

SAFETY DATA SHEET

Preparation Date: 9/3/2015

Revision Date: 9/27/2016

Revision Number: G2

1. IDENTIFICATION

Product identifier

Product code: A1005
Product Name: ACETAMIDE, CRYSTAL, REAGENT

Other means of identification

Synonyms: Acetic acid amide
 Acetimidic acid
 Ethanamide
 Methanecarboxamide

CAS #: 60-35-5
RTECS # AB4025000
CI#: Not available

Recommended use of the chemical and restrictions on use

Recommended use: Chemical intermediate. Solvent. Plasticizer.
Uses advised against No information available

Supplier: Spectrum Chemical Mfg. Corp
 14422 South San Pedro St.
 Gardena, CA 90248
 (310) 516-8000.

Order Online At: <https://www.spectrumchemical.com>

Emergency telephone number Chemtrec 1-800-424-9300

Contact Person: Martin LaBenz (West Coast)

Contact Person: Ibad Tirmiz (East Coast)

2. HAZARDS IDENTIFICATION

Classification

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

Considered a dangerous substance or mixture according to the Globally Harmonized System (GHS)

Carcinogenicity	Category 2
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Label elements

Warning

Hazard statements
 Suspected of causing cancer

**Hazards not otherwise classified (HNOC)**

Not Applicable

Other hazards

Not available

Precautionary Statements - Prevention

Obtain special instructions before use

Do not handle until all safety precautions have been read and understood

Wear protective gloves/protective clothing/eye protection/face protection

Precautionary Statements - Response*IF exposed or concerned: Get medical advice/attention***Precautionary Statements - Storage**

Store locked up

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

3. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS-No.	Weight %
Acetamide	60-35-5	100

4. FIRST AID MEASURES**First aid measures****General Advice:**

National Capital Poison Center in the United States can provide assistance if you have a poison emergency and need to talk to a poison specialist. Call 1-800-222-1222. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.

Skin Contact:

Wash off immediately with soap and plenty of water removing all contaminated clothing and shoes. Get medical attention if irritation develops. Consult a physician if necessary.

Eye Contact:

Flush eyes with water for 15 minutes. Get medical attention if irritation occurs. If symptoms persist, call a physician.

Inhalation:

Move to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

Ingestion:

Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Obtain medical attention.

Most important symptoms and effects, both acute and delayed**Symptoms**

Suspected of causing cancer. May cause eye/skin irritation. May cause gastrointestinal upset or indigestion. May affect the liver. Central nervous system effects. Paralysis. Lacrimation.

Indication of any immediate medical attention and special treatment needed

Notes to Physician: Treat symptomatically.

Protection of first-aiders

First-Aid Providers: Avoid exposure to blood or body fluids. Wear gloves and other necessary protective clothing. Dispose of contaminated clothing and equipment as bio-hazardous waste.

5. FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media: Dry chemical. Carbon dioxide (CO₂). Water spray, mist, or foam.

Unsuitable Extinguishing Media: No information available.

Specific hazards arising from the chemical

Hazardous Combustion Products: Carbon Oxides. Nitrogen Oxides.

Specific hazards: May be combustible at high temperatures
Fire may produce irritating, corrosive and/or toxic gases

Special Protective Actions for Firefighters

Specific Methods: For larger fires, use water spray or fog. Cool containers with flooding quantities of water until well after fire is out.

Special Protective Equipment for Firefighters: As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions: Ensure adequate ventilation. Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Keep people away from and upwind of spill/leak. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Avoid dust formation. Remove all sources of ignition.

Environmental precautions Prevent further leakage or spillage if safe to do so. Prevent entry into waterways, sewers, basements or confined areas. Prevent from entering into soil, ditches, sewers, waterways, and/or ground water. Prevent product from entering drains. Do not let this chemical enter the environment.

Methods and material for containment and cleaning up

Methods for containment Stop leak if you can do it without risk. Cover with plastic sheet to prevent spreading.

Methods for cleaning up Sweep up and shovel into suitable containers for disposal. Clean contaminated surface thoroughly.

7. HANDLING AND STORAGE

Precautions for safe handling

Technical Measures/Precautions:

Product code: A1005

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Provide sufficient air exchange and/or exhaust in work rooms. Keep away from incompatible materials. Keep away from open flames, hot surfaces and sources of ignition. Avoid dust formation.

Safe Handling Advice

Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Use only in well-ventilated areas. Do not ingest. When using do not smoke. Handle in accordance with good industrial hygiene and safety practice. Do not breathe vapors/dust. Keep away from heat and sources of ignition.

Conditions for safe storage, including any incompatibilities

Technical Measures/Storage Conditions:

Deliquescent. Protect from moisture. Keep container tightly closed in a dry and well-ventilated place. Store at room temperature in the original container. Store away from incompatible materials.

