

Safety Data Sheet (SDS)

Jem Chemical Company

Jem Strip 427

SDS Number: 133

Revision Date: 2/5/2015

Page 1 of 10

1 PRODUCT AND COMPANY IDENTIFICATION

Manufacturer

Jem Chemical Company
814 Castro St.
San Leandro, CA 94577

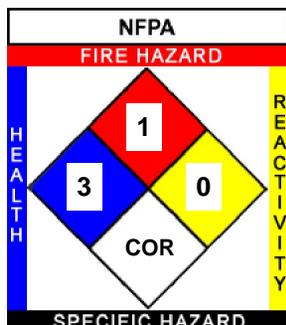
Contact: Jem Chemical Company
Phone: +1-888-243-6249 // +1-925-634-8248
Fax: +1-925-634-1896
Email: chembiz@earthlink.net
Web: www.jemchemical.com

Product Name: Jem Strip 427
Revision Date: 2/5/2015
Version: 1
SDS Number: 133
Common Name: Mild Alkaline Organic Solvent Mixture
CAS Number: MIXTURE
Product Code: JE-427A
Chemical Family: Mild Alkaline Organic Solvent Mixture
Chemical Formula: *** PROPRIETARY ***
Synonyms: Organic Stripper
Product Use: Hot Tank Stripper with Oil Seal: Powerful immersion paint remover that quickly strips painted, powder-coated, and electroplated surfaces.
Emergency Phone: +1-800-424-9300 (CHEMTREC)

2 HAZARDS IDENTIFICATION

NFPA:
HMIS III:

Health = 3, Fire = 1, Reactivity = 0
H*3/F1/PH0



HMIS III	
HEALTH	3
FLAMMABILITY	1
PHYSICAL HAZARDS	0
PERSONAL PROTECTION H Splash Goggles, Gloves, Apron, Vapor Respirator	

PERSONAL PROTECTION INDEX			
A	Goggles	G	Goggles + Gloves + Respirator
B	Goggles + Gloves	H	Goggles + Gloves + Apron + Respirator
C	Goggles + Gloves + Apron	I	Goggles + Gloves + Respirator
D	Goggles + Gloves + Apron + Respirator	J	Goggles + Gloves + Apron + Respirator
E	Goggles + Gloves + Respirator	K	Goggles + Gloves + Apron + Boots
F	Goggles + Gloves + Apron + Respirator	X	Consult your supervisor or S.O.P. for "SPECIAL" handling directions
A	Safety Glasses	n	Splash Goggles
O	Face Shield & Eye Protection	p	Gloves
q	Boots	r	Synthetic Apron
s	Full Suit	t	Dust Respirator
u	Vapor Respirator	w	Dust & Vapor Respirator
y	Full Face Respirator	z	Airline Hood or Mask
Additional Information			

Safety Data Sheet (SDS)

Jem Chemical Company

Jem Strip 427

SDS Number: 133

Revision Date: 2/5/2015

Page 2 of 10

GHS Signal Word:

DANGER

GHS Hazard Pictograms:



GHS Classifications:

Health, Acute toxicity, 4 Oral
Health, Aspiration hazard, 1
Health, Acute toxicity, 4 Dermal
Health, Skin corrosion/irritation, 1 B
Health, Acute toxicity, 4 Inhalation
Health, Specific target organ toxicity - Single exposure, 3
Health, Reproductive toxicity, 1

GHS Phrases:

H302 - Harmful if swallowed
H304 - May be fatal if swallowed and enters airways
H312 - Harmful in contact with skin
H314 - Causes severe skin burns and eye damage
H332 - Harmful if inhaled
H335 - May cause respiratory irritation
H360 - May damage fertility or the unborn child

GHS Precautionary Statements:

