



Safety Data Sheet

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SECTION 1: Identification

1.1. Product identifier

3M™ Adhesive LS Cartridge DS-2072

Product Identification Numbers

98-0212-3436-8

1.2. Recommended use and restrictions on use

Recommended use

Adhesive

1.3. Supplier's details

MANUFACTURER:	3M
DIVISION:	Advanced Materials Division
ADDRESS:	3M Center, St. Paul, MN 55144-1000, USA
Telephone:	1-888-3M HELPS (1-888-364-3577)

1.4. Emergency telephone number

1-800-364-3577 or (651) 737-6501 (24 hours)

SECTION 2: Hazard identification

2.1. Hazard classification

Acute Toxicity (oral): Category 4.
Acute Toxicity (dermal): Category 4.
Serious Eye Damage/Irritation: Category 2A.

2.2. Label elements

Signal word

Warning

Symbols

Exclamation mark |

Pictograms

**Hazard Statements**

Harmful if swallowed.
 Harmful in contact with skin.
 Causes serious eye irritation.

Precautionary Statements**Prevention:**

Wear eye/face protection.
 Wear protective gloves and protective clothing.
 Do not eat, drink or smoke when using this product.
 Wash thoroughly after handling.

Response:

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.
 IF ON SKIN: Wash with plenty of soap and water.
 Take off contaminated clothing and wash it before reuse.
 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
 Rinse mouth.
 Call a POISON CENTER or doctor/physician if you feel unwell.

Disposal:

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

2.3. Hazards not otherwise classified

None.

99% of the mixture consists of ingredients of unknown acute oral toxicity.
 99% of the mixture consists of ingredients of unknown acute dermal toxicity.
 2% of the mixture consists of ingredients of unknown acute inhalation toxicity.

SECTION 3: Composition/information on ingredients

Ingredient	C.A.S. No.	% by Wt
Sodium dodecylbenzenesulfonate	25155-30-0	1 - 2
Water	7732-18-5	< 1
Isooctyl Acrylate	29590-42-9	< 0.5
Acrylonitrile	107-13-1	< 0.1
Acrylate copolymer	Trade Secret*	> 96

*The specific chemical identity and/or exact percentage (concentration) of this composition has been withheld as a trade secret.

SECTION 4: First aid measures**4.1. Description of first aid measures**

Inhalation:

No need for first aid is anticipated.

Skin Contact:

Wash with soap and water. If signs/symptoms develop, get medical attention.

Eye Contact:

Immediately flush with large amounts of water. Remove contact lenses if easy to do. Continue rinsing. Get medical attention.

If Swallowed:

Rinse mouth. If you feel unwell, get medical attention.

4.2. Most important symptoms and effects, both acute and delayed

See Section 11.1. Information on toxicological effects.

4.3. Indication of any immediate medical attention and special treatment required

Not applicable

SECTION 5: Fire-fighting measures

5.1. Suitable extinguishing media

In case of fire: Use a fire fighting agent suitable for ordinary combustible material such as water or foam to extinguish.

5.2. Special hazards arising from the substance or mixture

None inherent in this product.

Hazardous Decomposition or By-Products

Substance

Carbon monoxide
Carbon dioxide
Hydrogen Sulfide
Oxides of Sulfur

Condition

During Combustion
During Combustion
During Combustion
During Combustion

5.3. Special protective actions for fire-fighters

No special protective actions for fire-fighters are anticipated.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Evacuate area. Ventilate the area with fresh air. Refer to other sections of this SDS for information regarding physical and health hazards, respiratory protection, ventilation, and personal protective equipment.

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

Collect as much of the spilled material as possible. Place in a closed container approved for transportation by appropriate authorities. Clean up residue. Seal the container. Dispose of collected material as soon as possible.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Avoid eye contact. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Avoid release to the environment. Wash contaminated clothing before reuse.

7.2. Conditions for safe storage including any incompatibilities

No special storage requirements.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits

If a component is disclosed in section 3 but does not appear in the table below, an occupational exposure limit is not available for the component.

