



NSF/GCI 355 Report

Note: For interpretation guidance and classification criteria information, please see NSF/GCI 355 Standard.

COMPANY NAME

Chemical Description (As Sold):

IUPAC Chemical Name:

Chemical Description:

Component Name:

Chemical/Component Identification Number (CAS):

Percentage:

Human Health Effects

Acute Inhalation:

If relevant, a minimum of one of the following parameters is required:

- ✓ Immediately Dangerous to Life and Health (IDLH): Enter Value mg/m³ Enter unit of time
or data not available
- ✓ Threshold Limit Value/Short-Term Exposure Limit (TLV/STEL): Enter Value mg/m³ Enter unit of time
or data not available
- ✓ Gas , Vapor , Mist , Dust or None of these
- ✓ Inhalation, Lethal Concentration (LC₅₀): Enter Value ppmV



GHS Classification: Enter Designation or does not meet GHS classification

Not a relevant route of exposure or no data available

Acute Dermal:

If relevant, a minimum of one of the following parameters is required:

- ✓ Dermal, Lethal dose (LD₅₀): Enter Value mg/kg

GHS Classification: Enter Designation or does not meet GHS classification

Not a relevant route of exposure or no data available

- ✓ Dermal Irritation:

GHS Classification: Enter Designation or does not meet GHS classification

Not a relevant route of exposure or no data available

Corrosive (Yes/No)

Skin Irritant (Yes/No)

- ✓ Eye Irritation:

GHS Classification: Enter Designation or does not meet GHS classification

Not a relevant route of exposure or no data available

Serious/Severe eye damage (Yes/No)

Eye Irritant (Yes/No)

Acute Oral:

If relevant, a minimum of one of the following parameters is required:

- ✓ Oral, Lethal dose (LD₅₀): Enter Value mg/kg

GHS Classification: Enter Designation or does not meet GHS classification



Not a relevant route of exposure or no data available

✓ Acute Reference Dose (AFfD) [For pesticide Residues Only]: Enter Value mg/kg

Subchronic Toxicity:

✓ Findings from repeat dose study: Descriptive Narrative

21 day , 28 day , 90 day , Other study duration

Target Organ:

GHS Classification: Enter Designation or does not meet GHS classification

No data available

Additional Notes:

Chronic Toxicity:

✓ Reproductive Development:

28 day , 90 day , Other study duration

Descriptive Narrative of Findings

GHS Classification: Enter Designation or does not meet GHS classification

No data available

✓ Neurotoxicity description (OECD guidance document No.20):

Descriptive Narrative of Findings

GHS Classification: Enter Designation or does not meet GHS classification

No data available

✓ Mutagenicity:

Descriptive Narrative of Findings



GHS Classification: Enter Designation or does not meet GHS classification

No data available

✓ Carcinogenicity:

Descriptive Narrative of Findings

GHS Classification: Enter Designation or does not meet GHS classification

IARC Classification: Enter Designation or does not meet IARC classification

NTP Classification: Enter Designation or does not meet NTP classification

No data available

Chronic Information:

*A minimum of one of the following parameters is required for the **most likely route of human exposure**. Report all information that is available:*

✓ Chronic Inhalation: Not a relevant route of exposure . Skip to 'Chronic Oral Dose'.

Threshold Limit Value/Time Weighted Average (TLV/TWA): Enter Value ppm Enter unit of time

Or TLV/TWA not established

GHS Classification: Enter Designation or does not meet GHS classification

Or GHS classification not available

Reference Concentration (RfC), inhalation: Enter Value mg/m³

Or RfC data not available

✓ Chronic Oral Dose: Not a relevant route of exposure . Skip to 'Dermal/skin sensitization.'

Reference Dose (RfD), oral Enter Value mg/m³/day

Or RfD data not available

✓ Dermal/skin sensitization: Not a relevant route of exposure .