P201 - Obtain special instructions before use.
P202 - Do not handle until all safety precautions have been read and understood.
P210 - Keep away from heat/sparks/open flames/hot surfaces. No smoking
P260 - Do not breathe dust/fume/gas/mist/vapors/spray.
P262 - Do not get in eyes, on skin, or on clothing.
P264 - Wash skin thoroughly after handling.
P270 - Do not eat, drink or smoke when using this product.
P271 - Use only outdoors or in a well-ventilated area.
P273 - Avoid release to the environment.
P280 - Wear protective gloves/protective clothing/eye protection/face protection.
P301+310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P301+330+331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303+361+353 - IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304+340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P305+351+338 - IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.
P321 - Specific treatment (see supplementary first aid instructions on this label).
P362 - Take off contaminated clothing and wash before reuse.
P403+233 - Store in a well ventilated place. Keep container tightly closed.
P403+235 - Store in a well ventilated place. Keep cool.
P405 - Store locked up.
P501 - Dispose of contents/container to an approved waste disposal plant.

Safety Data Sheet (SDS)

Jem Chemical Company

Jem Strip 427

SDS Number: 133

Revision Date: 2/5/2015

Page 3 of 10

3 COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients:

Cas #	Percentage	Chemical Name
872-50-4	<60%	n-Methyl-2-pyrrolidone
141-43-5	<20%	Ethanol, 2-amino-
64742-65-0	<10%	Distillates, petroleum, solvent-dewaxed heavy paraffinic
427879-79-0	<5%	D-Gluconic acid, compound with 2,2',2"-nitrilotrisethanol (1:1)
20405-61-2	<5%	D-Gluconic acid, compound with aminoethanol (1:1)
9016-45-9	<5%	Poly(oxy-1,2-ethanediyl), .alpha.-(nonylphenyl)-.omega.-hydroxy-
N/A	>5	Proprietary, non-hazardous, non-regulated

4 FIRST AID MEASURES

- Inhalation:** Give oxygen or artificial respiration if needed. If symptoms develop, move victim to fresh air. If symptoms persist, obtain medical attention.
- Skin Contact:** Take off contaminated clothing and shoes immediately. Promptly flush skin with water for at least 15 minutes to ensure all chemical is removed. If reddening develops and/or persists, obtain medical attention.
- Eye Contact:** Flush with large amounts of water for at least 15 minutes, lifting upper and lower lids occasionally. Get immediate medical attention. Continue rinsing eyes during transport to hospital.
- Ingestion:** Rinse mouth with water. Give 3-4 glasses of water or milk to dilute stomach contents. Do NOT induce vomiting. If vomiting occurs, give more water or milk. Never give anything by mouth to an unconscious person. Get immediate medical attention.

Most important symptoms and effects, both acute and delayed:

The most important known symptoms and effects are described in the labelling (see Section 2) and/or Section 11. This material has as aspiration hazard. Any potential danger from aspiration must be weighed against possible oral toxicity when determining whether to induce vomiting. Consider activated charcoal and/or gastric lavage. Any aspirated material may contain corrosive and toxic material, which may contribute to lung damage due to aspiration.

Indication of any immediate medical attention and special treatment needed:

No data available.

5 FIRE FIGHTING MEASURES

Flammability:	Not determined
Flash Point:	> 300° F (148.9° C)
Flash Point Method:	(TCC)
Burning Rate:	No data available
Autoignition Temp:	No data available
LEL:	No data available
UEL:	No data available

Extinguishing Media:

Carbon Dioxide
Alcohol-Resistant Foam
Dry Chemical

Special Hazards Arising From the Substance or Mixture:

Safety Data Sheet (SDS)

Jem Chemical Company

Jem Strip 427

SDS Number: 133

Revision Date: 2/5/2015

Page 4 of 10

Carbon Oxides
Hydrocarbon particulate
Nitrogen Oxides (NOx)

Advice for Firefighters:

Firefighters should wear full-face, positive-pressure respirators.

Further Information:

If incinerated, may release toxic fumes.

Use water spray to cool unopened containers.