Ingredient	C.A.S. No.	Agency	Limit type	Additional Comments
Acrylonitrile	107-13-1	ACGIH	TWA:2 ppm	A3: Confirmed animal carcin., SKIN
Acrylonitrile	107-13-1	OSHA	TWA:2 ppm;STEL:10 ppm	SKIN, 29 CFR 1910.1045
Isooctyl Acrylate	29590-42-9	Manufacturer determined	TWA:5 ppm	
Isooctyl Acrylate	29590-42-9	AIHA	TWA:37.5 mg/m ³ (5 ppm)	

ACGIH : American Conference of Governmental Industrial Hygienists

AIHA : American Industrial Hygiene Association

CMRG : Chemical Manufacturer's Recommended Guidelines

OSHA : United States Department of Labor - Occupational Safety and Health Administration

TWA: Time-Weighted-Average

STEL: Short Term Exposure Limit

CEIL: Ceiling

8.2. Exposure controls

8.2.1. Engineering controls

Use general dilution ventilation and/or local exhaust ventilation to control airborne exposures to below relevant Exposure Limits and/or control dust/fume/gas/mist/vapors/spray. If ventilation is not adequate, use respiratory protection equipment.

8.2.2. Personal protective equipment (PPE)

Eye/face protection

Select and use eye/face protection to prevent contact based on the results of an exposure assessment. The following eye/face protection(s) are recommended:

Indirect Vented Goggles

Skin/hand protection

Select and use gloves and/or protective clothing approved to relevant local standards to prevent skin contact based on the results of an exposure assessment. Selection should be based on use factors such as exposure levels, concentration of the substance or mixture, frequency and duration, physical challenges such as temperature extremes, and other use conditions. Consult with your glove and/or protective clothing manufacturer for selection of appropriate compatible gloves/protective clothing.

Gloves made from the following material(s) are recommended: Polymer laminate

Respiratory protection

An exposure assessment may be needed to decide if a respirator is required. If a respirator is needed, use respirators as part of a full respiratory protection program. Based on the results of the exposure assessment, select from the following respirator type(s) to reduce inhalation exposure:

Half facepiece or full facepiece air-purifying respirator suitable for organic vapors and particulates

For questions about suitability for a specific application, consult with your respirator manufacturer.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

General Physical Form:	Solid
Specific Physical Form:	Solid gel
Odor, Color, Grade:	Creamy brown with slight acrylate odor.
Odor threshold	<i>No Data Available</i>
pH	<i>Not Applicable</i>
Melting point	<i>No Data Available</i>
Boiling Point	<i>Not Applicable</i>
Flash Point	No flash point
Evaporation rate	<i>Not Applicable</i>
Flammability (solid, gas)	Not Classified
Flammable Limits(LEL)	<i>Not Applicable</i>
Flammable Limits(UEL)	<i>Not Applicable</i>
Vapor Pressure	<i>Not Applicable</i>
Vapor Density	<i>Not Applicable</i>
Density	1.01 g/cm ³
Specific Gravity	1.01 [<i>Ref Std: WATER=1</i>]
Solubility in Water	Negligible
Solubility- non-water	<i>No Data Available</i>
Partition coefficient: n-octanol/ water	<i>No Data Available</i>
Autoignition temperature	<i>No Data Available</i>
Decomposition temperature	<i>No Data Available</i>
Viscosity	<i>Not Applicable</i>
Volatile Organic Compounds	<i>No Data Available</i>
Percent volatile	<=3 %
VOC Less H ₂ O & Exempt Solvents	<i>No Data Available</i>

SECTION 10: Stability and reactivity

10.1. Reactivity

This material is considered to be non reactive under normal use conditions.

10.2. Chemical stability

Stable.

10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur.

10.4. Conditions to avoid

None known.

10.5. Incompatible materials

None known.

10.6. Hazardous decomposition products

<u>Substance</u>	<u>Condition</u>
None known.	

Refer to section 5.2 for hazardous decomposition products during combustion.

SECTION 11: Toxicological information

The information below may not be consistent with the material classification in Section 2 if specific ingredient classifications are mandated by a competent authority. In addition, toxicological data on ingredients may not be reflected in the material classification and/or the signs and symptoms of exposure, because an ingredient may be present below the threshold for labeling, an ingredient may not be available for exposure, or the data may not be relevant to the material as a whole.

11.1. Information on Toxicological effects

Signs and Symptoms of Exposure

Based on test data and/or information on the components, this material may produce the following health effects:

Inhalation:

No known health effects.