Incompatible Materials:

Moisture
Oxidizing agents
Strong acids

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

National occupational exposure limits

United States

Components	CAS-No.	OSHA	NIOSH	ACGIH	AIHA WHEEL
Acetamide	60-35-5	None	None	None	None

Canada

Components	CAS-No.	Canada - Alberta	Canada - British Columbia	Canada - Ontario	Canada - Quebec
Acetamide	60-35-5	None	None	None	None

Australia and Mexico

Components	CAS-No.	Australia	Mexico
Acetamide	60-35-5	None	None

Appropriate engineering controls

Engineering measures to reduce exposure:

Ensure adequate ventilation, especially in confined areas. Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

Individual protection measures, such as personal protective equipment

Personal Protective Equipment

Eye protection: Goggles Safety glasses with side-shields

Skin and body protection: Chemical resistant apron. Gloves. Long sleeved clothing.

Respiratory protection: Effective dust mask. Wear respirator with dust filter. Use a dust respirator under conditions where exposure to the substance is apparent (e.g. generation of high concentration of dust (dust clouds) , inadequate ventilation, development of respiratory tract irritation), and engineering controls are not feasible. Be sure to use an approved/certified respirator or equivalent.

Hygiene measures: Avoid contact with skin, eyes and clothing. When using, do not eat, drink or smoke. Wash hands before breaks and immediately after handling the product.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Solid	Appearance: Crystalline powder.	Color: White. Clear.
Odor: Odorless. Slight.	Taste Bitter.	Formula: C2H5NO
Molecular/Formula weight: 59.07	Flammability: No information available	Flashpoint (°C/°F): 104°C/219°F
Flash Point Tested according to: Not available	Autoignition Temperature (°C/°F): No information available	Lower Explosion Limit (%): No information available
Upper Explosion Limit (%): No information available	Melting point/range(°C/°F): 81°C/178°F	Decomposition temperature(°C/°F): No information available
Boiling point/range(°C/°F): 222°C/432°F	Bulk density: No information available	Density (g/cm3): 1.159
Specific gravity: No information available	pH: 10	Vapor pressure @ 20°C (kPa): 1.3
Evaporation rate: No information available	Vapor density: No information available	VOC content (g/L): No information available
Odor threshold (ppm): No information available	Partition coefficient (n-octanol/water): -1.26	Viscosity: No information available
Miscibility: No information available	Solubility: Insoluble in n-octanol Very soluble in water Very soluble in alcohol Insoluble in Ether Soluble in Chloroform Soluble in Benzene	

10. STABILITY AND REACTIVITY

Reactivity
Reactive with oxidizing agents and strong acids

Chemical stability

Stability: Stable under recommended storage conditions. Deliquescent. Moisture Sensitive.

Possibility of Hazardous Reactions: Hazardous polymerization does not occur

Conditions to avoid: Heat. Ignition sources. Incompatible materials. Exposure to moisture.

Incompatible Materials: Moisture
Oxidizing agents
Strong acids

Hazardous decomposition products: Carbon oxides. Nitrogen oxides (NOx).

Other Information
Corrosivity: No information available

Special Remarks on Corrosivity: No information available

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Principal Routes of Exposure:
Ingestion.

Acute Toxicity

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

ATEmix (oral) 7 mg/kg

Component Information

Acetamide
CAS-No. 60-35-5

LD50/oral/rat = 7 g/kg Oral LD50 Rat
LD50/oral/mouse = 12.9 g/kg oral LD50 mouse
LD50/dermal/rabbit = No information available
LD50/dermal/rat = 7 g/kg Oral LD50
LC50/inhalation/rat = 16000 ppm inhalation LC50 rat
LC50/inhalation/mouse = No information available
Other LD50 or LC50 information = No information available

Product Information

LD50/oral/rat =
VALUE- Acute Tox Oral = No information available

LD50/oral/mouse =
Value - Acute Tox Oral = No information available

LD50/dermal/rabbit
VALUE-Acute Tox Dermal = No information available

LD50/dermal/rat
VALUE -Acute Tox Dermal = No information available

LC50/inhalation/rat
VALUE-Vapor = No information available
VALUE-Gas = No information available
VALUE-Dust/Mist = No information available

LC50/Inhalation/mouse

VALUE-Vapor = No information available

VALUE - Gas = No information available

VALUE - Dust/Mist = No information available

Symptoms**Skin Contact:** May cause skin irritation.**Eye Contact:** May cause eye irritation.**Inhalation** Inhalation of dust may cause respiratory tract irritation.**Ingestion** May cause central nervous system effects (affect behavior). May cause lacrimation. May cause spastic paralysis.**Aspiration hazard** No information available.**Delayed and immediate effects as well as chronic effects from short and long-term exposure****Chronic Toxicity** Repeated or prolonged exposure may cause cancer. Prolonged or repeated ingestion may affect the liver.**Sensitization:** No information available.**Mutagenic Effects:** No information available**Carcinogenic effects:** Suspected of causing cancer.