Do NOT use high volume water jet to extinguish fire, as the force of the water jet may cause fire to spread.

See Section 7 for more information on safe handling.

See Section 8 for more information on personal protection equipment.

See Section 13 for disposal information.

6

ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:

Remove all sources of ignition.

Use personal protective equipment.

Keep from contacting skin or eyes.

Avoid breathing vapors, mist or gas.

Ensure adequate ventilation.

Evacuate personnel to safe areas.

Environmental precautions:

Prevent further release (leakage/spillage) if safe to do so.

Do not allow product to enter drains.

Do not allow to drain to environment.

Methods and materials for containments and cleaning up:

Absorb with liquid-binding material (sand, diatomite, universal binders, sawdust).

Neutralizing agent like Sodium Bicarbonate may also be used to absorb/neutralize any spilled material.

Spill may also be diluted with equal volume of water and absorbed (as above) or collected with an electrically-protected vacuum cleaner or by wet-brushing.

Place contaminated material into suitable, closed containers for disposal.

Dispose of contaminated material according to Section 13.

After spillage has been collected, area may be flushed with water or wet-brushed.

Ensure adequate ventilation.

Reference to other sections:

Comply with federal, state and local regulations on reporting spills.

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for information on proper disposal.

7

HANDLING AND STORAGE

Handling Precautions:

Avoid breathing vapors or mist.

Avoid contact with eyes, skin, or clothing.

Use approved, original containers only.

Keep containers closed when not in use.

Safety Data Sheet (SDS)

Jem Chemical Company

Jem Strip 427

SDS Number: 133

Revision Date: 2/5/2015

Page 5 of 10

Do not expose containers to open flame, excessive heat, or direct sunlight.
Do not puncture or drop containers.
Handle with care and avoid spillage on the floor.
Keep material out of reach of children.
Keep material away from incompatible materials.
Wash thoroughly after handling.
Ensure adequate ventilation.

Storage Requirements: Keep container tightly closed.
Avoid inhalation of vapors or mist upon opening container.
Store in a well-ventilated place.
Do not store at temperatures below 0 °C/32 °F exceeding 43.3 °C/110 °F.
Do not store in direct sunlight.
Store only in original container.
Store away from strong acids, strong bases, strong oxidizing agents, strong reducing agents, Iron, Copper and its alloys (Brass, etc.) and Rubber.

8

EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls: All ventilation should be designed in accordance with OSHA standard (29 CFR 1910.94). Use local exhaust at filling zones and where leakage and dust formation is probable. Use mechanical (general) ventilation for storage areas. Use appropriate ventilation as required to keep Exposure Limits in Air below TLV & PEL limits.

Personal Protective Equip: Eye/face protection:
When using material use safety goggles, gloves and apron and vapor respirator according to HMIS PP, H. All safety equipment should be tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU).

Skin protection:
Handle with gloves made from Viton, Nitrile or Buna rubber. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact. Dispose of contaminated gloves according to applicable laws and laboratory practices.

Body Protection:
Chemically resistant safety goggles, gloves, apron and vapor respirator are recommended. Type of protective equipment should be selected based on concentration amount and conditions of use of this material.

Respiratory protection:
Full-face vapor respirator is highly recommended as a backup to engineering controls when proper engineering controls are not in place to keep TLV and PEL limits below defined thresholds.

Control of environmental exposure:
Prevent leakage or spillage if safe to do so. Do not let material enter drains.

