Comment
Row 1	No, not currently but we plan to introduce them in the next two years	

W6.5

(W6.5) Do you engage in activities that could either directly or indirectly influence public policy on water through any of the following?

Yes, trade associations

W6.5a

(W6.5a) What processes do you have in place to ensure that all of your direct and indirect activities seeking to influence policy are consistent with your water policy/water commitments?

Grace engages with governmental entities directly and indirectly through trade organizations in all countries where we conduct our business. Grace's Public Affairs team is responsible for coordinating all such activity. Our Senior Vice President, Public Affairs and Environment Health & Safety and Chief Sustainability Officer is responsible for developing and implementing climate change policies. In the United States, Grace's primary mechanism for engagement on governmental policy is through our participation in the American Chemistry Council (ACC), a trade organization representing the chemical industry. Grace's policies and commitments, including those for water programs are consistent with those of the ACC Responsible Care sustainability principles that are required of member companies. Grace has established policies, including our EHSS policy and Responsible Care Management System, to ensure that our actions are aligned with our company's commitments and strategic objectives. For example, Grace is evaluating identifying priority sites to undergo ACC's Water Body Risk Assessment to understand water-related physical, regulatory, and reputational risks at those facilities. Policies of our key trade associations are reviewed by our CSO to identify inconsistencies with Grace policies and the resulting alignment / misalignment is reflected in the periodic surveys conducted by the trade associations and in calls with their Public Policy committees.

W6.6

(W6.6) Did your organization include information about its response to water-related risks in its most recent mainstream financial report?

Yes (you may attach the report - this is optional)

W7. Business strategy

W7.1

(W7.1) Are water-related issues integrated into any aspects of your long-term strategic business plan, and if so how?

	Are water-related issues integrated?	Long-term time horizon (years)	Please explain
Long-term business objectives	Yes, water-related issues are integrated	5-10	We consider water availability and quality (including regulatory and discharge) as part of our capital planning process for expansions and new facilities. In addition, our business strategy is to develop products that is responsive to our customer's needs that reduce water usage (ex. Daraclar)
Strategy for achieving long-term objectives	Yes, water-related issues are integrated	5-10	We have established water reduction goals, monitor water risks through WRI Aqueduct, and conduct strategic reviews of our product portfolio. As part of our review of our current and future product portfolio, we track revenue of current product and R&D of future products that reduce water usage and increase efficiency of customers' processes.
Financial planning	Yes, water-related issues are integrated	5-10	Grace takes into account water withdrawal volume and discharge quality requirements for our production facilities and warehouse operations as part of its capital allocation planning process. Increased capital expenditures on new technologies, process modifications, and raw materials to reduce water consumption, withdrawal, and discharge. These actions ensure the continued operation of our facilities in compliance with regulatory permits and that Grace is able to meet the expectations of our customers and the value chain.

W7.2

(W7.2) What is the trend in your organization's water-related capital expenditure (CAPEX) and operating expenditure (OPEX) for the reporting year, and the anticipated trend for the next reporting year?

Row 1

Water-related CAPEX (+/- % change)

0

Anticipated forward trend for CAPEX (+/- % change)

0

Water-related OPEX (+/- % change)

0

Anticipated forward trend for OPEX (+/- % change)

0

Please explain

WR Grace is reporting 0% changes as this is not a metric that is currently tracked. We hope to build in this ability in the future .

W7.3

(W7.3) Does your organization use scenario analysis to inform its business strategy?

	Use of scenario analysis	Comment
Row 1	Yes	Grace has utilized WRI Aqueduct to assess future water stress, water supply and water demand at its facilities. Currently 8% of Grace's water withdrawals are from water-stressed areas. In 2040, we anticipate that 28% of our current facilities will be in areas at high risk of becoming water stressed areas.

W7.3a

(W7.3a) Provide details of the scenario analysis, what water-related outcomes were identified, and how they have influenced your organization's business strategy.

	Type of scenario analysis used	Parameters, assumptions, analytical choices	Description of possible water-related outcomes	Influence on business strategy
Row 1	Other, please specify (WRI Aqueduct tool)			

W7.4

(W7.4) Does your company use an internal price on water?

Row 1

Does your company use an internal price on water?

No, and we do not anticipate doing so within the next two years

Please explain

Water has not historically been a material risk to our organization. We have therefore not set an internal price of water to account for water related risks to our operations.

W7.5

(W7.5) Do you classify any of your current products and/or services as low water impact?

