SOLVENT SYSTEMS International, Inc.
Environmental Services

Offer Sheet

Product	Dimethylacetamide
Quantity	20 drums
Net weight	~8,378 lbs.
Manufacture date	
Availability	One time
Location	North Chicago, IL 60064
Date	4/21/26
COA & SDS	Attached below

Brian Svrusis
Solvent Systems International
575 Bennett Road
Elk Grove Village, IL 60007
847-323-6718 call or text
Click here for: Surplus Inventory
Solvent-Systems.com

DMAc

- Polar aprotic solvent with strong solvency
- High boiling point (~165°C) provides process stability
- Dissolves difficult polymers and resins
- Miscible with water and many organics

In practice, DMAc is used as a **processing solvent for polymer systems that are hard to dissolve**.

Core commercial applications

1. Synthetic fiber production (largest use)

Use:

- Acrylic fibers
- Spandex (elastane)
- Aramid fibers

Function:

- Dissolves polymer prior to spinning
- Enables controlled fiber formation

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2. Polyurethane and specialty polymer processing

Use:

- Polyurethane coatings
- Synthetic leather
- Elastomers

Function:

- Solubilizes polyurethane systems
- Controls viscosity in coating and casting processes

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3. Pharmaceutical manufacturing

Use:

- Reaction solvent
- Intermediate processing

Function:

- Dissolves complex organic compounds
- Stabilizes reaction environments

Used where high solvency and thermal stability are required.

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4. Electronics and membrane production

Use:

- Battery component processing
- Membrane and film casting

Function:

- Polymer dissolution for film formation
- Controlled evaporation for uniform structures

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5. Coatings and paint removal

Use:

- Specialty coatings
- Paint stripping (reduced use today)

Function:

- Penetrates and breaks down coatings

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6. Agrochemicals and chemical synthesis

Use:

- Carrier solvent in herbicides and pesticides

Function:

- Improves solubility of active ingredients
- Enhances formulation stability

EMCO
CHEMICAL DISTRIBUTORS

8601 95TH Street
Pleasant Prairie, WI 53158
(262) 427-0400

Certificate of Analysis

		CUSTOMER PO #:	
EMAIL:		EMCO ORDER #:	SC0281961
ATTN:	QC LAB	EMCO CUST #:	121009
BILL TO:		CODE:	RMS.S.20033228
PRODUCT:	N,N-Dimethylacetamide	SHIP DATE:	09/17/2024
EPC #:	17894A419	LOT #:	77531968E0
MFR NAME:	BASF	MFR DATE:	7/7/2023
MFR SITE:	Ludwigshafen, Germany	EXP DATE:	7/6/2025

TEST DESCRIPTIONS	SPECIFICATIONS	TEST RESULTS
DIMETHYLACETAMIDE	99.8 % MIN.	>99.9
DIMETHYLFORMAMIDE	0.015 % MAX	0.003
WATER (PPM)	200 MAX	66
COLOR (PT-CO)	10 MAX	<5
ACID CONTENT (PPM)	80 MAX	<10
BASICITY (PPM)	5 MAX	<1
Fe (PPM)	50 MAX	<50
Al, Ca, Cr, Cu, Zn, K, Mg, Mn, Ni, Pb, Na (PPM)	< 50 EACH	<50
Si (PPM)	< 1	<1

BY: D. Dilts
CHEMIST
9/16/2024

100247622

By/Date: [signature] 10OCT2024

Questions regarding this shipment should be directed to EMCO'S Lab Services Department: 1-262-427-0400

SAFETY DATA SHEET

Creation Date 06-Oct-2009 **Revision Date** 23-Oct-2025 **Revision Number** 7

1. Identification

Product Name **N,N-Dimethylacetamide**

Cat No. : **D160-1**

CAS No 127-19-5
Synonyms Dimethyl Acetamide

Recommended Use Laboratory chemicals.
Uses advised against Food, drug, pesticide or biocidal product use.

Details of the supplier of the safety data sheet

Company
Fisher Scientific Company
One Reagent Lane
Fair Lawn, NJ 07410
Tel: (201) 796-7100

Emergency Telephone Number
CHEMTREC®, Inside the USA: 800-424-9300
CHEMTREC®, Outside the USA: 001-703-527-3887

2. Hazard(s) identification

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

Flammable liquids	Category 4
Acute dermal toxicity	Category 4
Acute Inhalation Toxicity - Vapors	Category 4
Serious Eye Damage/Eye Irritation	Category 2
Carcinogenicity	Category 2
Reproductive Toxicity	Category 1B

Label Elements

Signal Word
Danger

Hazard Statements
Combustible liquid
Causes serious eye irritation

Suspected of causing cancer
May damage the unborn child
Harmful in contact with skin or if inhaled