Components with workplace control parameters:

Component(s): n-Methyl-2-pyrrolidone; Ethanol-2-amino-; Distillates, petroleum, solvent-dewaxed heavy paraffinic
CAS No(s): 872-50-4; 141-43-5; 64742-65-0
USA ACGIH (TWA/TLV): 3 ppm
USA ACGIH (STEL/TWA): 6 ppm
USA OSHA - Table Z-1 Limits for Air Contaminants (TWA): 3 ppm

Safety Data Sheet (SDS)

Jem Chemical Company

Jem Strip 427

SDS Number: 133

Revision Date: 2/5/2015

Page 6 of 10

USA OSHA - Table Z-1 Limits for Air Contaminants (STEL): 6 ppm
USA OSHA Occupational Exposure Limits - Table Z-1 Limits for Air Contaminants (TWA): 3 ppm
USA NIOSH Recommended Exposure Limits (TWA): 3 ppm
USA NIOSH Recommended Exposure Limits (ST): 6 ppm
USA Workplace Environmental Exposure Levels (WEEL/TWA): 10 ppm

Biological occupational exposure limits:

Component: n-Methyl-2-pyrrolidone
CAS-No: 872-50-4
Parameters: 5-Hydroxy-N-methyl-2-pyrrolidone
Biological Specimen: Urine
USA ACGIH Biological Exposure Indices: 100 mg/L

Derived No Effect Level (DNEL):

Component: n-Methyl-2-pyrrolidone
CAS-No: 872-50-4
Inhalation - Workers (Acute systemic effects): 208 mg/kg BW/d
Skin Contact - Workers (Acute systemic effects): 80 mg/m³
Inhalation - Workers (Long-term systemic effects): 19.8 mg/kg BW/d
Skin Contact - Workers (Long-term systemic effects): 40 mg/m³

Predicted No Effect Concentration (PNEC):

Component: n-Methyl-2-pyrrolidone
CAS-No: 872-50-4
Water: 5 mg/l
Soil: 0.138 mg/kg
Marine Water: 0.025 mg/kg
Fresh Water: 0.25 mg/l
Fresh Water Sediment: 0.805 mg/kg
Onsite Sewage Treatment Plant: 10 mg/l

9

PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Yellow Liquid	Odor:	Amine-Like
Physical State:	Liquid	Molecular Formula:	MIXTURE
Odor Threshold:	Not determined	Solubility:	100%
Particle Size:	No data available	Softening Point:	Not determined
Spec Grav./Density:	0.990 g/ml (8.26 lbs/gal)	Percent Volatile:	69.7%
Viscosity:	Not determined	Heat Value:	Not determined
Sat. Vap. Conc.:	Not determined	Freezing/Melting Pt.:	Not determined
Boiling Point:	300 - 400° F (148.9 - 204.4° C)	Flash Point:	> 300° F (148.9° C)
Flammability:	(solid, gas): Not determined	Octanol:	Not determined
Partition Coefficient:	Not determined	Vapor Density:	(air = 1): > 16
Vapor Pressure:	(mm Hg @ 25 °C): < 0.0001	VOC:	690 g/L
pH:	@ 1%: 11.6	Bulk Density:	Not determined
Evap. Rate:	(Butyl Acetate = 1): 0.001	Auto-Ignition Temp:	Not determined
Molecular weight:	MIXTURE	UFL/LFL:	Not determined
Decomp Temp:	Not determined		

Safety Data Sheet (SDS)

Jem Chemical Company

Jem Strip 427

SDS Number: 133

Revision Date: 2/5/2015

Page 7 of 10

10

STABILITY AND REACTIVITY

Stability: Product is stable under normal conditions.
Conditions to Avoid: Incompatibilities, flames, ignition sources.
Materials to Avoid: Strong acids, strong bases, strong oxidizing agents, strong reducing agents, Iron, Copper and its alloys (Brass, etc.) and Rubber.
Hazardous Decomposition: Carbon Oxides, Hydrocarbon particulate and Nitrogen Oxides (NOx).
Hazardous Polymerization: Will not occur.

