

Safety Data Sheet acc. to OSHA HCS

Date of issue: 06/30/2026

Reviewed on 06/30/2026

1 Identification

- **Product identifier**
- **Trade name:** C-957
- **Other means of identification**
- **Application of the substance / the mixture** For Laboratory Use Only
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
NSI Lab Solutions
7212 ACC Blvd.,
Raleigh, NC 27617
USA
- **Information department:** Product safety department
- **Emergency telephone number:** During normal opening times: +1 (919) 789-3000

* 2 Hazard(s) identification

- **Classification of the substance or mixture**



GHS08 Health hazard

Carcinogenicity 2

H351 Suspected of causing cancer.

Reproductive toxicity 1B

H360 May damage fertility or the unborn child.



GHS07

Acute toxicity - inhalation 4 H332 Harmful if inhaled.

- **Label elements**
- **GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).
- **Hazard pictograms**



GHS07



GHS08

- **Signal word** Danger
- **Hazard-determining components of labeling:**
N,N-dimethylacetamide
butane, pure
- **Hazard statements**
Harmful if inhaled.
Suspected of causing cancer.
May damage fertility or the unborn child.

(Contd. on page 2)

Safety Data Sheet

acc. to OSHA HCS

Date of issue: 06/30/2026

Reviewed on 06/30/2026

Trade name: C-957

(Contd. of page 1)

· **Precautionary statements**

Obtain special instructions before use.

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

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

Use only outdoors or in a well-ventilated area.

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

If inhaled: Remove person to fresh air and keep comfortable for breathing.

IF exposed or concerned: Get medical advice/attention.

Call a poison center/doctor if you feel unwell.

Store locked up.

Dispose of contents/container in accordance with local/regional/national/international regulations.

· **Information pertaining to particular dangers for man and environment:**

· **Classification system:**

· **NFPA ratings (scale 0 - 4)**



· **HMIS-ratings (scale 0 - 4)**

HEALTH	2	Health = *2
FIRE	2	Fire = 2
REACTIVITY	0	Reactivity = 0

· **Other hazards**

· **Results of PBT and vPvB assessment**

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

· **Classification according to (d)(1)(ii) of § 1910.1200**

The SDS issuer does not object to the classifications provided by importers or manufacturers of precursor products.

· **Hazards not otherwise classified**

There are no adverse physical or health effects known that are not covered by the hazard classes of the Hazard Communications Standard.

* 3 Composition/information on ingredients

· **Chemical characterization: Mixtures**

· **Description:** Mixture of the substances listed below with nonhazardous additions.

· Dangerous components:		
127-19-5	N,N-dimethylacetamide	80–100%
· Non-hazardous components		
75-28-5	isobutane	0.1–1%
106-97-8	butane, pure	0.1–1%
74-98-6	propane	0.1–1%
75-21-8	ethylene oxide	<0.1%

— US —

(Contd. on page 3)

Safety Data Sheet

acc. to OSHA HCS

Date of issue: 06/30/2026

Reviewed on 06/30/2026

Trade name: C-957

(Contd. of page 2)

4 First-aid measures

- **Description of first aid measures**

- **General information:**

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

- **After inhalation:**

Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.
In case of unconsciousness place patient stably in side position for transportation.

- **After skin contact:** Generally the product does not irritate the skin.

- **After eye contact:** Rinse opened eye for several minutes under running water.

- **After swallowing:** If symptoms persist consult doctor.

- **Most important symptoms and effects, both acute and delayed** No further relevant information available.

- **Indication of any immediate medical attention and special treatment needed** No further relevant information available.

5 Fire-fighting measures

- **Extinguishing media**

- **Suitable extinguishing agents:**

CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

- **Special hazards arising from the substance or mixture** No further relevant information available.

- **Advice for firefighters**

- **Protective equipment:** Mouth respiratory protective device.

* 6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures** Not required.

- **Environmental precautions:** Do not allow to enter sewers/ surface or ground water.

- **Methods and material for containment and cleaning up:**

Dispose contaminated material as waste according to section 13.

Ensure adequate ventilation.

- **Protective Action Criteria for Chemicals**

· PAC-1:		
127-19-5	N,N-dimethylacetamide	30 ppm
75-28-5	isobutane	5500 ppm
106-97-8	butane, pure	5500 ppm
74-98-6	propane	5500 ppm
75-21-8	ethylene oxide	5.0 ppm
· PAC-2:		
127-19-5	N,N-dimethylacetamide	67 ppm
75-28-5	isobutane	17000 ppm
106-97-8	butane, pure	17000 ppm
74-98-6	propane	17000 ppm
75-21-8	ethylene oxide	45 ppm
· PAC-3:		
127-19-5	N,N-dimethylacetamide	400 ppm
75-28-5	isobutane	53000 ppm

(Contd. on page 4)

Safety Data Sheet

acc. to OSHA HCS

Date of issue: 06/30/2026

Reviewed on 06/30/2026

Trade name: C-957

(Contd. of page 3)

106-97-8	butane, pure	53000 ppm
74-98-6	propane	33000 ppm
75-21-8	ethylene oxide	200 ppm

· **Reference to other sections**

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

7 Handling and storage

· **Precautions for safe handling**

Thorough dedusting.