Skin Contact:

Harmful in contact with skin. Mild Skin Irritation: Signs/symptoms may include localized redness, swelling, itching, and dryness.

Eye Contact:

Severe Eye Irritation: Signs/symptoms may include significant redness, swelling, pain, tearing, cloudy appearance of the cornea, and impaired vision.

Ingestion:

Harmful if swallowed. Gastrointestinal Irritation: Signs/symptoms may include abdominal pain, stomach upset, nausea, vomiting and diarrhea.

Toxicological Data

If a component is disclosed in section 3 but does not appear in a table below, either no data are available for that endpoint or the data are not sufficient for classification.

Acute Toxicity

Name	Route	Species	Value
Overall product	Dermal		No data available; calculated ATE 1,000 - 2,000 mg/kg
Overall product	Inhalation-Vapor(4 hr)		No data available; calculated ATE > 50 mg/l
Overall product	Ingestion		No data available; calculated ATE 300 - 2,000 mg/kg
Sodium dodecylbenzenesulfonate	Dermal	Rat	LD50 > 2,000 mg/kg
Sodium dodecylbenzenesulfonate	Ingestion	Rat	LD50 1,260 mg/kg
Isooctyl Acrylate	Dermal	Rabbit	LD50 > 2,000 mg/kg
Isooctyl Acrylate	Ingestion	Rat	LD50 > 5,000 mg/kg
Acrylonitrile	Dermal	Rabbit	LD50 226 mg/kg
Acrylonitrile	Inhalation-Vapor (4 hours)	Rat	LC50 2 mg/l
Acrylonitrile	Ingestion	Rat	LD50 93 mg/kg

ATE = acute toxicity estimate

Skin Corrosion/Irritation

Name	Species	Value
Sodium dodecylbenzenesulfonate	Rabbit	Irritant
Isooctyl Acrylate	In vitro	No significant irritation

Acrylonitrile	data	
	Rabbit	Irritant

Serious Eye Damage/Irritation

Name	Species	Value
Sodium dodecylbenzenesulfonate	Rabbit	Corrosive
Isooctyl Acrylate	similar health hazards	Mild irritant
Acrylonitrile	Rabbit	Corrosive

Skin Sensitization

Name	Species	Value
Sodium dodecylbenzenesulfonate	Guinea pig	Some positive data exist, but the data are not sufficient for classification
Isooctyl Acrylate	Mouse	Sensitizing
Acrylonitrile	Human and animal	Sensitizing

Respiratory Sensitization

For the component/components, either no data are currently available or the data are not sufficient for classification.

Germ Cell Mutagenicity

Name	Route	Value
Sodium dodecylbenzenesulfonate	In Vitro	Not mutagenic
Sodium dodecylbenzenesulfonate	In vivo	Not mutagenic
Isooctyl Acrylate	In Vitro	Some positive data exist, but the data are not sufficient for classification
Acrylonitrile	In Vitro	Some positive data exist, but the data are not sufficient for classification
Acrylonitrile	In vivo	Some positive data exist, but the data are not sufficient for classification

Carcinogenicity

Name	Route	Species	Value
Sodium dodecylbenzenesulfonate	Dermal	Mouse	Not carcinogenic
Sodium dodecylbenzenesulfonate	Ingestion	Rat	Not carcinogenic
Isooctyl Acrylate	Dermal	Mouse	Not carcinogenic
Acrylonitrile	Ingestion	Rat	Carcinogenic
Acrylonitrile	Inhalation	Rat	Carcinogenic

Reproductive Toxicity

Reproductive and/or Developmental Effects

Name	Route	Value	Species	Test Result	Exposure Duration
Sodium dodecylbenzenesulfonate	Ingestion	Not toxic to female reproduction	Rat	NOAEL 350 mg/kg/day	3 generation
Sodium dodecylbenzenesulfonate	Ingestion	Not toxic to male reproduction	Rat	NOAEL 350 mg/kg/day	3 generation
Sodium dodecylbenzenesulfonate	Dermal	Some positive developmental data exist, but the data are not sufficient for classification	Mouse	NOAEL 1,500 mg/kg/day	during organogenesis
Sodium dodecylbenzenesulfonate	Ingestion	Some positive developmental data exist, but the data are not sufficient for classification	Mouse	LOAEL 300 mg/kg/day	during organogenesis
Isooctyl Acrylate	Dermal	Not toxic to female reproduction	Rat	NOAEL 57 mg/kg/day	prematuring & during gestation
Isooctyl Acrylate	Dermal	Not toxic to male reproduction	Rat	NOAEL 57	prematuring &