	Products and/or services classified as low water impact	Definition used to classify low water impact	Primary reason for not classifying any of your current products and/or services as low water impact	Please explain
Row 1	No, but we plan to address this within the next two years	<Not Applicable>	Please select	

W8. Targets

W8.1

(W8.1) Describe your approach to setting and monitoring water-related targets and/or goals.

	Levels for targets and/or goals	Monitoring at corporate level	Approach to setting and monitoring targets and/or goals
Row 1	Company-wide targets and goals Site/facility specific targets and/or goals	Targets are monitored at the corporate level Goals are monitored at the corporate level	Grace has established a company-wide goal to reduce water consumption. To monitor progress on this goal, we set a specific company-wide target, which will be monitored at the facility level through key performance indicators.

W8.1a

(W8.1a) Provide details of your water targets that are monitored at the corporate level, and the progress made.

Target reference number

Target 1

Category of target

Water consumption

Level

Company-wide

Primary motivation

Water stewardship

Description of target

Some of our products are water-intensive and Grace is committed to being responsible water stewards. Therefore, we have established a target to reduce water consumption by 10 percent from 2019 levels by 2029.

Quantitative metric

% reduction in total water consumption

Baseline year

2019

Start year

2020

Target year

2029

% of target achieved

Please explain

We plan to back-cast our 2020 water consumption data to include water data from our South Haven and Tyrone facilities (acquired by Grace in 2021).

W8.1b

(W8.1b) Provide details of your water goal(s) that are monitored at the corporate level and the progress made.

Goal

Promotion of water data transparency

Level

Company-wide

Motivation

Water stewardship

Description of goal

Grace recognizes the importance of water availability and quality for both its manufacturing processes and its value chain. We also acknowledge that water is a finite resource that should be protected for future generations. Grace is committed to reduce water consumption throughout its operations, reuse water where feasible and treat and discharge wastewater in accordance with all applicable regulations.

Baseline year

2019

Start year

2020

End year

2029

Progress

In 2021, Grace's water consumption decreased by 31% compared with 2020. In prior years, we assumed that water consumption was 100% water withdrawal whenever stormwater cannot be separated from wastewater volume. This avoided negative consumption values but limited comparability of the data set. Beginning 2021 consumption will not be modified, and raw calculated values will be reported for all facilities.

W9. Verification

W9.1

(W9.1) Do you verify any other water information reported in your CDP disclosure (not already covered by W5.1a)?

No, but we are actively considering verifying within the next two years

W10. Sign off

W-FI

(W-FI) Use this field to provide any additional information or context that you feel is relevant to your organization's response. Please note that this field is optional and is not scored.

W10.1

(W10.1) Provide details for the person that has signed off (approved) your CDP water response.

	Job title	Corresponding job category
Row 1	Senior Vice President Government Relations and Environment Health and Safety, and Chief Sustainability Officer	Chief Sustainability Officer (CSO)

W10.2

(W10.2) Please indicate whether your organization agrees for CDP to transfer your publicly disclosed data on your impact and risk response strategies to the CEO Water Mandate's Water Action Hub [applies only to W2.1a (response to impacts), W4.2 and W4.2a (response to risks)].

No

SW. Supply chain module

SW0.1

(SW0.1) What is your organization's annual revenue for the reporting period?

	Annual revenue
Row 1	2512600000

SW1.1

(SW1.1) Could any of your facilities reported in W5.1 have an impact on a requesting CDP supply chain member?

We do not have this data and have no intentions to collect it

SW1.2

(SW1.2) Are you able to provide geolocation data for your facilities?

	Are you able to provide geolocation data for your facilities?	Comment
Row 1	Yes, for some facilities	

SW1.2a

(SW1.2a) Please provide all available geolocation data for your facilities.

Identifier	Latitude	Longitude	Comment
Curtis Bay	39.214629	-76.570979	
Lake Charles	30.157912	-93.339482	
Worms	49.66342	8.35778	

SW2.1

(SW2.1) Please propose any mutually beneficial water-related projects you could collaborate on with specific CDP supply chain members.

SW2.2

(SW2.2) Have any water projects been implemented due to CDP supply chain member engagement?

No

SW3.1

(SW3.1) Provide any available water intensity values for your organization's products or services.

Submit your response

In which language are you submitting your response?

English

Please confirm how your response should be handled by CDP

	I understand that my response will be shared with all requesting stakeholders	Response permission
Please select your submission options	Yes	Public

Please confirm below

I have read and accept the applicable Terms