Ensure good ventilation/exhaustion at the workplace.

Open and handle receptacle with care.

· **Information about protection against explosions and fires:** Keep respiratory protective device available.

· **Conditions for safe storage, including any incompatibilities**

· **Storage:**

· **Requirements to be met by storerooms and receptacles:** No special requirements.

· **Information about storage in one common storage facility:** Not required.

· **Further information about storage conditions:** Keep receptacle tightly sealed.

· **Specific end use(s)** No further relevant information available.

* 8 Exposure controls/personal protection

· **Control parameters**

· **Components with limit values that require monitoring at the workplace:**

127-19-5 N,N-dimethylacetamide

PEL Long-term value: 35 mg/m³, 10 ppm

Skin

REL Long-term value: 35 mg/m³, 10 ppm

Skin

TLV Long-term value: 36 mg/m³, 10 ppm

Skin; BEI, A3

· **Ingredients with biological limit values:**

127-19-5 N,N-dimethylacetamide

BEI 30 mg/g creatinine

Medium: urine

Time: end of shift at end of workweek

Parameter: N-Methylacetamide

· **Additional information:** The lists that were valid during the creation were used as basis.

· **Exposure controls**

· **Appropriate engineering controls** No further data; see section 7.

· **Personal protective equipment:**

· **General protective and hygienic measures:**

Keep away from foodstuffs, beverages and feed.

Wash hands before breaks and at the end of work.

Store protective clothing separately.

(Contd. on page 5)

Safety Data Sheet

acc. to OSHA HCS

Date of issue: 06/30/2026

Reviewed on 06/30/2026

Trade name: C-957

(Contd. of page 4)

· **Breathing equipment:**

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

· **Protection of hands:**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· **Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· **Eye protection:** Not required.

· **Body protection:** Protective work clothing

* 9 Physical and chemical properties

· **Information on basic physical and chemical properties**

· **General Information**

· **Physical state**

Solid

· **Color:**

According to product specification

· **Odor:**

Characteristic

· **Odor threshold:**

Not determined.

· **Melting point/Melting range:**

-20 °C (-4 °F)

· **Boiling point/Boiling range:**

165.5 °C (329.9 °F)

· **Flammability:**

Not determined.

· **Explosion limits:**

· **Lower:**

1.7 Vol %

· **Upper:**

11.5 Vol %

· **Flash point:**

66 °C (150.8 °F)

· **Auto igniting:**

390 °C (734 °F)

· **Decomposition temperature:**

Not determined.

· **pH-value:**

Not applicable.

· **Viscosity:**

· **Kinematic:**

Not applicable.

· **Dynamic:**

Not applicable.

· **Solubility in / Miscibility with**

· **Water:**

Soluble.

· **Partition coefficient (n-octanol/water):**

Not determined.

· **Vapor pressure at 20 °C (68 °F):**

3.3 hPa (2.5 mm Hg)

· **Vapor pressure:**

· **Density at 20 °C (68 °F):**

0.9347 g/cm³ (7.80007 lbs/gal)

· **Relative density**

Not determined.

· **Vapor density**

Not applicable.

· **Particle characteristics**

Not determined.

(Contd. on page 6)

Safety Data Sheet

acc. to OSHA HCS

Date of issue: 06/30/2026

Reviewed on 06/30/2026

Trade name: C-957

(Contd. of page 5)

· Other information	
· Appearance:	
· Form:	Solid
· Important information on protection of health and environment, and on safety.	
· Ignition temperature:	Product is not selfigniting.
· Danger of explosion:	Product does not present an explosion hazard.
· Solvent content:	
· Organic solvents:	0.7 %
· VOC content:	1.25 %
· Solids content:	98.7 %
· Change in condition	
· Evaporation rate	Not applicable.

10 Stability and reactivity

- **Reactivity** No further relevant information available.
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known.

*11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**

· LD/LC50 values that are relevant for classification:		
ATE (Acute Toxicity Estimate)		
Dermal	LD50	2,268 mg/kg (rabbit)
Inhalative	LC50/4 h	1.52 mg/l

127-19-5 N,N-dimethylacetamide		
Oral	LD50	4,930 mg/kg (rat)
Dermal	LD50	2,240 mg/kg (rabbit)

- **Primary irritant effect:**
- **on the skin:** No irritant effect.
- **on the eye:** No irritating effect.
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:**
The product shows the following dangers according to internally approved calculation methods for preparations:
Harmful
- **Interactive effects** No interactive effects between components are known.
- **Carcinogenic categories**

· IARC (International Agency for Research on Cancer)		
127-19-5	N,N-dimethylacetamide	2B
75-21-8	ethylene oxide	I

(Contd. on page 7)

US —

Safety Data Sheet

acc. to OSHA HCS

Date of issue: 06/30/2026

Reviewed on 06/30/2026

Trade name: C-957

(Contd. of page 6)

· NTP (National Toxicology Program)		
75-21-8	ethylene oxide	K
· OSHA-Ca (Occupational Safety & Health Administration)		
75-21-8	ethylene oxide	
· Alternative sources for toxicological information No non-standard sources for toxicological information where used.		

