CHEMTREAT AH7

Safety Data Sheet

according to the United Nations GHS (Rev. 10, 2023)
Issue date: 10/20/2024 Revision date: 10/19/2027 Version: 1.0

BCI
الصناعات الكيميائية الأساسية
BASIC CHEMICAL INDUSTRIES

SECTION 1: Identification

1.1. GHS Product identifier

Product form : Mixture
Product name : CHEMTREAT AH7

1.2. Other means of identification

No additional information available

1.3. Recommended use of the chemical and restrictions on use

Recommended use : Inhibited sulphamic acid used for metal surface cleaning

1.4. Supplier's details

Supplier
Chemical Marketing and Distribution Co. Ltd.
Dammam 31431,
P.O. Box 1053
Saudi Arabia
T +966138217777 - F +966138472648
sales@bci.com.sa

1.5. Emergency phone number

Emergency number : +966138217777

SECTION 2: Hazard identification

2.1. Classification of the substance or mixture

Classification according to the United Nations GHS

Acute toxicity (oral), Category 4	H302
Acute toxicity (dermal), Category 5	H313
Skin corrosion/irritation, Category 1	H314
Skin sensitisation, Category 1	H317
Specific target organ toxicity – Repeated exposure, Category 1	H372
Hazardous to the aquatic environment – Chronic Hazard, Category 3	H412

Full text of H-statements: see section 16

Adverse physicochemical, human health and environmental effects : Causes damage to organs through prolonged or repeated exposure,Harmful if swallowed,Harmful in contact with skin,Causes severe skin burns and eye damage,May cause an allergic skin reaction,Harmful to aquatic life with long lasting effects.

2.2. GHS Label elements, including precautionary statements

Labelling according to the United Nations GHS

Hazard pictograms (GHS UN) :

Signal word (GHS UN) : Danger
Hazardous ingredients : N,N'-Diethylthiourea; Sulfamic acid
Hazard statements (GHS UN) : H302 - Harmful if swallowed
H313 - May be harmful in contact with skin
H314 - Causes severe skin burns and eye damage
H317 - May cause an allergic skin reaction
H372 - Causes damage to organs through prolonged or repeated exposure
H412 - Harmful to aquatic life with long lasting effects

Precautionary statements (GHS UN) : P260 - Do not breathe dust, fume, gas, mist, spray, vapours.
P270 - Do not eat, drink or smoke when using this product.
P272 - Contaminated work clothing should not be allowed out of the workplace.
P273 - Avoid release to the environment.
P280 - Wear protective clothing, eye protection, face protection, protective gloves.
P301+P317 - IF SWALLOWED: Get medical help.
P301+P330+P331 - IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
P302+P317 - IF ON SKIN: Get medical help.
P302+P352 - IF ON SKIN: Wash with plenty of soap and water.
P302+P361+P354 - IF ON SKIN: Take off immediately all contaminated clothing. Immediately rinse with water for several minutes.
P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P354+P338 - IF IN EYES: Immediately rinse with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P316 - Get emergency medical help immediately.
P319 - Get medical help if you feel unwell.
P330 - Rinse mouth.
P333+P317 - If skin irritation or rash occurs: Get medical help.
P362+P364 - Take off contaminated clothing and wash it before reuse.
P363 - Wash contaminated clothing before reuse.
P405 - Store locked up.

2.3. Other hazards which do not result in classification

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to the United Nations GHS
Sulfamic acid	CAS-No.: 5329-14-6	> 90	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Aquatic Chronic 3, H412
N,N'-Diethylthiourea	CAS-No.: 105-55-5	< 5	Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Dermal), H312 Eye Dam. 1, H318 Skin Sens. 1B, H317 STOT RE 1, H372

Full text of H-statements: see section 16

SECTION 4: First-aid measures

4.1. Description of necessary first-aid measures

First-aid measures general : Call a physician immediately. If you feel unwell, seek medical advice (show the label where possible).

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. Obtain medical attention if breathing difficulty persists.

First-aid measures after skin contact : Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse. Rinse skin with water/shower. Take off immediately all contaminated clothing. Call a physician immediately. Seek medical attention if ill effect or irritation develops.