Precautionary Statements
Prevention
Obtain special instructions before use
Do not handle until all safety precautions have been read and understood
Use personal protective equipment as required
Avoid breathing dust/fume/gas/mist/vapors/spray
Use only outdoors or in a well-ventilated area
Wash face, hands and any exposed skin thoroughly after handling
Wear eye/face protection
Keep away from heat/sparks/open flames/hot surfaces. - No smoking
Response
IF exposed or concerned: Get medical attention/advice
Inhalation
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
Skin
IF ON SKIN: Wash with plenty of soap and water
Call a POISON CENTER or doctor/physician if you feel unwell
Wash contaminated clothing before reuse
Eyes
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
If eye irritation persists: Get medical advice/attention
Fire
In case of fire: Use CO2, dry chemical, or foam for extinction
Storage
Store locked up
Store in a well-ventilated place. Keep cool
Disposal
Dispose of contents/container to an approved waste disposal plant
Hazards not otherwise classified (HNOC)

WARNING. Cancer and Reproductive Harm - https://www.p65warnings.ca.gov/.

3. Composition/information on Ingredients

Component	CAS No	Weight %
Dimethyl acetamide	127-19-5	>95

4. First-aid measures

General Advice Show this safety data sheet to the doctor in attendance. Immediate medical attention is required.

Eye Contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

Skin Contact Wash off immediately with plenty of water for at least 15 minutes. Immediate medical attention is required.

Inhalation Remove to fresh air. If not breathing, give artificial respiration. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Immediate medical attention is required.

Ingestion Do NOT induce vomiting. Call a physician or poison control center immediately.

Most important symptoms and effects None reasonably foreseeable. Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting

Notes to Physician Treat symptomatically

5. Fire-fighting measures

Suitable Extinguishing Media Water spray, carbon dioxide (CO2), dry chemical, alcohol-resistant foam. Water mist may be used to cool closed containers.

Unsuitable Extinguishing Media No information available

Flash Point 70 °C / 158 °F

Method - No information available

Autoignition Temperature 490 °C / 914 °F

Explosion Limits

Upper 11.5 vol %

Lower 1.7 vol %

Sensitivity to Mechanical Impact No information available

Sensitivity to Static Discharge No information available

Specific Hazards Arising from the Chemical

Combustible material. Containers may explode when heated. Keep product and empty container away from heat and sources of ignition. Thermal decomposition can lead to release of irritating gases and vapors.

Hazardous Combustion Products

Carbon monoxide (CO). Carbon dioxide (CO_2). Nitrogen oxides (NOx).

Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Thermal decomposition can lead to release of irritating gases and vapors.

NFPA

Health	Flammability	Instability	Physical hazards
2	2	1	N/A

6. Accidental release measures

Personal Precautions Use personal protective equipment as required. Ensure adequate ventilation. Keep people away from and upwind of spill/leak. Evacuate personnel to safe areas. Remove all sources of ignition. Take precautionary measures against static discharges.

Environmental Precautions Should not be released into the environment.

Methods for Containment and Clean Up Soak up with inert absorbent material. Keep in suitable, closed containers for disposal. Remove all sources of ignition.

7. Handling and Storage

Handling Wear personal protective equipment/face protection. Do not get in eyes, on skin, or on

clothing. Use only under a chemical fume hood. Do not breathe mist/vapors/spray. Do not ingest. If swallowed then seek immediate medical assistance. Keep away from open flames, hot surfaces and sources of ignition.

Storage. Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from heat, sparks and flame. Keep under nitrogen. Store under an inert atmosphere. Air sensitive. Incompatible Materials. Strong oxidizing agents. Aldehydes. Peroxides. Strong acids.

8. Exposure controls / personal protection

Exposure Guidelines

Component	ACGIH TLV	OSHA PEL	NIOSH	Mexico OEL (TWA)
Dimethyl acetamide	TWA: 10 ppm Skin	(Vacated) TWA: 10 ppm (Vacated) TWA: 35 mg/m³ Skin TWA: 10 ppm TWA: 35 mg/m³	IDLH: 300 ppm REL = 10 ppm (TWA) REL = 35 mg/m³ (TWA)	TWA: 10 ppm

Legend

ACGIH - American Conference of Governmental Industrial Hygienists
OSHA - Occupational Safety and Health Administration
NIOSH: NIOSH - National Institute for Occupational Safety and Health

Engineering Measures Ensure adequate ventilation, especially in confined areas. Use explosion-proof electrical/ventilating/lighting equipment. Ensure that eyewash stations and safety showers are close to the workstation location.

Personal Protective Equipment

Eye/face Protection Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin and body protection Wear appropriate protective gloves and clothing to prevent skin exposure.

Respiratory Protection Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Recommended Filter type: Organic gases and vapours filter. Type A. Brown. conforming to EN14387.

