

# SAFETY DATA SHEET

**Issue Date** 27-09-2019 **Revision Date** 26-Jan-2024 **Version** 1.3 **Page** 1 / 13

## 1. IDENTIFICATION

**Product identifier** 

Product Name THM PLUS Reagent 2

Other means of identification

Product Code(s) 2754048

Safety data sheet number M01680

UN/ID no UN2810

Recommended use of the chemical and restrictions on use

**Recommended Use** Determination of halogenated hydrocarbons.

Uses advised against None. Restrictions on use None.

Details of the supplier of the safety data sheet

### **Manufacturer Address**

Hach Company, P.O.Box 389, Loveland, CO 80539, USA, +1(970) 669-3050

### Emergency telephone number

+1(303) 623-5716 - 24 Hour Service

## 2. HAZARDS IDENTIFICATION

## Classification

## **Regulatory Status**

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Acute toxicity - Oral	Category 3
Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2A
Specific target organ toxicity (single exposure)	Category 3

### Hazards not otherwise classified (HNOC)

Not applicable

## Label elements

## Signal word

Danger

EN / AGHS Page 1/13

Version 1.3

Product Name THM PLUS Reagent 2 Revision Date 26-Jan-2024

**Page** 2 / 13



#### **Hazard statements**

H301 - Toxic if swallowed

H315 - Causes skin irritation

H319 - Causes serious eye irritation

H335 - May cause respiratory irritation

## **Precautionary statements**

P270 - Do not eat, drink or smoke when using this product

P301 + P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician

P405 - Store locked up

P501 - Dispose of contents/ container to an approved waste disposal plant

P302 + P352 - IF ON SKIN: Wash with plenty of soap and water

P332 + P313 - If skin irritation occurs: Get medical attention

P362 - Take off contaminated clothing and wash before reuse

P280 - Wear protective gloves, protective clothing, eye protection, and face protection

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to

do. Continue rinsing

P337 + P313 - If eye irritation persists: Get medical attention

P261 - Avoid breathing dust/fume/gas/mist/vapors/spray

P271 - Use only outdoors or in a well-ventilated area

P304 + P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing

P312 - Call a POISON CENTER or doctor if you feel unwell

P403 + P233 - Store in a well-ventilated place. Keep container tightly closed

## Other Hazards Known

None

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance

**Chemical Name** N,N Diethylnicotinamide

Organic Amide. **Chemical Family** C<sub>10</sub>H<sub>14</sub>N<sub>2</sub>O **Formula CAS No** 59-26-7

Percent ranges are used where confidential product information is applicable.

Chemical name	CAS No	Percent Range	HMRIC #
Nikethamide	59-26-7	100%	-

## 4. FIRST AID MEASURES

## **Description of first aid measures**

**General advice** Show this safety data sheet to the doctor in attendance.

Inhalation Remove to fresh air. IF exposed or concerned: Get medical advice/attention. Get medical

attention immediately if symptoms occur.

Eye contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep

eye wide open while rinsing. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists. Do not rub affected area.

EN / AGHS 2/13 Page

Revision Date 26-Jan-2024

Product Name THM PLUS Reagent 2

**Page** 3 / 13

**Skin contact** Wash off immediately with soap and plenty of water for at least 15 minutes. Get medical

attention if irritation develops and persists.

**Ingestion** Do NOT induce vomiting. Clean mouth with water and drink afterwards plenty of water.

Never give anything by mouth to an unconscious person. Get medical attention.

**Self-protection of the first aider** Avoid contact with skin, eyes or clothing.

Most important symptoms and effects, both acute and delayed

**Symptoms** Burning sensation.

Indication of any immediate medical attention and special treatment needed

## 5. FIRE-FIGHTING MEASURES

surrounding environment.

Unsuitable Extinguishing Media Caution: Use of water spray when fighting fire may be inefficient.

Specific hazards arising from the

chemical

No information available.

Hazardous combustion products Carbon monoxide, Carbon dioxide. Nitrogen oxides. May emit acrid smoke and fumes.

Special protective equipment for

fire-fighters

Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear.

Use personal protection equipment.

## 6. ACCIDENTAL RELEASE MEASURES

**U.S. Notice**Only persons properly qualified to respond to an emergency involving hazardous

substances may respond to a spill according to federal regulations (OSHA 29 CFR

1910.120(a)(v)) and per your company's emergency response plan and

guidelines/procedures. See Section 13, Special Instructions for disposal assistance. Outside of the US, only persons properly qualified according to state or local regulations should

respond to a spill involving chemicals.

