

Break Down Adhesive Buildup. Responsibly.

BIO-BASED ADHESIVE REMOVER



We've got just one world to call home, right? So, let's take care of it! That responsibility includes the solutions we choose for removing adhesive buildup on equipment. We take that responsibility to heart, so while Flexo Shine™ Adhesive Remover is made to melt glue like a hot knife to butter, it's made with a GRAS (Generally Regarded As Safe) and biodegradable citrus solvent. Its citrus solvent is extracted from oranges, not an oil well... and, that's a good thing for our planet. But does it work? With a Kauri-Butanol (KB) value at or above most petroleum solvents, Flexo Shine's bio-based adhesive remover is a powerful alternative to environmentally harmful, oil-based adhesive removers.

Flexo Shine Adhesive Remover is ruthlessly tough on glue without risking harm to your people, equipment, or planet:

- Effortless removal of tough adhesive buildup
- Effective bio-based solvent replacement
- Lower flammability than xylenes
- Safer on equipment paint than most petroleum solvents
- Harmless cleaner for anilox rolls
- Better results than petroleum solvents
- Made from environmentally sustainable citrus oil

Proudly Made in America



Removing adhesive buildup on equipment is not only easier; it is now safer with Flexo Shine™ Adhesive Remover, made with environmentally sustainable technology and citrus!



FLEXO SHINE™



ADHESIVE REMOVER TECHNICAL DATA

GLOBAL HARMONIZATION

(FLAMMABLE AND EXCLAMATION POINT SIGNS) DANGER

Flammable liquid and vapor. Causes skin irritation. Causes serious eye irritation. May cause allergic skin reaction.

P210 Keep away from heat/sparks/open flames/hot surfaces.

-No smoking

P264 Wash thoroughly after handling.

P261 Avoid breathing dust/fumes/gas/mist/vapor/spray.

P301+P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/ physical

P272 Contaminated work clothing should not be allowed out of the workplace

P280 Wear protective gloves/protective clothing/eye protection/ face protection

P321 IF ON SKIN: Wash with plenty of soap and water

P331 Do NOT induce vomiting

P302+P352 Specific treatment for active ingredient poisoning is required

P333+P313 If skin irritation or rash occurs: Get medical advice/ attention

P362+P364 Take off contaminated clothing and wash it before reuse

P405 Store locked up

P501 Dispose of contents/container in accordance with local, state, and federal rules

PERSONAL PROTECTION

For your safety, we recommend these precautions when applying Flexo Shine Adhesive Remover:

- Safety glasses
- Nitrile gloves
- General ventilation

PHYSICAL PROPERTIES

The Flexo Shine Adhesive Remover formula results in safe physical properties:

- pH Neat: 6.5-8.5
- Specific Gravity: 0.96 g/ml
- Total VOC: 797 g/L
- Color: Orange
- Odor: Citrus
- Flash Point: 135F

DOT SHIPPING INFORMATION

Combustible Liquid, NOS

(Not regulated as a hazardous material when shipped domestically in quantities 119 gallons or less in a single container.)

OTHER REGULATORY

requested sizes:

- 1-Gallon (3.8L), 4/1 Case
- 15-Gallon (57L)
- 275-Gallon Tote (1045L)
- 5-Gallon (19L)
- 55-Gallon (209L)

SHIPPING INFORMATION

Not regulated by the DOT



ADHESIVE REMOVER INSTRUCTIONS

USING FLEXO SHINE ADHESIVE REMOVER IS SIMPLE AND FAST:

1. Apply Adhesive Remover directly to adhesive residues by spraying the surface or wiping it with a cloth saturated in Adhesive Remover.
2. Let Adhesive Remover sit on adhesive buildup for 60 seconds.
3. Wipe area clean with a cloth or towel, using mild pressure.

Tip: While not necessary, wiping the surface (after completing the steps above) with a cloth saturated in fresh water or rinsing with fresh water will leave a cleaner finish.