First-aid measures after eye contact : Rinse immediately with plenty of water. Rinse immediately with plenty of water for 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention if pain, blinking or redness persists. Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician immediately. Seek medical attention if ill effect or irritation develops.

First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Rinse mouth. Do not induce vomiting. Call a physician immediately.

4.2. Most important symptoms/effects, acute and delayed

Symptoms/effects after skin contact : Burns. May cause an allergic skin reaction.

Symptoms/effects after eye contact : Serious damage to eyes.

Symptoms/effects after ingestion : Burns.

4.3. Indication of immediate medical attention and special treatment needed, if necessary

Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Suitable extinguishing media

Suitable extinguishing media : Foam. Dry powder. Carbon dioxide. Water spray. Sand.

Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Specific hazards arising from the chemical

Hazardous decomposition products in case of fire : Toxic fumes may be released. Thermal decomposition can lead to the release of irritating gases and vapours.

5.3. Special protective actions for fire-fighters

Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire fighting water from entering the environment.

Protective equipment for firefighters : Do not enter fire area without proper protective equipment, including respiratory protection. Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Evacuate unnecessary personnel.

Personal Precautions, Protective Equipment and Emergency Procedures : Wear recommended personal protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

Prevention Measures for Secondary Accidents : Avoid release to the environment.

6.1.1. For non-emergency personnel

Protective equipment : Wear personal protective equipment. Wear suitable protective clothing. For further information refer to section 8: "Exposure controls/personal protection".

Emergency procedures : Ventilate spillage area. Do not breathe dust/fume/gas/mist/vapours/spray. Avoid contact with skin, eyes and clothing.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. Wear recommended personal protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Avoid release to the environment. Prevent entry to sewers and public waters.

6.3. Methods and materials for containment and cleaning up

For containment : Soak up with inert absorbent material (for example sand, sawdust, a universal binder, silica gel). Collect spillage.

Methods for cleaning up : Mechanically recover the product. On land, sweep or shovel into suitable containers. Minimise generation of dust. Store away from other materials.

Other information : Dispose of materials or solid residues at an authorized site.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Provide good ventilation in process area to prevent formation of vapour. Do not breathe dust/fume/gas/mist/vapours/spray. Do not get in eyes, on skin, or on clothing. Wear personal protective equipment.

Hygiene measures : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Wash contaminated clothing before reuse. Contaminated work clothing should not be allowed out of the workplace. Do not eat, drink or smoke when using this product. Always wash hands after handling the product. Handle in accordance with good industrial hygiene and safety procedures.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep only in the original container in a cool well ventilated place. Keep container closed when not in use. Store locked up. Store in a well-ventilated place. Keep cool.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available

8.2. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station.

Environmental exposure controls : Avoid release to the environment.

Other information : Do not eat, drink or smoke during use.

8.3. Individual protection measures, such as personal protective equipment (PPE)

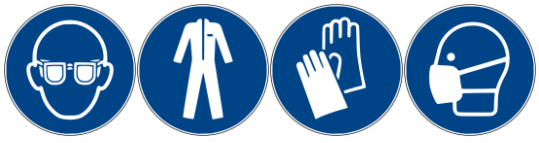
Hand protection : Impermeable protective gloves. protective gloves

Eye protection : Chemical goggles or safety glasses. Safety glasses

Skin and body protection : Wear suitable protective clothing

Respiratory protection : In case of insufficient ventilation, wear suitable respiratory equipment. Wear suitable respiratory equipment in case of insufficient ventilation

Personal protective equipment symbol(s)



8.4. Exposure limit values for the other components

No additional information available

SECTION 9: Physical and chemical properties

9.1. Basic physical and chemical properties

Physical state : Solid

Colour : White.

Odour	:	Slight.
Odour threshold	:	Not available
Melting point	:	205 – 209 °C
Freezing point	:	Not applicable
Boiling point	:	Not available
Flammability	:	Not flammable
Lower explosion limit	:	Not applicable
Upper explosion limit	:	Not applicable
Flash point	:	Not applicable
Auto-ignition temperature	:	Not applicable
Decomposition temperature	:	Not available
pH	:	1
pH solution	:	Not available
Viscosity, kinematic (calculated value) (40 °C)	:	Not applicable
Partition coefficient n-octanol/water (Log Kow)	:	Not available
Vapour pressure	:	Not available
Vapour pressure at 50°C	:	Not available
Density	:	Not available
Relative density	:	2.15
Relative vapour density at 20°C	:	Not applicable
Solubility	:	Soluble in water.
Particle size	:	Not available

9.2. Data relevant with regard to physical hazard classes (supplemental)

Explosive limits : Not applicable

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

Avoid moisture.