Personal precautions, protective equipment and emergency procedures

Personal precautions Ensure adequate ventilation. Use personal protective equipment as required. Evacuate

personnel to safe areas. Avoid contact with skin, eyes or clothing.

Other Information Refer to protective measures listed in Sections 7 and 8.

Environmental precautions

**Environmental precautions** Prevent further leakage or spillage if safe to do so.

Methods and material for containment and cleaning up

**Methods for containment** Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder,

sawdust). Take up mechanically, placing in appropriate containers for disposal.

EN / AGHS Page 3/13

Product Name THM PLUS Reagent 2

Revision Date 26-Jan-2024

**Page** 4 / 13

Clean contaminated objects and areas thoroughly observing environmental regulations. Prevention of secondary hazards

See section 8 for more information. See section 13 for more information. Reference to other sections

## 7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling Handle in accordance with good industrial hygiene and safety practice. Avoid contact with

skin, eyes or clothing. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash before reuse. Ensure adequate ventilation. Avoid breathing

vapors or mists. In case of insufficient ventilation, wear suitable respiratory equipment.

Conditions for safe storage, including any incompatibilities

**Storage Conditions** Keep containers tightly closed in a dry, cool and well-ventilated place. Keep out of the reach

of children.

Flammability class Not applicable

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

This product, as supplied, does not contain any hazardous materials with occupational **Exposure Guidelines** 

exposure limits established by the region specific regulatory bodies

Appropriate engineering controls

**Engineering Controls** 

Showers

Eyewash stations Ventilation systems.

Individual protection measures, such as personal protective equipment

Respiratory protection No protective equipment is needed under normal use conditions. If exposure limits are

exceeded or irritation is experienced, ventilation and evacuation may be required.

**Hand Protection** Wear suitable gloves. Impervious gloves. Barrier creams may help to protect the exposed

> areas of skin. Gloves must be inspected prior to use. The selected protective gloves have to satisfy the specifications of EU Directive 2016/425 and the standard EN 374 derived from it. Chemical resistant gloves made of butyl rubber or nitrile rubber category III according to EN

374-1:2016.

Eye/face protection If splashes are likely to occur, wear safety glasses with side-shields.

Skin and body protection Wear suitable protective clothing. Long sleeved clothing.

Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this **General Hygiene Considerations** 

product. Avoid contact with skin, eyes or clothing.

**Environmental exposure controls** Local authorities should be advised if significant spillages cannot be contained. Do not allow

into any sewer, on the ground or into any body of water.

Thermal hazards None under normal processing.

#### 9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

EN / AGHS Page 4 / 13

Version 1.3

Product Name THM PLUS Reagent 2

Revision Date 26-Jan-2024

**Page** 5 / 13

Physical state

Liquid

Appearance viscous Odor Slight

Color White to yellow Odor threshold No data available

Property Values Remarks • Method

Molecular weight 178.26 g/mole

pH No data available

Melting point / freezing point 24 °C / 75.2 °F

Initial boiling point and boiling range 298 °C / 568.4 °F

Evaporation rateNo data availableVapor pressureNo data available

Relative vapor density

No data available

Specific gravity - VALUE 1 1.061

Partition coefficient No data available

**Soil Organic Carbon-Water Partition** 

Coefficient

No data available

Autoignition temperature No data available

**Decomposition temperature** No data available

Dynamic viscosity

No data available

Kinematic viscosity

No data available

Solubility(ies)

Water solubility

Water solubility classification	Water solubility	Water Solubility Temperature
Soluble	> 1000 mg/l	25 °C / 77 °F

## Solubility in other solvents

Chemical Name	Chemical Name Solubility classification		Solubility Temperature
Acetone	Acetone Soluble		25 °C / 77 °F
Acids Soluble		> 1000 mg/L	25 °C / 77 °F
Ethyl alcohol Soluble		> 1000 mg/L	25 °C / 77 °F
Most Organic Solvents	Soluble	> 1000 mg/L	25 °C / 77 °F

## **Other information**

**Metal Corrosivity** 

Steel Corrosion RateNo data availableAluminum Corrosion RateNo data available

## **Volatile Organic Compounds (VOC) Content**

This Product is by Weight 100% an Individual Pure Chemical Substance

Chemical name	CAS No	Volatile organic compounds (VOC) content	CAA (Clean Air Act)
---------------	--------	------------------------------------------	---------------------