Components	CAS-No.	IARC	ACGIH - Carcinogens	NTP	OSHA HCS - Carcinogens	Australia - Notifiable Carcinogenic Substances	Australia - Prohibited Carcinogenic Substances
Acetamide	60-35-5	Monograph 71 [1999] Supplement 7 [1987] Monograph 7 [1974]	Not listed	Not listed	Present	Not listed	Not listed

*ACGIH (American Conference of Governmental Industrial Hygienists)**IARC (International Agency for Research on Cancer)**NTP (National Toxicology Program)**OSHA (Occupational Safety and Health Administration of the US Department of Labor)***Reproductive toxicity** No data is available**Reproductive Effects:** No information available**Developmental Effects:** No information available**Teratogenic Effects:** No information available**Specific Target Organ Toxicity****STOT - single exposure** No information available.**STOT - repeated exposure** No information available.**Target Organs:** Liver.**12. ECOLOGICAL INFORMATION****Product code:** A1005**Product name:** ACETAMIDE,
CRYSTAL, REAGENT**7 / 11**

Ecotoxicity

Ecotoxicity effects: Harmful to aquatic organisms.

Acetamide - 60-35-5

Freshwater Fish Species Data: 13300 mg/L LC50 *Gambusia affinis* 96h

Persistence and degradability: No information available

Bioaccumulative potential: An estimated Bioconcentration Factor (BCF) value of 3. Potential for bioconcentration in aquatic organisms is low.

Mobility: It is expected to have high mobility in soil.

13. DISPOSAL CONSIDERATIONS

Disposal Methods

Waste from residues / unused products:

Waste must be disposed of in accordance with Federal, State and Local regulation.

Contaminated packaging:

Empty containers should be taken for local recycling, recovery or waste disposal

Components	CAS-No.	RCRA - F Series Wastes	RCRA - K Series Wastes	RCRA - P Series Wastes	RCRA - U Series Wastes
Acetamide	60-35-5	None	None	None	None

14. TRANSPORT INFORMATION

DOT

UN-No: UN3077
Proper Shipping Name: Environmentally hazardous substance, solid, n.o.s. (acetamide)
Hazard Class: 9
Subsidiary Class: No information available
Packing group: III
Emergency Response Guide Number: 171
Marine Pollutant: No data available
DOT RQ (lbs): No information available
Special Provisions: 146, 335, A112, B54, B120, IB8, IP3, N20, N91, T1, TP33, 8
Symbol(s): No information available
Description: UN3077, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S., 9, III, Marine pollutant

TDG (Canada)

UN-No: UN3077
Proper Shipping Name: Environmentally hazardous substance, solid, n.o.s. (acetamide)
Hazard Class: 9
Subsidiary Risk: No information available
Packing Group: III
Marine Pollutant: No Information available
Description: UN3077, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Acetamide), 9, III

ADR

Product code: A1005

Product name: ACETAMIDE,
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UN-No: UN3077
Proper Shipping Name: Environmentally hazardous substance, solid, n.o.s. (acetamide)
Hazard Class: 9
Packing Group: III
Subsidiary Risk: No information available
Special Provisions 274, 335, 375, 601
Description: UN3077, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Acetamide), 9, III

IMO / IMDG

UN-No: UN3077
Proper Shipping Name: Environmentally hazardous substance, solid, n.o.s. (acetamide)
Hazard Class: 9
Subsidiary Risk: No information available
Packing Group: III
Marine Pollutant No information available
EMS: F-A
Special Provisions 274, 335, 966, 967, 969
Description UN3077, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Acetamide), 9, III, Marine pollutant

RID

UN-No: UN3077
Proper Shipping Name: Environmentally hazardous substance, solid, n.o.s. (acetamide)
Hazard Class: 9
Subsidiary Risk: No information available
Packing Group: III
Special Provisions 274, 335, 375, 601
Description: UN3077, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Acetamide), 9, III

ICAO

UN-No: UN3077
Proper Shipping Name: Environmentally hazardous substance, solid, n.o.s. (acetamide)
Hazard Class: 9
Subsidiary Risk: No information available
Packing Group: III
Description: UN3077, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Acetamide), 9, III
Special Provisions A158, A97, A179, A197