12 Ecological information

- **Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects**
- **Additional ecological information:**
- **General notes:**
 Water hazard class 2 (Self-assessment): hazardous for water
 Do not allow product to reach ground water, water course or sewage system.
 Danger to drinking water if even small quantities leak into the ground.

13 Disposal considerations

- **Waste treatment methods**
- **Recommendation:**
 Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleansing agent:** Water, if necessary with cleansing agents.

14 Transport information

· UN-Number	
· DOT, IMDG, IATA	not regulated
· UN proper shipping name	
· DOT, IMDG, IATA	not regulated
· Transport hazard class(es)	
· DOT, ADN, IMDG, IATA	
· Class	not regulated
· Packing group	
· DOT, IMDG, IATA	not regulated
· Environmental hazards:	Not applicable.

(Contd. on page 8)

Safety Data Sheet

acc. to OSHA HCS

Date of issue: 06/30/2026

Reviewed on 06/30/2026

Trade name: C-957

(Contd. of page 7)

· Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	Not applicable.
· Special precautions for user	Not applicable.
· UN "Model Regulation":	not regulated

15 Regulatory information

· Safety, health and environmental regulations/legislation specific for the substance or mixture No further relevant information available.		
· Sara		
· Section 355 (extremely hazardous substances):		
75-21-8	ethylene oxide	
· Section 313 (Specific toxic chemical listings):		
75-21-8	ethylene oxide	
· TSCA (Toxic Substances Control Act):		
All components have the value ACTIVE.		
· Hazardous Air Pollutants		
75-21-8	ethylene oxide	
· Proposition 65		
· Chemicals known to cause cancer:		
127-19-5	N,N-dimethylacetamide	
75-21-8	ethylene oxide	
· Chemicals known to cause reproductive toxicity for females:		
75-21-8	ethylene oxide	
· Chemicals known to cause reproductive toxicity for males:		
127-19-5	N,N-dimethylacetamide	
75-21-8	ethylene oxide	
· Chemicals known to cause developmental toxicity:		
127-19-5	N,N-dimethylacetamide	
75-21-8	ethylene oxide	
· Carcinogenic categories		
· EPA (Environmental Protection Agency)		
75-21-8	ethylene oxide	CaH
· TLV (Threshold Limit Value)		
127-19-5	N,N-dimethylacetamide	A4
75-21-8	ethylene oxide	A2
· NIOSH-Ca (National Institute for Occupational Safety and Health)		
75-21-8	ethylene oxide	
· GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS).		

(Contd. on page 9)

Safety Data Sheet

acc. to OSHA HCS

Date of issue: 06/30/2026

Reviewed on 06/30/2026

Trade name: C-957

(Contd. of page 8)

· Hazard pictograms



GHS07 GHS08

· Signal word Danger

· Hazard-determining components of labeling:

N,N-dimethylacetamide
butane, pure

· Hazard statements

Harmful if inhaled.
Suspected of causing cancer.
May damage fertility or the unborn child.

· Precautionary statements

Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Avoid breathing dust/fume/gas/mist/vapors/spray
Use only outdoors or in a well-ventilated area.
Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.
If inhaled: Remove person to fresh air and keep comfortable for breathing.
If exposed or concerned: Get medical advice/attention.
Call a poison center/doctor if you feel unwell.
Store locked up.
Dispose of contents/container in accordance with local/regional/national/international regulations.

· Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· Department issuing SDS: Environment protection department.

· Contact: - Department Technical Manager

· Date of previous version 03/04/2024

· Date of preparation 06/30/2026

· Abbreviations and acronyms:

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
DOT: US Department of Transportation
IATA: International Air Transport Association
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
NFPA: National Fire Protection Association (USA)
HMIS: Hazardous Materials Identification System (USA)
VOC: Volatile Organic Compounds (USA, EU)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
NIOSH: National Institute for Occupational Safety
OSHA: Occupational Safety & Health
TLV: Threshold Limit Value
PEL: Permissible Exposure Limit
REL: Recommended Exposure Limit

(Contd. on page 10)

Safety Data Sheet

acc. to OSHA HCS

Date of issue: 06/30/2026

Reviewed on 06/30/2026

Trade name: C-957

(Contd. of page 9)

BEI: Biological Exposure Limit

Acute toxicity - inhalation 4: Acute toxicity – Category 4

Carcinogenicity 2: Carcinogenicity – Category 2

Reproductive toxicity 1B: Reproductive toxicity – Category 1B

· *** Data compared to the previous version altered.**

— US —