EN / AGHS Page 5/13

Version 1.3

**Product Name** THM PLUS Reagent 2 **Revision Date** 26-Jan-2024

**Page** 6 / 13

Chemical name	CAS No	Volatile organic compounds (VOC) content	CAA (Clean Air Act)
Nikethamide	59-26-7	No data available	-

**Explosive properties** 

Upper explosion limitNo data availableLower explosion limitNo data available

Flammable properties

Flash point No data available

Flammability Limit in Air

Upper flammability limit:No data availableLower flammability limit:No data available

Oxidizing properties No data available.

Bulk density

No data available

## 10. STABILITY AND REACTIVITY

#### Reactivity

Not applicable.

## **Chemical stability**

Stable under normal conditions.

#### **Explosion data**

**Sensitivity to Mechanical Impact** None. **Sensitivity to Static Discharge** None.

## Possibility of hazardous reactions

None under normal processing.

## **Hazardous polymerization**

None under normal processing.

### Conditions to avoid

None known based on information supplied.

## Incompatible materials

Strong acids. Strong bases. Strong oxidizing agents.

## Hazardous decomposition products

Heating to decomposition releases acrid smoke and fumes.

## 11. TOXICOLOGICAL INFORMATION

#### Information on likely routes of exposure

### **Product Information**

**Inhalation** May cause irritation of respiratory tract.

**Eye contact** Irritating to eyes. Causes serious eye irritation.

EN / AGHS Page 6/13

Product Name THM PLUS Reagent 2 Revision Date 26-Jan-2024 Page 7 / 13

**Skin contact** Causes skin irritation.

Ingestion Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. Toxic if

swallowed.

**Symptoms** Redness. May cause redness and tearing of the eyes.

Acute toxicity

Toxic if swallowed

## **Mixture**

If available, see ingredient data below.

## **Ingredient Acute Toxicity Data**

Test data reported below.

## **Oral Exposure Route**

Chemical name	Endpoint type	Reported dose	Exposure time	Toxicological effects	Key literature references and sources for data
Nikethamide (100%) CAS#: 59-26-7	Mouse LD₅o	188 mg/kg	None reported	None reported	Vendor SDS

#### **Unknown Acute Toxicity**

0% of the mixture consists of ingredient(s) of unknown toxicity.

### **Acute Toxicity Estimations (ATE)**

Not applicable

The following values are calculated based on chapter 3.1 of the GHS document

ATEmix (oral)	No information available
ATEmix (dermal)	No information available
ATEmix (inhalation-dust/mist)	No information available
ATEmix (inhalation-vapor)	No information available
ATEmix (inhalation-gas)	No information available

## **Skin corrosion/irritation**

Classification based on data available for ingredients. Irritating to skin.

### **Mixture**

If available, see ingredient data below.

### Ingredient Skin Corrosion/Irritation Data

No data available.

### Serious eye damage/irritation

Classification based on data available for ingredients. Irritating to eyes.

#### Mixture

If available, see ingredient data below.

## Ingredient Eye Damage/Eye Irritation Data

No data available.

### Respiratory or skin sensitization

Based on available data, the classification criteria are not met.

#### **Mixture**

EN / AGHS Page 7/13

Product Name THM PLUS Reagent 2 Revision Date 26-Jan-2024 Page 8 / 13

If available, see ingredient data below.

## **Ingredient Sensitization Data**

No data available.

### STOT - single exposure

May cause respiratory irritation.

#### **Mixture**

If available, see ingredient data below.

## Ingredient Specific Target Organ Toxicity Single Exposure Data

No data available.

### **STOT - repeated exposure**

Based on available data, the classification criteria are not met.

#### Mixture

If available, see ingredient data below.

## Ingredient Specific Target Organ Toxicity Repeat Exposure Data

No data available.

### Carcinogenicity

Based on available data, the classification criteria are not met.

#### **Mixture**

If available, see ingredient data below.

## **Ingredient Carcinogenicity Data**

No data available.

Chemical name	CAS No	ACGIH	IARC	NTP	OSHA
Nikethamide	59-26-7	-	-	-	-

## Legend

ACGIH (American Conference of Governmental Industrial Hygienists)	Does not apply
IARC (International Agency for Research on Cancer)	Does not apply
NTP (National Toxicology Program)	Does not apply
OSHA	Does not apply

## Germ cell mutagenicity

Based on available data, the classification criteria are not met.