				mg/kg/day	during gestation
Isooctyl Acrylate	Dermal	Not toxic to development	Rat	NOAEL 57 mg/kg/day	prematuring & during gestation
Isooctyl Acrylate	Ingestion	Some positive developmental data exist, but the data are not sufficient for classification	Rat	NOAEL 1,000 mg/kg/day	during organogenesis
Acrylonitrile	Ingestion	Not toxic to female reproduction	Rat	NOAEL 35 mg/kg/day	3 generation
Acrylonitrile	Ingestion	Some positive male reproductive data exist, but the data are not sufficient for classification	Mouse	LOAEL 10 mg/kg/day	60 days
Acrylonitrile	Ingestion	Some positive developmental data exist, but the data are not sufficient for classification	Rat	NOAEL 25 mg/kg/day	during organogenesis
Acrylonitrile	Inhalation	Some positive developmental data exist, but the data are not sufficient for classification	Rat	NOAEL 0.09 mg/l	during organogenesis

Target Organ(s)

Specific Target Organ Toxicity - single exposure

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
Isooctyl Acrylate	Inhalation	respiratory irritation	All data are negative	Human	NOAEL Not available	occupational exposure
Isooctyl Acrylate	Ingestion	central nervous system depression	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 5,000 mg/kg	
Acrylonitrile	Dermal	nervous system	Causes damage to organs	Human	NOAEL Not available	occupational exposure
Acrylonitrile	Inhalation	nervous system	Causes damage to organs	Human	NOAEL Not available	occupational exposure
Acrylonitrile	Inhalation	liver	May cause damage to organs	Human	NOAEL Not available	occupational exposure
Acrylonitrile	Inhalation	respiratory irritation	May cause respiratory irritation	Human	NOAEL Not available	occupational exposure
Acrylonitrile	Inhalation	heart	Some positive data exist, but the data are not sufficient for classification	Human	NOAEL Not available	poisoning and/or abuse
Acrylonitrile	Inhalation	blood	Some positive data exist, but the data are not sufficient for classification	Human	NOAEL Not available	occupational exposure
Acrylonitrile	Ingestion	nervous system	Causes damage to organs	Rat	NOAEL Not available	
Acrylonitrile	Ingestion	endocrine system	May cause damage to organs	Rat	NOAEL Not available	
Acrylonitrile	Ingestion	blood	Some positive data exist, but the data are not sufficient for classification	Multiple animal species	NOAEL Not available	

Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
Sodium dodecylbenzenesulfonate	Ingestion	kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 40 mg/kg/day	6 months
Sodium dodecylbenzenesulfonate	Ingestion	hematopoietic system liver	Some positive data exist, but the data are not sufficient for classification	Dog	NOAEL 150 mg/kg/day	6 months
Isooctyl Acrylate	Dermal	heart endocrine system hematopoietic system liver immune system	All data are negative	Rat	NOAEL 57 mg/kg/day	prematuring & during gestation