IATA

UN-No: UN3077
Proper Shipping Name: Environmentally hazardous substance, solid, n.o.s. (acetamide)
Hazard Class: 9
Subsidiary Risk: No information available
Packing Group: III
ERG Code: 9L
Special Provisions No information available
Description: UN3077, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Acetamide), 9, III

15. REGULATORY INFORMATION

International Inventories

Components	CAS-No.	U.S. TSCA	KOREA KECL	Philippines (PICCS)	Japan ENCS	CHINA	Australia (AICS)	EINECS-No.
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Acetamide	60-35-5	Present	Present KE-00004	Present	Present (2)-724	Present	Present	Present 200-473-5
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U.S. Regulations

Acetamide

Massachusetts RTK: Present

New Jersey RTK Hazardous Substance List: 2890

New Jersey (EHS) List: 2890 500 lb TPQ

New Jersey - Discharge Prevention - List of Hazardous Substances: Present

Pennsylvania RTK: Environmental hazard

Pennsylvania RTK - Environmental Hazard List Present

Minnesota - Hazardous Substance List: Present

New York Release Reporting - List of Hazardous Substances:

1 lb RQ

Louisiana Reportable Quantity List for Pollutants: 100lb final RQ

45.4kg final RQ

500lb RQ

California Directors List of Hazardous Substances: Present

FDA - 21 CFR - Total Food Additives Present (Not Regulated under 21 CFR)

California Prop. 65: Safe Drinking Water and Toxic Enforcement Act of 1986.

Chemicals Known to the State of California to Cause Cancer:

WARNING: This product contains a chemical known to the State of California to cause cancer. (See table below)

Chemicals Known to the State of California to Cause Reproductive Toxicity:

WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm (See table below)

Components	CAS-No.	Carcinogen	Developmental Toxicity	Male Reproductive Toxicity	Female Reproductive Toxicity:
Acetamide	60-35-5	carcinogen	Not Listed	Not Listed	Not Listed

CERCLA/SARA

Components	CAS-No.	CERCLA - Hazardous Substances and their Reportable Quantities	Section 302 Extremely Hazardous Substances and TPQs	Section 302 Extremely Hazardous Substances and RQs	Section 313 - Chemical Category	Section 313 - Reporting de minimis
Acetamide	60-35-5	100 lb final RQ 45.4 kg final RQ	None	None	None	0.1 % de minimis concentration

U.S. TSCA

Components	CAS-No.	TSCA Section 5(a)2 - Chemicals With Significant New Use Rules (SNURS)	TSCA 8(d) -Health and Safety Reporting
Acetamide	60-35-5	Not Applicable	Not Applicable

Canada

WHMIS hazard class:

D2A Very toxic materials

Canada Controlled Products Regulation:

This product has been classified according to the hazard criteria of the CPR (Controlled Products Regulation) and the MSDS contains all of the information required by the CPR.

Inventory

Components	CAS-No.	Canada (DSL)	Canada (NDSL)

Product code: A1005

Product name: ACETAMIDE,
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Acetamide	60-35-5	Present	Not Listed
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Components	CAS-No.	CEPA Schedule I - Toxic Substances
Acetamide	60-35-5	Not listed
Components	CAS-No.	CEPA - 2010 Greenhouse Gases Subject to Mandatory Reporting
Acetamide	60-35-5	Not listed

EU Classification

R-phrase(s)

R40 - Limited evidence of a carcinogenic effect

S -phrase(s)

S 2 - Keep out of the reach of children.

S36/37 - Wear suitable protective clothing and gloves.

Components	CAS-No.	Classification	Concentration Limits:	Safety Phrases
Acetamide	60-35-5	Carc.Cat.3; R40	No information	

The product is classified in accordance with Annex VI to Directive 67/548/EEC

Indication of danger:

Xn - Harmful.

Xn



16. OTHER INFORMATION

Preparation Date: 9/3/2015
Revision Date: 9/27/2016
Prepared by: Roumann Pangilinan

Disclaimer:

All chemicals may pose unknown hazards and should be used with caution. This Safety Data Sheet (SDS) applies only to the material as packaged. If this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this SDS. The physical properties reported in this SDS are obtained from the literature and do not constitute product specifications. Information contained herein does not constitute a warranty, whether expressed or implied, as to the safety, merchantability or fitness of the goods for a particular purpose. Spectrum Chemicals & Laboratory Products, Inc. assumes no responsibility for results obtained or for incidental or consequential damages, including lost profits, arising from the use of these data. No warranty against infringement of any patent, copyright or trademark is made or implied. It shall be the user's responsibility to develop proper methods of handling and personal protection based on the actual conditions of use. While this SDS is based on technical data judged to be reliable, Spectrum assumes no responsibility for the completeness or accuracy of the information contained herein.

End of Safety Data Sheet