## Mixture invitro Data

If available, see ingredient data below.

#### Substance invitro Data

No data available.

### Mixture invivo Data

If available, see ingredient data below.

### Substance invivo Data

No data available.

## Reproductive toxicity

Based on available data, the classification criteria are not met.

#### **Mixture**

No data available.

EN / AGHS Page 8/13

**Product Name** THM PLUS Reagent 2 **Revision Date** 26-Jan-2024

**Page** 9 / 13

## **Ingredient Reproductive Toxicity Data**

No data available.

### **Aspiration hazard**

Based on available data, the classification criteria are not met.

### 12. ECOLOGICAL INFORMATION

**Ecotoxicity** Based on available data, the classification criteria are not met.

**Unknown aquatic toxicity** 0% of the mixture consists of components(s) of unknown hazards to the aquatic

environment.

**Mixture** 

**Aquatic Acute Toxicity** 

If available, see ingredient data below.

**Aquatic Chronic Toxicity** 

If available, see ingredient data below.

**Substance** 

**Aquatic Acute Toxicity** 

No data available.

**Aquatic Chronic Toxicity** 

No data available.

Persistence and degradability

**Mixture** 

No data available.

**Mixture** 

No data available.

**Mobility** 

**Soil Organic Carbon-Water Partition Coefficient** 

No data available

Other adverse effects

No information available

## 13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Waste from residues/unused products

Dispose of in accordance with local regulations. Dispose of waste in accordance with

environmental legislation.

**Contaminated packaging** Do not reuse empty containers.

**Special instructions for disposal** Dispose of material in an E.P.A. approved hazardous waste facility.

### 14. TRANSPORT INFORMATION

EN / AGHS Page 9/13

**Product Name** THM PLUS Reagent 2 **Revision Date** 26-Jan-2024

**Page** 10 / 13

Version 1.3

**DOT** 

UN/ID no UN2810

Proper shipping name Toxic, Liquid, Organic, N.O.S. DOT Technical Name (N,N-Diethylnicotinamide)

Transport hazard class(es) 6.1
Packing Group

TDG

UN/ID no UN2810

Proper shipping name Toxic, Liquid, Organic, N.O.S. TDG Technical Name (N,N-Diethylnicotinamide)

Transport hazard class(es) 6.1
Packing Group

IATA

UN number or ID number UN2810

Proper shipping name Toxic, Liquid, Organic, N.O.S. IATA Technical Name (N,N-Diethylnicotinamide)

Transport hazard class(es) 6.1
Packing group III

**IMDG** 

**UN number or ID number** UN2810

Proper shipping name Toxic, Liquid, Organic, N.O.S. IMDG Technical Name (N,N-Diethylnicotinamide)

Transport hazard class(es) 6.1
Packing Group

**Note:** No special precautions necessary.

### **Additional information**

There is a possibility that this product could be contained in a reagent set or kit composed of various compatible dangerous goods. If the item is not in a reagent set or kit, the classification given above applies.

If the item is part of a reagent set or kit the classification would change to the following:

UN3316 Chemical Kit, Hazard Class 9, Packing Group II or III.

If the item is not regulated, the Chemical Kit classification does not apply.

## 15. REGULATORY INFORMATION

**National Inventories** 

TSCA Complies DSL/NDSL Complies

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

**International Inventories** 

EINECS/ELINCS
Complies
ENCS
Complies
IECSC
KECL
PICCS
Does not comply
TCSI
Complies
Complies

TCSICompliesAICSCompliesNZIOCComplies

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

**ENCS** - Japan Existing and New Chemical Substances

**IECSC** - China Inventory of Existing Chemical Substances

**KECL** - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

EN / AGHS Page 10/13

on 1.3 Page 11/13

Product Name THM PLUS Reagent 2
Revision Date 26-Jan-2024

TCSI - Taiwan Chemical Substances Inventory
AICS - Australian Inventory of Chemical Substances
NZIOC - New Zealand Inventory of Chemicals

## **US Federal Regulations**

### **SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

## SARA 311/312 Hazard Categories

Acute health hazard	Yes
Chronic Health Hazard	No
Fire hazard	No
Sudden release of pressure hazard	No
Reactive Hazard	No

### **CWA (Clean Water Act)**

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

## **CERCLA**

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

## **US State Regulations**

### **California Proposition 65**

This product does not contain any Proposition 65 chemicals

#### U.S. State Right-to-Know Regulations

This product does not contain any substances regulated by state right-to-know regulations.