Hygiene Measures Handle in accordance with good industrial hygiene and safety practice.

9. Physical and chemical properties

Physical State	Liquid	
Appearance	Colorless	
Odor	Ammonia-like	
Odor Threshold	No information available	
pH	4	200 g/l aq. sol
Melting Point/Range	-20 °C / -4 °F	
Softening Point	No data available	
Boiling Point/Range	164 - 166 °C / 327.2 - 330.8 °F	@ 760 mmHg
Flash Point	70 °C / 158 °F	**Method -** No information available

Flammability (liquid)	Combustible liquid	On basis of test data
Flammability (solid,gas)	Not applicable	Liquid
Explosion Limits	**Lower** 1.7 vol%	
	Upper 11.5 vol%	
Autoignition Temperature	490 °C / 914 °F	
Decomposition Temperature	No data available	
Water Solubility	Soluble	
Solubility in other solvents	No information available	
Partition Coefficient (n-octanol/water)		
Component	**log Pow**	
Dimethyl acetamide	0.8	
Vapor Pressure	1.7 mbar @ 25 °C	
Density / Specific Gravity	0.937	
Bulk Density	Not applicable	Liquid
Vapor Density	3.02	(Air = 1.0)
Viscosity	1.02 mPa s @ 20 °C	
Particle characteristics	Not applicable (liquid)	

Molecular Formula	C4 H9 N O
Molecular Weight	87.12
Explosive Properties	explosive air/vapour mixtures possible
Evaporation Rate	<0.17 (Butyl Acetate = 1.0)

10. Stability and reactivity

Reactive Hazard None known, based on information available

Stability Stable under normal conditions. Hygroscopic.

Conditions to Avoid Incompatible products. Heat, flames and sparks. Exposure to moisture. Keep away from open flames, hot surfaces and sources of ignition. Exposure to moist air or water.

Incompatible Materials Strong oxidizing agents, Aldehydes, Peroxides, Strong acids

Hazardous Decomposition Products Carbon monoxide (CO), Carbon dioxide (CO_2), Nitrogen oxides (NOx)

Hazardous Polymerization Hazardous polymerization does not occur.

Hazardous Reactions None under normal processing.

11. Toxicological information

Information on expected route of exposure

Inhalation Avoid breathing vapors or mists. Harmful by inhalation.
Ingestion May be harmful if swallowed.
Eyes Avoid contact with eyes. Irritating to eyes. Vapor may cause irritation.
Skin Avoid contact with skin. May cause irritation. Prolonged skin contact may defat the skin and produce dermatitis.

Acute Toxicity

Product Information
Component Information

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Dimethyl acetamide	LD50 = 4263 mg/kg (Rat)	LD50 = 2100 mg/kg (Rabbit) OECD 402	LC50 = 8.81 mg/L (Rat) 1 h

Toxicologically Synergistic Products No information available

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Irritation Irritating to eyes

Sensitization No information available

Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen.

Component	CAS No	IARC	NTP	ACGIH	OSHA	Mexico
Dimethyl acetamide	127-19-5	Group 2B	Not listed	A3	X	Not listed

IARC (International Agency for Research on Cancer)

ACGIH: (American Conference of Governmental Industrial Hygienists)

IARC (International Agency for Research on Cancer)
Group 1 - Carcinogenic to Humans
Group 2A - Probably Carcinogenic to Humans
Group 2B - Possibly Carcinogenic to Humans
A1 - Known Human Carcinogen
A2 - Suspected Human Carcinogen
A3 - Animal Carcinogen
ACGIH: (American Conference of Governmental Industrial Hygienists)

Mutagenic Effects Not mutagenic in AMES Test

Reproductive Effects May cause harm to the unborn child.

Developmental Effects No information available.

Teratogenicity No information available.

STOT - single exposure None known
STOT - repeated exposure None known

Aspiration hazard No information available

Symptoms / effects,both acute and delayed Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting

Endocrine Disruptor Information No information available

Other Adverse Effects The toxicological properties have not been fully investigated.

12. Ecological information

Ecotoxicity
Do not empty into drains. .

Component	Freshwater Algae	Freshwater Fish	Microtox	Water Flea
Dimethyl acetamide	EC50 >500 mg/L/72h	Not listed	EC50 = 2393 mg/L 30 min EC50 = 4815 mg/L 5 min	EC50 >500 mg/L/48h

Persistence and Degradability Persistence is unlikely

Bioaccumulation/ Accumulation No information available.

Mobility . Will likely be mobile in the environment due to its water solubility.