ADHESIVE REMOVER FIRST AID

SHOULD YOU NEED TO PERFORM FIRST AID RELATED TO OUR ADHESIVE REMOVER, WE RECOMMEND THE FOLLOWING:

- **INGESTION:** Drink two large glasses of water and seek medical attention.
- **SKIN:** Flush thoroughly with water and seek medical attention if irritation on persists.
- **EYES:** Flush thoroughly with water and seek medical attention if irritation on persists.
- **INHALATION:** Remove patient to fresh air and give artificial respiration.



Adhesive Remover

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT IDENTIFIER

- Product Name** • Adhesive Remover
- Product Formula** • DS-FS-1160

RELEVANT IDENTIFIED USE OF THE CHEMICAL AND RESTRICTIONS ON USE

- Relevant Use** • Citrus fruit based solvent adhesive remover.

SUPPLIER DETAILS

- Flexo Shine
PO Box 216
Nixa MO 65714
Ph: 417-434-6388
orders@flexoshine.com

SECTION 2: HAZARD IDENTIFICATION

United States (US) - According to OSHA 29 CFR 1920.1200 Hazard Communication Standard

CLASSIFICATION OF THE SUBSTANCE OR MIXTURE

- Hazard Classification** • Flammable Liquids - 3
Skin Corrosion/Irritation - 2
Serious Eye Damage/Eye Irritation - 2A
Skin Sensitization - 1B

LABEL ELEMENTS

- Signal Word and Pictogram** • Warning
Warning
Warning
Warning





HAZARD STATEMENTS

H226	Flammable liquid and vapour
H315	Causes skin irritation
H319	Causes serious eye irritation
H317	May cause an allergic skin reaction

PRECAUTIONARY STATEMENTS

P210	Keep away from heat/sparks/open flames/hot surfaces. -No smoking.
P264	Wash thoroughly after handling.
P264	Wash thoroughly after handling.
P261	Avoid breathing dust/fumes/gas/mist/vapour/spray.
P301+P310	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physical.
P272	Contaminated work clothing should not be allowed out of the workplace.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P302+P352	IF ON SKIN: Wash with plenty of soap and water.
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
P321	Specific treatment for active ingredient poisoning is required.
P362+P364	Take off contaminated clothing and wash it before reuse.
P501	Dispose of contents/container in accordance with local, state, and federal rules.
P331	Do NOT induce vomiting.
P405	Store locked up.
P501	Dispose of contents/container in accordance with local, state, and federal rules.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P302+P352	IF ON SKIN: Wash with plenty of soap and water.
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OTHER HAZARDS •



HEALTH	2
FLAMMABILITY	2
PHYSICAL HAZARD	0
PERSONAL PROTECTION	B

SECTION 3: COMPOSITION INFORMATION ON

Chemical Identity	CAS	Percent Weight
D-Limonene	138-86-3	<90
No other reportable hazardous materials.	N/A	

SECTION 4: FIRST AID MEASURES

- INHALATION** • If overcome by exposure, remove victim to fresh air immediately. Give oxygen or artificial respiration as needed. Call a physician immediately.
- SKIN** • Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Call a physician if irritation persists. Wash clothing before reuse.
- EYE** • Immediately flush eyes with gentle but large stream of water for at least 15 minutes, lifting lower and upper eyelids occasionally. Call a physician if irritation persists.
- INGESTION** • Do not induce vomiting. Never give anything by mouth to an unconscious person. Dilute by drinking two large glasses of water. Call a physician immediately.

SECTION 5: FIRE-FIGHTING MEASURES

- SUITABLE EXTINGUISHING MEDIA** • Use non-flammable or non-explosive extinguishing media.
- SPECIFIC HAZARDS** • Above flash point, vapor-air mixtures are explosive within flammable limits. Vapors can flow along surfaces to distant ignition source and flash back. Contact with strong oxidizers may cause fire. Sensitive to static discharge.
- SPECIAL PROTECTIVE ACTIONS FOR FIREFIGHTERS** • Dry chemical, alcohol foam or carbon dioxide. Do not use a solid stream of water, since the stream will scatter and spread the fire. Water spray may be used to keep fire exposed containers cool, dilute spills to nonflammable mixtures, protect personnel attempting to stop leak and disperse vapors.