GHS Classification: Enter Designation or does not meet GHS classification

Or GHS classification not available

Comments for Human Health Data:

References for Human Health Data:

Ecological Effects

Persistence:

✓ Rapid Degradation/Degradation meets or exceeds 60% in 28 days (Yes /No)

-If yes, percent degradation in 28 days is equal to Enter Value %

-If no, report the following information if available:

(If rapid degradation does not apply, but data below may still be relevant, please report).

- Water

Half Life: Enter Value days or not relevant or no data available

Source:

-Soil

Half Life: Enter Value days or not relevant or no data available

Source:

-Sediment

Half Life: Enter Value days or not relevant or no data available

Source:

-Air

Half Life: Value days or not relevant or no data available



Source:

Partitioning:

- ✓ %Air Enter Value or not relevant or no data available

Source:

- ✓ % Water Enter Value or not relevant or no data available

Source:

- ✓ % Soil Enter Value or not relevant or no data available

Source:

- ✓ Henry's Law Constant: Enter Value mg³/mol (Calculated /Measured)
- ✓ Kow: Enter Value (Calculated /Measured)
- ✓ Koc: Enter Value (Calculated /Measured)

Bioaccumulation:

- ✓ BCF: Enter Value L/kg (Calculated /Measured)

Or not relevant

Or not measured

- ✓ BAF (Steady State):

Value: Enter Value

Trophic Level:

Acute Aquatic Toxicity:

*Report data for **most sensitive species**; if data for other species are available, it should be reported.*



✓ Acute Fish LC₅₀:

Value: Enter Value mg/L

Species:

Study Duration: hours

GHS acute classification: Enter designation or does not meet GHS classification

Or not relevant

Or no data available

✓ Acute Daphnia LC₅₀:

Value: Enter Value mg/L

Species:

Study Duration: hours

GHS acute classification: Enter designation or does not meet GHS classification

Or not relevant

Or no data available

✓ Acute Green Algae EC₅₀:

Value: Enter Value mg/L

Species:

Study Duration: hours

GHS acute classification: Enter designation or does not meet GHS classification

Or not relevant

Or no data available



Chronic Ecological Toxicity:

Report data for **most sensitive species**; if data for other species are available, it should be reported.

- ✓ Earthworm, 14-day [Pesticides]:

Value: Enter Value

Species:

Study Duration:

Or not relevant

Or no data available

- ✓ Subchronic Fish LC₅₀:

Value: Enter Value mg/L

Species:

Study Duration:

NOEC or equivalent EC_x: Enter Value mg/L

GHS chronic classification: Enter Designation or does not meet GHS classification

Or not relevant

Or no data available

- ✓ Subchronic Daphnia LC₅₀:

Value: Enter Value mg/L

Species:

Study Duration:



NOEC or equivalent EC_x: Enter Value mg/L

GHS chronic classification: Enter Designation or does not meet GHS classification

Or not relevant

Or no data available

Long Term Impacts:

If the company engages in life cycle thinking, these data may already be available for the boundaries of this product/process.

✓ Global Warming Potential:

CO₂ Equivalents per 100 years: Enter Value

✓ Ozone Depleting Potential:

Listed in Annexes to Montreal Protocol (Yes /No)

GHS Classification: Enter Designation or does not meet GHS classification

Or not relevant

Or no data available

✓ Photochemical Smog Potential related to ethane (C₂H₂):

Value Enter Value, or not relevant , or no data available

✓ Acidification Potential related to SO₂:

✓ Value Enter Value, or not relevant , or no data available

✓ Eutrophication Potential related to PO₄ in water:

Value Enter Value or not relevant or no data available

✓ Theoretical Oxygen Demand (ThOD) in water:

Value Enter Value mg/L, or not relevant, or no data available



- ✓ Chemical Oxygen Demand (COD) in water:
ValueEnter Value mg/L, or not relevant, or no data available
- ✓ Groundwater Mobility Factor (GWMF) [for pesticides]:
ValueEnter Value mg/L, or not relevant, or no data available

Comments for Ecological Effects Data:

References for Ecological Effects Data:

Physical Safety Properties

Flammability:

- ✓ Physical State:
- ✓ Gas:
Enter Value°C at 101.3 kPa
GHS Classification: Enter Designation or does not meet GHS classification
Or not relevant
Or no data available
- ✓ Aerosol:
GHS Classification: Enter Designation or does not meet GHS classification
Or not relevant
Or no data available



✓ Liquid:

Flashpoint: Enter Value^{°C} Test Method:

Boiling point at 1 bar of pressure: °C Test Method:

GHS Classification: Enter Designation or does not meet GHS classification

Or not relevant

Or no data available

✓ Solid:

Burning time: Enter value with units

Burning rate: Enter value with units

GHS Classification: Enter Designation or does not meet GHS classification

Or not relevant

Or no data available

Reactivity:

✓ Explosivity (Check any classifications that apply):

✓ GHS Division 1.1/ 1.2/ 1.3/ 1.4/1.5/1.6

✓ Reactive category A/B/ C

Special:

✓ Corrosive to metal: Classified as GHS category 1 (Yes/No)

Or does not meet GHS classification

Or not relevant



Or no data available

✓ Oxidizer:

Physical State:

GHS Classification 1 / 2 / or 3 (Check one if applicable).

Or does not meet GHS classification

Or not relevant

Or no data available

✓ Water Reactive:

Value: Enter value with units (L/kg substance/time)

GHS Classification 1 / 2 / 3 (Check one if applicable).

✓ Radioactive:

Activity: Enter Value Bq/g

Classified as UN Class 7 (Yes / No) or does not meet UN classification.

Or not relevant

Or no data available

✓ Threshold Odor Concentration (TOC):

100% recognition threshold Enter Value ppm

Or not a relevant route of exposure

Or no data available

✓ Odor Index (OI): Enter Value

Or not a relevant route of exposure



Or no data available

Comments for Physical Safety Properties:

References for Physical Safety Properties:

Input/Output

PME (M input/M P+Q input):

Optional Narrative:

Recycled/Reused Input Chemicals:

Type of Chemical (e.g. Solvent)	Percent Recycled	Comments

✓ Input chemicals recycled or reused from **your other processes** (Yes /No)

✓ Input chemicals recycled or reused **from outside sources** (Yes /No):

Type of Chemical (e.g. Solvent)	Percent Recycled	Comments



Generation of Chemical Waste:

✓ Some waste is classified as hazardous or dangerous by applicable regulation (Yes /No):

Waste Type (e.g. Solvent)	Percentage of Total Waste

✓ Gas waste:

Reporting of greenhouse gases as defined under the Kyoto Protocol is required. Reporting of non-greenhouse gas emissions is optional.

Gas Description	GHG (Y or N)	Percentage of Total Waste

Consumption and Discharge of Water:

✓ Water use:



Refer to reporting options 1-5 from Standard 355 Section 6.3.3.

Value: Enter value with units

Additional Comments:

- ✓ Water consumption (Sum of freshwater withdrawal and rain water collection related to the process per quantity of production):

Value: Enter value with units.

Additional Comments:

- ✓ Water discharge (Total treated and untreated process (liquid water) discharge per quantity of production):

Value: Enter value with units

Additional Comments:

- ✓ Impact and adjusted water use per quantity of production(specify in narrative report or table):

Calculated using WBCSD's Global Water Tool (<http://www.wbcds.org>) or equivalent.

Provide narrative, report or table.

Water Discharge Quality:

- ✓ Narrative description of the water discharged from this process:
- ✓ Quality meets local drinking water standards (Yes/No)
- ✓ Quality meets or exceeds conditions of ambient water conditions (Yes/No)
- ✓ Quality meets local wastewater treatment requirements before sending to local treatment facility (Yes/No)
- ✓ Quality meets local wastewater treatment requirements prior to discharge to the watershed (Yes/No)
- ✓ Additional comments:

Energy Values (per unit time):

- ✓ Time frame (e.g., annual):

This time frame shall be consistently applied throughout this standard.