Component	log Pow
Dimethyl acetamide	0.8

13. Disposal considerations

Waste Disposal Methods Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

14. Transport information

DOT COMBUSTIBLE LIQUID, NOT REGULATED FOR TRANSPORT IN THIS QUANTITY
According to 49 CFR §173.150(f)(1), this material should reclassified as NA1993, Combustible Liquid, NOS if it is shipped in bulk

UN-No	NA1993
Proper Shipping Name	Combustible liquid, n.o.s.
Packing Group	III
TDG	Not regulated
IATA	Not regulated
IMDG/IMO	Not regulated

15. Regulatory Information

United States of America Inventory

Component	CAS No	TSCA	TSCA Inventory notification - Active-Inactive	TSCA - EPA Regulatory Flags
Dimethyl acetamide	127-19-5	X	ACTIVE	-

Legend:
TSCA US EPA (TSCA) - Toxic Substances Control Act, (40 CFR Part 710)
X - Listed
'-' - Not Listed

TSCA - Per 40 CFR 751, Regulation of Certain Chemical Substances & Mixtures, Under TSCA Section 6(h) (PBT) Not applicable

TSCA 12(b) - Notices of Export Not applicable

International Inventories
China, X = listed, Australia, U.S.A. (TSCA), Canada (DSL/NDSL), Europe (EINECS/ELINCS/NLP), Australia (AICS), Korea (KECL), China (IECSC), Japan (ENCS), Philippines (PICCS), Taiwan (TCSI), Japan (ISHL), New Zealand (NZIoC), Japan (ISHL).

Component	CAS No	DSL	NDSL	EINECS	PICCS	ENCS	ISHL	AICS	IECSC	KECL
Dimethyl acetamide	127-19-5	X	-	204-826-4	X	X	X	X	X	KE-11114

KECL - NIER number or KE number (http://ncis.nier.go.kr/en/main.do)

U.S. 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
Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications.

CWA (Clean Water Act) Not applicable

Clean Air Act Not applicable

OSHA - Occupational Safety and Health Administration Not applicable

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.

California Proposition 65 This product contains the following Proposition 65 chemicals.

Component	CAS No	California Prop. 65	Prop 65 NSRL	Category
Dimethyl acetamide	127-19-5	Carcinogen Developmental Male Reproductive	-	Developmental Carcinogen

U.S. State Right-to-Know Regulations

Component	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Dimethyl acetamide	X	X	X	X	X

U.S. Department of Transportation

Reportable Quantity (RQ): N
DOT Marine Pollutant N
DOT Severe Marine Pollutant N

U.S. Department of Homeland Security This product does not contain any DHS chemicals.

Other International Regulations

Mexico - Grade Moderate risk, Grade 2

Authorisation/Restrictions according to EU REACH

Component	CAS No	REACH (1907/2006) - Annex XIV - Substances Subject to Authorization	REACH (1907/2006) - Annex XVII - Restrictions on Certain Dangerous Substances	REACH Regulation (EC 1907/2006) article 59 - Candidate List of Substances of Very High Concern (SVHC)
Dimethyl acetamide	127-19-5	-	Use restricted. See entry 72. (see link for restriction details) Use restricted. See entry 30. (see link for restriction details) Use restricted. See entry 75. (see link for restriction details)	SVHC Candidate list - Toxic for reproduction (Article 57 c)

After the sunset date the use of this substance requires either an authorization or can only be used for exempted uses, e.g. use in scientific research and development which includes routine analytics or use as intermediate.

REACH links
https://echa.europa.eu/authorisation-list
https://echa.europa.eu/substances-restricted-under-reach
https://echa.europa.eu/candidate-list-table

Safety, health and environmental regulations/legislation specific for the substance or mixture

Component	CAS No	OECD HPV	Persistent Organic Pollutant	Ozone Depletion Potential	Restriction of Hazardous Substances (RoHS)
Dimethyl acetamide	127-19-5	Listed	Not applicable	Not applicable	Not applicable

Contains component(s) that meet a 'definition' of per & poly fluoroalkyl substance (PFAS)?
Not applicable

Other International Regulations

Component	CAS No	Seveso III Directive (2012/18/EC) - Qualifying Quantities for Major Accident Notification	Seveso III Directive (2012/18/EC) - Qualifying Quantities for Safety Report Requirements	Rotterdam Convention (PIC)	Basel Convention (Hazardous Waste)
Dimethyl acetamide	127-19-5	Not applicable	Not applicable	Not applicable	Not applicable

16. Other Information

Prepared By
Regulatory Affairs
Thermo Fisher Scientific
Email: EMSDS.RA@thermofisher.com

Creation Date 06-Oct-2009
Revision Date 23-Oct-2025
Print Date 23-Oct-2025
Revision Summary This document has been updated to comply with the US OSHA HazCom 2012 Standard replacing the current legislation under 29 CFR 1910.1200 to align with the Globally Harmonized System of Classification and Labeling of Chemicals (GHS).

Disclaimer
The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text

End of SDS