SECTION 6: ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES

- FOR NON-EMERGENCY PERSONNEL** • For non-emergency personnel, ventilate area of leak or spill and remove all ignition sources. Wear appropriate personal protective equipment as required to prevent any contamination of skin, eyes, and personal clothing. Isolate release area. Do not touch or walk through spilled material unless wearing the appropriate protective equipment. Keep unnecessary and unprotected personnel from entering.

FOR EMERGENCY RESPONDERS

- For emergency responders, as an immediate precautionary measure, isolate spill or leak area for at least 50 meters (150 feet) in all directions. Eliminate all ignition sources (no smoking, flares, sparks or flames in immediate area). Keep out of low areas. Keep unauthorized personnel away. Stay upwind. Ventilate closed spaces before entering.

ENVIRONMENTAL PRECAUTIONS**ACCIDENTAL RELEASE ENVIRONMENTAL**

- Stop leak if you can do it without risk. If possible, keep from entering into drains, surface water, or ground water. This product is biodegradable.

METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING UP**CONTAINMENT AND CLEANUP**

- Contain and recover liquid when possible. Cover drains or cap spill when safe. Collect liquid in an appropriate container or absorb with an inert material (e.g. vermiculite, dry sand, earth), and place in a chemical waste container. Do not use combustible materials, such as saw dust. Small spills may be flushed to the sanitary sewer with approval from local authorities.

SECTION 7: HANDLING AND STORAGE**PRECAUTIONS FOR SAFE HANDLING**

- Protect against physical damage. Store in a cool, dry well-ventilated location, away from any area where the fire hazard may be acute. Outside or detached storage is preferred. Separate from oxidizing materials. Containers should be bonded and grounded for transfers to avoid static sparks. Storage and use areas should be No Smoking areas. Containers of this material may be hazardous when empty since they retain product residues (vapors, liquid); observe all warnings and precautions listed for the product.

CONDITIONS FOR SAFE STORAGE AND INCOMPATIBILITIES

- Protect against physical damage. Store in a cool, dry well-ventilated location, away from any area where the fire hazard may be acute. Outside or detached storage is preferred. Separate from oxidizing materials. Containers should be bonded and grounded for transfers to avoid static sparks. Storage and use areas should be No Smoking areas. Containers of this material may be hazardous when empty since they retain product residues (vapors, liquid); observe all warnings and precautions listed for the product.

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION**CONTROL PARAMETERS**

Chemical Identity	CAS	TLV
D-Limonene	138-86-3	N/E
No other reportable hazardous materials.	N/A	N/A

APPROPRIATE ENGINEERING CONTROLS

- Use adequate ventilation systems as needed to maintain air concentrations below occupational exposure standards.

INDIVIDUAL PROTECTIONS MEASURES, SUCH AS PERSONAL PROTECTIVE EQUIPMENT**EYE / FACE PROTECTION**

- Safety glasses with polycarbonate lenses.

SKIN PROTECTION

- Nitrile gloves.

RESPIRATORY PROTECTION

- None required for normal use. Use an approved NIOSH/MSHA air respirator where use may cause overexposure.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Clear orange liquid.	Lower Limits	Not available.
Odor	Strong citrus odor.	Vapor Pressure	Not available.
pH	6.5 to 7.5 neat	Vapor Density	Not available.
Melting Freezing Point	Not available.	Relative Density	0.95 g/ml
Initial Boiling Point	Not available.	Solubility	Immiscible with water.
Flash Point	135 F TCC	Partition Coefficient	Not available.
Evaporation Rate	Not available.	Auto Ignition Temp	Not available.
Flammability	Not available.	Decomposition Temp	Not available.
VOC (g/L)	785 g/L	Viscosity	Not available.