11

TOXICOLOGICAL INFORMATION

Component(s): n-Methyl-2-pyrrolidone; Ethanol-2-amino-; Distillates, petroleum, solvent-dewaxed heavy paraffinic; Poly(oxy-1,2-ethanediyl), .alpha.-(nonylphenyl)-.omega.-hydroxy-
CAS No(s): 872-50-4; 141-43-5; 64742-65-0; 9016-45-9

Acute Toxicity:

LD50 Oral - Rat: 1,720 mg/kg
LD50 Dermal - Rabbit: 1,015 mg/kg
LC50 Inhalation - Rat: > 5 mg/l (4 h)
LDLo Inhalation - Rat: 5100 ppm (4 h)
LD50 Intraperitoneal - Mouse: 168 mg/kg

Skin Corrosion/Irritation: No data available.

Serious Eye Damage/Eye Irritation: Rabbit eyes - Serious eye irritation.

Respiratory or Skin Sensitation: Certain reactions were observed for sensitive people.

Germ Cell Mutagenicity: No data available.

Carcinogenicity:

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive Toxicity: Damage to fetus possible. NOEL Teratogenicity Oral - Rat: 50 mg/kg - Effects on development were observed.

Specific Target Organ Toxicity - Single Exposure: Inhalation - May cause respiratory irritation.

Specific Target Organ Toxicity - Repeated Exposure: No data available.

Aspiration Hazard: Product has an aspiration hazard. Aspiratiopn into the lungs when swallowed or vomited may cause chemical pneumonitis which can be fatal.

Additional Information:

Safety Data Sheet (SDS)

Jem Chemical Company

Jem Strip 427

SDS Number: 133

Revision Date: 2/5/2015

Page 8 of 10

Component: n-Methyl-2-pyrrolidone; RTECS: UY5790000

Component: Ethanol-2-amino-; RTECS: KJ5775000

Component: Distillates, petroleum, solvent-dewaxed heavy paraffinic; RTECS: PY8038500

Component: Poly(oxy-1,2-ethanediyl), .alpha.-(nonylphenyl)-.omega.-hydroxy-; RTECS: AX0247000

12

ECOLOGICAL INFORMATION

Component(s): n-Methyl-2-pyrrolidone; Ethanol-2-amino-; Distillates, petroleum, solvent-dewaxed heavy paraffinic; Poly(oxy-1,2-ethanediyl), .alpha.-(nonylphenyl)-.omega.-hydroxy-
CAS No(s): 872-50-4; 141-43-5; 64742-65-0; 9016-45-9

Toxicity:

Toxicity to fish:

LC50 - Lepomis macrochirus (Bluegill): 1.0 mg/l (96 h)

Mortality NOEC - Pimephales promelas (Fathead Minnow): 2.0 mg/l (72 h)

Mortality LOEC - Pimephales promelas (Fathead Minnow): 1.8 mg/l (72 h)

Toxicity to daphnia and other aquatic invertebrates (fresh water):

Mortality NOEC - Daphnia magna (Water Flea): 10.0 mg/l (144 h)

Mortality LOEC - Daphnia magna (Water Flea): 20.0 mg/l (144 h)

EC50 - Daphnia magna (Water Flea): 12.2 - 17.0 mg/l (48 h)

Toxicity to algae:

EC50 - Desmodesmus subspicatus (Green Algae): 15 mg/l (72 h)

Growth Inhibition LOEC: Pseudokirchneriella subcapitata: 16.0 mg/l (96 h)

Growth Inhibition NOEC: Pseudokirchneriella subcapitata: 8.0 mg/l (96 h)

Persistence and Degradability:

Major constituents are expected to be readily biodegradable, but the product contains components that may persist in the environment.

Bioaccumulative potential:

Most of the hydrocarbon blocks comprising "Distillates, petroleum, solvent-dewaxed heavy paraffinic" have a $\text{Log}_{\text{KOW}} > 6$, indicating that these constituents have a potential to bioaccumulate.

Mobility in Soil:

No data available.

Results of PBT and vPvB assessment:

Not required/conducted.

Other Adverse Effects:

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Very toxic to aquatic life. Toxic to aquatic life with long lasting effects.