10.5. Incompatible materials

Alkaline products.

10.6. Hazardous decomposition products

Sulphur oxides, nitrogen oxides.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Harmful if swallowed.
Acute toxicity (dermal) : May be harmful in contact with skin.
Acute toxicity (inhalation) : Not classified (Based on available data, the classification criteria are not met)

CHEMTREAT AH7	
ATE UN (oral)	1283.833 mg/kg bodyweight
ATE UN (dermal)	4000 mg/kg bodyweight

CHEMTREAT AH7	
Unknown acute toxicity (GHS UN)Unknown acute toxicity (GHS UN)	90% of the mixture consists of ingredient(s) of unknown acute toxicity (Dermal) 95% of the mixture consists of ingredient(s) of unknown acute toxicity (Inhalation (Dust/Mist))

N,N'-Diethylthiourea (105-55-5)	
LD50 oral rat	316 mg/kg (Source: NLM_CIP)
LD50 dermal rat	2000 mg/kg (Source: ECHA_API)

Sulfamic acid (5329-14-6)	
LD50 oral rat	1450 mg/kg (Source: IUCLID)
LD50 dermal rat	> 2000 mg/kg (Source: ECHA_API)

Skin corrosion/irritation : Causes severe skin burns.
pH: 1

Serious eye damage/irritation : Assumed to cause serious eye damage
pH: 1

Respiratory or skin sensitization : May cause an allergic skin reaction.

Germ cell mutagenicity : Not classified (Based on available data, the classification criteria are not met)

Carcinogenicity : Not classified (Based on available data, the classification criteria are not met)

Reproductive toxicity : Not classified (Based on available data, the classification criteria are not met)

STOT-single exposure : Not classified (Based on available data, the classification criteria are not met)

STOT-repeated exposure : Causes damage to organs through prolonged or repeated exposure.

N,N'-Diethylthiourea (105-55-5)	
STOT-repeated exposure	Causes damage to organs through prolonged or repeated exposure.

Aspiration hazard : Not classified (Based on available data, the classification criteria are not met)

CHEMTREAT AH7	
Viscosity, kinematic	Not applicable

Other information : Likely routes of exposure: ingestion, inhalation, skin and eye.

SECTION 12: Ecological information

12.1. Toxicity

Hazardous to the aquatic environment, short–term (acute) : Not classified (Based on available data, the classification criteria are not met)

Hazardous to the aquatic environment, long–term (chronic) : Harmful to aquatic life with long lasting effects.

Classification procedure (Hazardous to the aquatic environment, long–term (chronic)) : Calculation method

N,N'-Diethylthiourea (105-55-5)	
LC50 - Fish [1]	910 mg/l (Exposure time: 96 h - Species: Danio rerio [static] Source: ECHA)
EC50 96h - Algae [1]	1138.448 mg/l Source: ECOSAR

Sulfamic acid (5329-14-6)	
LC50 - Fish [1]	14.2 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static] Source: EPA)

12.2. Persistence and degradability

CHEMTREAT AH7	
Persistence and degradability	Rapidly degradable

N,N'-Diethylthiourea (105-55-5)	
Persistence and degradability	Rapidly degradable

Sulfamic acid (5329-14-6)	
Persistence and degradability	Not established.

12.3. Bioaccumulative potential

CHEMTREAT AH7	
Bioaccumulative potential	No additional information available

N,N'-Diethylthiourea (105-55-5)	
Partition coefficient n-octanol/water (Log Pow)	0.57 (at pH 6.5-12)

Sulfamic acid (5329-14-6)	
Partition coefficient n-octanol/water (Log Pow)	0.1
Bioaccumulative potential	Not established.

12.4. Mobility in soil

CHEMTREAT AH7	
Mobility in soil	No additional information available

12.5. Other adverse effects

Ozone : Not classified (Based on available data, the classification criteria are not met)
Other adverse effects : No additional information available
Effect on the ozone layer : No additional information available.
Other information : Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Disposal methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.
Product/Packaging disposal recommendations : Dispose of in a safe manner in accordance with local/national regulations.
Ecological waste information : Avoid release to the environment.