SECTION 10: STABILITY AND REACTIVITY

Reactivity	• No dangerous reaction known under conditions of normal use.
Chemical Stability	• Stable under normal temperatures and pressures.
Possibility of Haz Rxns	• Will not occur.
Conditions to Avoid	• No unusual conditions.
Incompatible Materials	• Do not mix with strong acids or bases. Do not mix with any other chemical unless instructed to do so by the manufacturer.
Hazardous Decomposition	• In case of fire, oxides of carbon, hydrocarbons, fumes or vapors, soot, and smoke may be produced.

SECTION 11: TOXICOLOGICAL INFORMATION

INFORMATION ON TOXICOLOGICAL EFFECTS

Acute Toxicity	No specific information available for mixture.
Skin Corrosion/Irritation	No specific information available for mixture.
Serious Eye Damage/Irritation	No specific information available for mixture.
Respiratory or Skin Sensitization	No specific information available for mixture.
Germ Cell Mutagenicity	No specific information available for mixture.
Carcinogenicity	No specific information available for mixture.
Reproductive Toxicity	No specific information available for mixture.
STOT Single Exposure	No specific information available for mixture.
STOT Repeated Exposure	No specific information available for mixture.
Aspiration Hazard	No specific information available for mixture.

Target Organs Skin.

Routes of Entry Exposure Ingestion, inhalation, skin, eye.

POTENTIAL HEALTH EFFECTS

INHALATION ACUTE	• May irritate nose and lungs.
INHALATION CHRONIC	• Vapors or mists may aggravate pre-existing lung conditions.
SKIN ACUTE	• May irritate skin or cause redness and pain. Can be absorbed through skin with

possible systemic effects.

SKIN CHRONIC

- Sensitivity of the skin may occur with repeated, prolonged exposure.

EYE ACUTE

- Vapors are irritating and may produce immediate pain, redness and tearing. Splashes can cause severe pain, stinging, swelling.

EYE CHRONIC

- No data available.

INGESTION ACUTE

- May irritate gastrointestinal tract. May cause nausea, vomiting, and diarrhea.

INGESTION CHRONIC

- No data available.

SECTION 12: ECOLOGICAL INFORMATION

TOXICITY

- Not enough information on the mixture is available.

PERSISTENCE & BIODEGRADABILITY

- Not enough information on the mixture is available. The components of the mixture are determined as either readily biodegradable or inherently biodegradable. It is

BIOACCUMULATIVE POTENTIAL

- Not enough information on the mixture is available.

MOBILITY IN SOIL

- Not enough information on the mixture is available.

OTHER ADVERSE EFFECTS

- Not enough information on the mixture is available.

SECTION 13: DISPOSAL CONSIDERATIONS

DISPOSAL CONSIDERATIONS

- Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste disposal facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.

SECTION 14: TRANSPORT INFORMATION

TRANSPORT ENVIRONMENTAL HAZARDS

- Not regulated by D.O.T.
- None known.

SPECIAL PRECAUTIONS

- None known.

SECTION 15: REGULATORY INFORMATION

SARA TITLE III INFORMATION**Chemical Identity****CAS / CAT CODE PERCENT WT**

None Reportable

OTHER REGULATORY INFORMATION

- **TSCA (Toxic Substance Control Act):** All ingredients of this product are listed on the TSCA inventory.
- **CARCINOGENICITY:** Not listed by IARC, NTP, or OSHA.
- **CALIFORNIA PROPOSITION 65:** This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins which would be subject to the proposition.

SECTION 16: OTHER INFORMATION

KEY TO ABBREVIATIONS

N/E = Not Established. CAS = Chemical Abstract Service. ppm = Parts Per Million
g/L = Grams per Liter mg/m³ = milligrams per cubic meter

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