### **U.S. EPA Label Information**

## 16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION

### **Special Comments**

None

### **Additional information**

## Global Automotive Declarable Substance List (GADSL)

Not applicable

## NFPA and HMIS Classifications

NFPA	Health hazards - 2	Flammability - 0	Instability - 0	Physical and chemical
				properties -
HMIS	Health hazards - 2	Flammability - 0	Physical hazards - 0	Personal protection -
		-	_	x
				- 1

## Key or legend to abbreviations and acronyms used in the safety data sheet

ACGIH	ACGIH (American Conference of Governmental Industrial Hygienists)
ATSDR	ATSDR (Agency for Toxic Substances and Disease Registry)
CCRIS	CCRIS (Chemical Carcinogenesis Research Information System)

EN / AGHS Page 11/13

Version 1.3

**Product Name** THM PLUS Reagent 2 **Revision Date** 26-Jan-2024

Page 12 / 13

CDC (Center for Disease Control)

CEPA CEPA (Canadian Environmental Protection Agency)

CICAD CICAD (Concise International Chemical Assessment Documents)

ECHA ECHA (The European Chemicals Agency)
EEA EEA (European Environment Agency)
EPA EPA (Environmental Protection Agency)

ERMA ERMA (New Zealands Environmental Risk Management Authority)

ECOSARS Estimation through ECOSARS v1.11 part of the Estimation Programs Interface (EPI) Suite™

FDA FDA (Food & Drug Administration)

GESTIS GESTIS (Information System on Hazardous Substances of the German Social Accident

Insurance)

HSDB (Hazardous Substances Data Bank)

INERISINERIS (The National Industrial Environment and Risks Institute)IPCS INCHEMIPCS INCHEM (International Programme on Chemical Safety)IUCLIDIUCLID (The International Uniform Chemical Information Database)NITEJapan National Institute of Technology and Evaluation (NITE)

NIH (National Institutes of Health)

NIOSH NIOSH (National Institute for Occupational Safety and Health)
LOLI LOLI (List of Lists - An International Chemical Regulatory Database)

NDF no data

NICNAS Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)

NIOSH IDLH Immediately Dangerous to Life or Health

OSHA OSHA (Occupational Safety and Health Administration of the US Department of Labor)

PEEN (Pan European Ecological Network)

RTECS (Registry of Toxic Effects of Chemical Substances)
SIDS (Screening Information Dataset) for High Volume Chemicals

SYKE The Finnish Environment Institute (SYKE)
USDA USDA (United States Department of Agriculture)
USDC USDC (United States Department of Commerce)

WHO (World Health Organization)

## <u>Legend - Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION</u>

TWA TWA (time-weighted average) STEL STEL (Short Term Exposure Limit)

MAC Maximum Allowable Concentration Ceiling Ceiling Limit Value

X Listed Vacated These values have no official status. The only

binding levels of contaminants are those listed in the final OSHA PEL. These lists are for reference purposes only. Please note that some reference state regulations of these "liberated" exposure limits in their state

regulations.

SKN\* Skin designation SKN+ Skin sensitization
RSP+ Respiratory sensitization \*\* Hazard Designation
C Carcinogen R Reproductive toxicant

M mutagen

Prepared By Hach Product Compliance Department

**Issue Date** 27-09-2019

Revision Date 26-Jan-2024

Revision Note None

## **Disclaimer**

USER RESPONSIBILITY: Each user should read and understand this information and incorporate it in individual site safety programs in accordance with applicable hazard communication standards and regulations.

EN / AGHS Page 12/13

Product Name THM PLUS Reagent 2 Revision Date 26-Jan-2024 Page 13 / 13

THE INFORMATION CONTAINED HEREIN IS BASED ON DATA CONSIDERED TO BE ACCURATE. HOWEVER, NO WARRANTY IS EXPRESSED OR IMPLIED REGARDING THE ACCURACY OF THESE DATA OR THE RESULTS TO BE OBTAINED FROM THE USE THEREOF.

HACH COMPANY©2023

**End of Safety Data Sheet** 

EN / AGHS Page 13/13