Safety Data Sheet (SDS)

Jem Chemical Company

Jem Strip 427

SDS Number: 133

Revision Date: 2/5/2015

Page 9 of 10

13

DISPOSAL CONSIDERATIONS

Product: Hazardous wastes shall be managed responsibly. All entities that store, transport or handle hazardous waste shall take the necessary measures to prevent risks of pollution, release into the environment or damage to people and animals. Contact a licensed professional waste disposal service to dispose of this material.

Contaminated Packaging: Dispose of as unused product.

14

TRANSPORT INFORMATION

DOT Class: Corrosive (8) #8

UN #: UN 3267, Class: 8, Proper Shipping Name: Corrosive liquid, basic, organic, n.o.s. (containing Ethanolamine)

DOT (US)

UN Number: 3267

Class: 8

Packing Group: III

ERG #: 153

Proper Shipping Name: Corrosive liquid, basic, organic, n.o.s. (containing Ethanolamine)

Marine Pollutant: No

Poison Inhalation Hazard(s): No

IMDG

UN Number: 3267

Class: 8

Packing Group: III

EMS-No: F-A, S-B

Proper Shipping Name: Corrosive liquid, basic, organic, n.o.s. (containing Ethanolamine)

Marine Pollutant: No

IATA

UN Number: 3267

Class: 8

Packing Group: III

ERG #: 153

Proper Shipping Name: Corrosive liquid, basic, organic, n.o.s. (containing Ethanolamine)

Marine Pollutant: No



Safety Data Sheet (SDS)

Jem Chemical Company

Jem Strip 427

SDS Number: 133

Revision Date: 2/5/2015

Page 10 of 10

15

REGULATORY INFORMATION

COMPONENT / (CAS/PERC) / CODES

-
- *n-Methyl-2-pyrrolidone (872504 <50%) MASS, NJHS, PA, PROP65, SARA311/312, SARA313, TSCA
 - *Ethanol, 2-amino- (141435 <40%) HAP, MASS, NJHS, OSHAWAC, PA, SARA311/312, TSCA, TXAIR
 - *Distillates, petroleum, solvent-dewaxed heavy paraffinic (64742650 <10%) NJHS, TSCA
 - *D-Gluconic acid, compound with 2,2',2"-nitrilotrisethanol (1:1) (42728-79-0) TSCA
 - *D-Gluconic acid, compound with aminoethanol (1:1) (20405-61-2 <5%) TSCA
 - *Poly(oxy-1,2-ethanediyl), .alpha.-(nonylphenyl)-.omega.-hydroxy- (9016459 <5%) NJHS, PA, SARA311/312, TSCA

REGULATORY KEY DESCRIPTIONS

CERCLA = Superfund clean up substance
CSWS = Clean water Act Hazardous substances
HAP = Hazardous Air Pollutants
MASS = MA Massachusetts Hazardous Substances List
NJHS = New Jersey Right to Know Hazardous Substances
OSHA = OSHA Workplace Air Contaminants
PA = PA Right-To-Know List of Hazardous Substances
PROP65 = CA Prop 65
SARA311/312 = SARA 311/312 Toxic Chemicals
SARA313 = SARA 313 Title III Toxic Chemicals
TSCA = Toxic Substances Control Act
TXAIR = TX Air Contaminants with Health Effects Screening Level

16

OTHER INFORMATION

Disclaimer:

The data in this Safety Data Sheet relates only to the specific material designated herein and does not relate to use in combination with any other material in any process. The information set forth herein is furnished free of charge and is based on technical data that Jem Chemical Company believes to be reliable. It is intended for use by persons having technical skill and at their own discretion and risk. Since conditions of use are outside of Jem Chemical Company's control, Jem Chemical Company makes no warranties, expressed or implied, and assumes no liability in connection with any use of this information. Nothing herein is to be taken as a license to operate under, or a recommendation to infringe upon, any patents.

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www.ghsconversionservices.com
(669) 236-0304