SECTION 14: Transport information

In accordance with UN RTDG / IMDG / IATA /

UN RTDG	IMDG	IATA
14.1. UN number		
2967	2967	2967
14.2. UN Proper Shipping Name		
SULPHAMIC ACID	SULPHAMIC ACID	Sulphamic acid
14.3. Transport hazard class(es)		
8	8	8
		
14.4. Packing group		
III	III	III

UN RTDG	IMDG	IATA
14.5. Environmental hazards		
Dangerous for the environment: No	Dangerous for the environment: No Marine pollutant: No	Dangerous for the environment: No
No supplementary information available		

14.6. Special precautions for user

UN RTDG

Limited quantities (UN RTDG) : 5 kg
Excepted quantities (UN RTDG) : E1
Packing instruction (UN RTDG) : P002, IBC08, LP02
Special packing provisions (UN RTDG) : B3
Portable tank and bulk container special instructions (UN RTDG) : T1
Portable tank and bulk container special provisions (UN RTDG) : TP33

IMDG

Limited quantities (IMDG) : 5 kg
Excepted quantities (IMDG) : E1
Packing instructions (IMDG) : P002, LP02
IBC packing instructions (IMDG) : IBC08
IBC special provisions (IMDG) : B3
Tank instructions (IMDG) : T1
Tank special provisions (IMDG) : TP33
EmS-No. (Fire) : F-A - FIRE SCHEDULE Alfa - GENERAL FIRE SCHEDULE
EmS-No. (Spillage) : S-B - SPILLAGE SCHEDULE Bravo - CORROSIVE SUBSTANCES
Stowage category (IMDG) : A
Segregation (IMDG) : SGG1, SG36, SG49
Properties and observations (IMDG) : White crystalline powder. Soluble in water. Decomposes when heated, evolving toxic fumes. Causes burns to skin, eyes and mucous membranes.

IATA

PCA Excepted quantities (IATA) : E1
PCA Limited quantities (IATA) : Y845
PCA limited quantity max net quantity (IATA) : 5kg
PCA packing instructions (IATA) : 860
PCA max net quantity (IATA) : 25kg
CAO packing instructions (IATA) : 864
CAO max net quantity (IATA) : 100kg
Special provisions (IATA) : A803
ERG code (IATA) : 8L

14.7. Transport in bulk according to IMO instruments

Not applicable

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations specific for the product in question

No additional information available

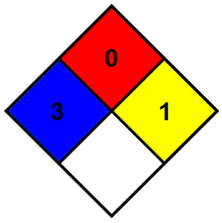
SECTION 16: Other information

NFPA health hazard : 3 - Materials that, under emergency conditions, can cause serious or permanent injury.

NFPA fire hazard : 0 - Materials that will not burn under typical fire conditions, including intrinsically noncombustible materials such as concrete, stone, and sand.

NFPA reactivity : 1 - Materials that in themselves are normally stable but can become unstable at elevated temperatures and pressures.

NFPA specific hazard : None



Hazard Rating

Health : 3 Serious Hazard - Major injury likely unless prompt action is taken and medical treatment is given

Flammability : 0 Minimal Hazard - Materials that will not burn

Physical : 1 Slight Hazard - Materials that are normally stable but can become unstable (self-react) at high temperatures and pressures. Materials may react non-violently with water or undergo hazardous polymerization in the absence of inhibitors.

Issue date : 10/20/2024

Revision date : 10/19/2027

Other information : None.

Full text of H-statements:	
Acute Tox. 4 (Dermal)	Acute toxicity (dermal), Category 4
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Skin Irrit. 2	Skin corrosion/irritation, Category 2
Skin Sens. 1B	Skin sensitisation, category 1B
H302	Harmful if swallowed
H312	Harmful in contact with skin
H313	May be harmful in contact with skin
H314	Causes severe skin burns and eye damage
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H318	Causes serious eye damage
H319	Causes serious eye irritation
H372	Causes damage to organs through prolonged or repeated exposure
H412	Harmful to aquatic life with long lasting effects

Safety Data Sheet (SDS), UN

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.