		nervous system kidney and/or bladder respiratory system				
Isooctyl Acrylate	Ingestion	endocrine system liver kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 600 mg/kg/day	90 days
Isooctyl Acrylate	Ingestion	heart bone, teeth, nails, and/or hair hematopoietic system immune system muscles nervous system eyes respiratory system vascular system	All data are negative	Rat	NOAEL 600 mg/kg/day	90 days
Acrylonitrile	Inhalation	nervous system	Causes damage to organs through prolonged or repeated exposure	Human	NOAEL Not available	occupational exposure
Acrylonitrile	Inhalation	respiratory system	May cause damage to organs though prolonged or repeated exposure	Rat	LOAEL 0.045 mg/l	2 years
Acrylonitrile	Inhalation	heart kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 0.18 mg/l	2 years
Acrylonitrile	Inhalation	blood liver immune system	Some positive data exist, but the data are not sufficient for classification	Human	NOAEL Not available	occupational exposure
Acrylonitrile	Ingestion	nervous system	May cause damage to organs though prolonged or repeated exposure	Rat	NOAEL 25 mg/kg/day	12 weeks
Acrylonitrile	Ingestion	endocrine system	May cause damage to organs though prolonged or repeated exposure	Rat	NOAEL 14 mg/kg/day	60 days
Acrylonitrile	Ingestion	liver	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 25 mg/kg/day	2 years
Acrylonitrile	Ingestion	heart	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 14 mg/kg/day	2 years
Acrylonitrile	Ingestion	blood	Some positive data exist, but the data are not sufficient for classification	Rat	LOAEL 14 mg/kg/day	2 years
Acrylonitrile	Ingestion	kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Multiple animal species	NOAEL Not available	not available
Acrylonitrile	Ingestion	respiratory system	All data are negative	Rat	NOAEL 25 mg/kg	2 years

Aspiration Hazard

For the component/components, either no data are currently available or the data are not sufficient for classification.

Please contact the address or phone number listed on the first page of the SDS for additional toxicological information on this material and/or its components.

SECTION 12: Ecological information

Ecotoxicological information

Please contact the address or phone number listed on the first page of the SDS for additional ecotoxicological information on this material and/or its components.

Chemical fate information

Please contact the address or phone number listed on the first page of the SDS for additional chemical fate information on this material and/or its components.

SECTION 13: Disposal considerations

13.1. Disposal methods

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

Dispose of waste product in a permitted industrial waste facility. As a disposal alternative, incinerate in a permitted waste incineration facility. Proper destruction may require the use of additional fuel during incineration processes. Empty drums/barrels/containers used for transporting and handling hazardous chemicals (chemical substances/mixtures/preparations classified as Hazardous as per applicable regulations) shall be considered, stored, treated & disposed of as hazardous wastes unless otherwise defined by applicable waste regulations. Consult with the respective regulating authorities to determine the available treatment and disposal facilities.

EPA Hazardous Waste Number (RCRA): Not regulated

SECTION 14: Transport Information

For Transport Information, please visit <http://3M.com/Transportinfo> or call 1-800-364-3577 or 651-737-6501.

SECTION 15: Regulatory information

15.1. US Federal Regulations

Contact 3M for more information.

311/312 Hazard Categories:

Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No Immediate Hazard - Yes Delayed Hazard - No

15.2. State Regulations

Contact 3M for more information.

15.3. Chemical Inventories

The components of this product are in compliance with the new substance notification requirements of CEPA.

The components of this material are in compliance with the China "Measures on Environmental Management of New Chemical Substance". Certain restrictions may apply. Contact the selling division for additional information.

The components of this material are in compliance with the provisions of Japan Industrial Safety and Health Law. Certain restrictions may apply. Contact the selling division for additional information.

The components of this material are in compliance with the provisions of Japan Chemical Substance Control Law. Certain restrictions may apply. Contact the selling division for additional information.

The components of this product are in compliance with the chemical notification requirements of TSCA.

Contact 3M for more information.

15.4. International Regulations

Contact 3M for more information.

This SDS has been prepared to meet the U.S. OSHA Hazard Communication Standard, 29 CFR 1910.1200.

SECTION 16: Other information

NFPA Hazard Classification

Health: 2 Flammability: 1 Instability: 0 Special Hazards: None

National Fire Protection Association (NFPA) hazard ratings are designed for use by emergency response personnel to address the hazards that are presented by short-term, acute exposure to a material under conditions of fire, spill, or similar emergencies. Hazard ratings are primarily based on the inherent physical and toxic properties of the material but also include the toxic properties of combustion or decomposition products that are known to be generated in significant quantities.

HMIS Hazard Classification

Health: 2 Flammability: 1 Physical Hazard: 0 Personal Protection: X - See PPE section.

Hazardous Material Identification System (HMIS® IV) hazard ratings are designed to inform employees of chemical hazards in the workplace. These ratings are based on the inherent properties of the material under expected conditions of normal use and are not intended for use in emergency situations. HMIS® IV ratings are to be used with a fully implemented HMIS® IV program. HMIS® is a registered mark of the American Coatings Association (ACA).

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