- ✓ Method (Direct Process Measurement /Facility Allocation /Engineering Estimates /Life Cycle Inventory Assessment , Other Specify Other Method)
- ✓ CO₂ equivalents: Enter value with units

Process Energy (per mass of product and co-product):

- ✓ Method (Direct Process Measurement /Facility Allocation /Engineering Estimates /Life Cycle Inventory Assessment , Other Specify Other Method)
- ✓ CO₂ equivalents per mass of product: Enter value with units
- ✓ CO₂ equivalents per mass of co-product: Enter value with units

Energy Sourcing for the manufacturing process:

- ✓ % Renewable Enter Value %Recycled Enter Value %Co-Generated Enter Value
- % Nuclear Enter Value %Bio-based Enter Value %Solar Enter Value
- %Wind Enter Value %Water Enter Value %Other Enter Value
- ✓ Description of programs in place to reduce consumption and releases of carbon dioxide equivalents: Descriptive Narrative of Program
- ✓ Additional information related to energy sourcing:

Bio-based Carbon Content in Input Chemicals:

- ✓ Do any input chemicals contain bio-based carbon? (Yes /No)

If yes, one of the following pieces of information is required:



-Analysis of % bio-based organic carbon content:

Value: Enter Value %

Test method:

Method uncertainty: Enter value with units

-Calculation of % bio-based organic carbon content:

Value: Enter Value %

Standard deviation: Enter value with units

Description of calculation: Descriptive Narrative

-Descriptive Narrative of bio-based carbon content: Descriptive Narrative

- ✓ Does your company take measures to mitigate potential impacts associated with bio-based carbon content? (Yes /No)

-If yes, provide a narrative description of measures taken: Descriptive Narrative

Bio-based Carbon Content of Product:

- ✓ Does the chemical product claiming conformance to this Standard have bio-based carbon content? (Yes /No)

If yes, one of the following pieces of information is required:

-Analysis of % bio-based organic carbon content:

Value: Enter value with units

Test method (e.g. ASTM D6866):

Method uncertainty: Enter value with units

-Calculation of % bio-based organic carbon content:

Value: Enter value with units



Standard deviation: Enter value with units

Description of calculation:

-Not relevant to products /no carbon in product

-Or no data available

Comments for Input/Output information:

References for Input/Output information:

Process Safety

The company participates in an industry safety performance standard (Yes/No)

If yes, provide all of the following information:

- ✓ Name of program (e.g. CSPA Product Care):
- ✓ Narrative describing implementation of the program:

The company tracks and makes available to the customer at least one indicator of the safety standard

(Yes/No)

- ✓ If yes, specify voluntary standard: Center for Chemical Process Safety, Process Safety Leading and Lagging Metrics , BSR/API Standard RP 754 , Other Descriptive Narrative.

Safety records are tracked annually and a summary is available to customers (Yes/No)

- ✓ If yes, provide a narrative detailing implementation and application (See standard 355 for guidance): Descriptive Narrative.



- ✓ Hard copy of safety records is attached (Yes /No)
- ✓ Safety records may be found at the following website:

Provide list of safety awards:

Policy in place for improving or sustaining process safety: (Yes /No)

- ✓ If yes, provide narrative detailing implementation and application: Descriptive Narrative

Comments for Process Safety:

References for Process Safety:

Innovation

Innovation:

Does the manufacturer process use innovative solutions and technologies (Yes /No)

If yes, describe: Descriptive Narrative

Human Rights and Societal Performance

Child Labor:

- ✓ The process uses child labor (Yes /No)

Optional narrative:



Forced and compulsory labor:

- ✓ The process uses forced or compulsory labor (Yes /No)

Optional narrative:

Compliance:

- ✓ Your company/facility makes reports publicly available describing the amounts and dates associated with all significant fines and reports their value for non-compliance with all laws and regulations concerning the product and/or process claiming conformance (Yes /No)

Optional narrative:

Additional Information .