



SMITHERS-OASIS NORTH AMERICA
919 MARVIN STREET • P.O. BOX NUMBER 790 • KENT, OHIO 44240

MATERIAL SAFETY DATA SHEET

OASIS® Floral Adhesive

SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION	
IDENTITY OASIS® Floral Adhesive	DATE PREPARED 06/08/2009
SYNONYMS, CHEMICAL NAMES, COMMON NAMES OASIS® Floral Adhesive	USE: Floral adhesive

MANUFACTURER'S NAME Smithers-Oasis	TELEPHONE NUMBER - INFORMATION (330) 673-5831
ADDRESS 919 Marvin Street P.O. Box 790 Kent, OH 44240 USA	TELEPHONE NUMBER - EMERGENCY Transportation emergency: CHEMTREC: 800 424-9300 International Transportation: CHEMTREC: 703-527-3887 Rocky Mountain Poison and Drug Center: 303 623-5716

SECTION 2 - HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW
<p>Thick tan liquid with sweet, pungent odor. Extremely flammable liquid and vapor. May cause dizziness and drowsiness. Overexposure may cause damage to the peripheral nervous system. May cause irritation to skin, eyes, and respiratory tract. May cause skin sensitization. Aspiration hazard if swallowed. Can enter lungs and cause damage.</p>

PRIMARY ROUTE(S) OF EXPOSURE:

Inhalation; skin; eyes; ingestion; skin absorption

IRRITATION DATA:

May cause irritation to skin, eyes, and upper respiratory tract.

Standard Draize test (skin/rabbit): Mild @ 500 mg/24H Acetone

Standard Draize test (eye/rabbit): Severe @ 20mg Acetone

Standard Draize test (eye/rabbit): Mild@ 10mg Hexane

INHALATION:

ACUTE: Vapors may cause irritation to the eyes, nose, and respiratory tract. High vapor concentration may cause CNS depression, evidenced by giddiness, headache, dizziness, and nausea.

CHRONIC: Prolonged and repeated inhalation of vapors may cause peripheral and central nervous system damage, evidenced by muscular weakness and loss of sensation in arms and legs. Reports have associated repeated and prolonged overexposure to solvents with permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling this material may be harmful or fatal.

SKIN CONTACT:

ACUTE: Irritating to skin. Contact may cause redness, itching, burning, and skin damage. Contact may result in skin absorption.

CHRONIC: Prolonged and repeated contact can result in defatting, drying, and cracking of the skin which may result in irritation and dermatitis. Prolonged contact may result in skin sensitization in sensitive individuals.

EYE CONTACT:

ACUTE: May cause irritation experienced as discomfort or pain, and seen as excess redness and swelling of the eyes, with possible injury to the cornea.

CHRONIC: Irritation and conjunctivitis.

INGESTION:

ACUTE: Ingestion may cause abdominal discomfort, nausea, and transient excitation followed by signs of nervous system depression including headache, drowsiness, dizziness, loss of coordination, disorientation, and fatigue. Aspiration may occur during swallowing or vomiting resulting in lung inflammation and damage.

CHRONIC: See section 11.

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE

Persons with pre-existing skin, eye, or respiratory tract conditions may be at increased risk from exposure. Impaired peripheral nerve function from preexisting disorders may be aggravated by exposure to a component of this product. Exposure to high concentrations of this material may increase the sensitivity of the heart to certain drugs. Persons with pre-existing heart disorders may be more susceptible to this effect.

SECTION 3 - COMPOSITION, INFORMATION ON INGREDIENTS

HAZARDOUS COMPONENTS	CAS#	%
Hexane	110-54-3	40-50%
Acetone	67-64-1	10-20%
Solid ingredients	Proprietary	30-50 %
Remaining components, if any, are not hazardous or hazardous components are present at less than 1% (0.1% for carcinogens).		

SECTION 4 - EMERGENCY AND FIRST AID PROCEDURES

INHALATION: Remove from exposure to fresh air immediately. If breathing has stopped, give artificial respiration. If breathing difficulties develop, oxygen may be administered by qualified personnel. Get medical attention.

SKIN CONTACT: Remove contaminated clothing and shoes. Wash affected area with soap and water until no evidence of the chemical remains. If irritation or redness develops, get medical attention. If the skin surface is damaged, apply a clean dressing and get medical attention.

EYE CONTACT: Flush thoroughly with water for at least 15 minutes, occasionally lifting the upper and lower lids, until no evidence of the chemical remains. Get medical attention.

INGESTION: If swallowed, do not induce vomiting. Treat symptomatically and supportively. If vomiting occurs spontaneously, keep head below hips to prevent aspiration of liquid into lungs. If possible, do not leave victim unattended and observe closely for adequacy of breathing. Get medical attention.

SECTION 5 - FIRE FIGHTING MEASURES

Flash Point: -15°F (Hexane)

Flammable Limits UEL: 12.8 %

Flammable Limits LEL: 1.0 %

Autoignition Temperature: 437° F/ 225° C

Extinguishing Media: Foam, carbon dioxide, or dry chemical powder is recommended. Water spray is recommended to cool or protect exposed materials or structures. Water may be ineffective for extinguishment.

Special Fire Fighting Procedures: Firefighters should wear full protective NIOSH approved self-contained breathing apparatus. Cool fire exposed containers with water. Water spray may be useful in minimizing or dispersing vapors. Avoid spreading burning liquid with water used for cooling purposes.

Unusual Fire and Explosion Hazards: Extremely flammable. Can be ignited by heat, sparks, flames, or other sources of ignition (e.g. static electricity, pilot lights, mechanical/electrical equipment, and electronic devices such as cell phones, computers, calculators, and pagers.) Vapors may ignite or explode. Vapors may travel considerable distances to a source of ignition where they can ignite, flash back, or explode. May create vapor/air explosion hazard indoors, in confined spaces, outdoors, or in sewers. Vapors are heavier than air and can accumulate in low areas. Containers exposed to extreme heat should be cooled with water to prevent vapor pressure buildup which could result in container rupture.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

Wear suitable protective equipment. Extremely flammable. Eliminate all ignition sources. Keep hot metal surfaces away from spill/release. Handling equipment must be grounded to prevent sparking. The use of explosion-proof equipment is recommended. Use foam on spills to minimize vapors. Take up with absorbent material and place in non-leaking container. Seal tightly for proper disposal.

Prevent spilled material from entering sewers, drains, other unauthorized drainage systems, and/or natural waterways. Dike far ahead of spill for later recovery or disposal. Use foam on spills to minimize vapors.

SECTION 7 - HANDLING AND STORAGE

Open container slowly to relieve any pressure. Bond and ground when transferring from one container to another. Can accumulate static charge by flow or agitation. Can be ignited by static discharge. The use of explosion proof equipment is recommended.

Wash thoroughly after handling. Do not wear contaminated clothing or shoes. Keep contaminated clothing away from sources of ignition. Use good personal and industrial hygiene practices.

Keep containers closed when not in use. Prohibit smoking when handling or processing this material. Store in a cool, dry well ventilated area. Do not store near heat or open flames. Do not store in direct sunlight.

COMPONENTS	OSHA PEL	ACGIH TLV
Hexane (CAS# 110-54-3)	500 ppm TWA 2000 mg/m ³ TWA	400 ppm TWA
Acetone (CAS# 67-64-1)	1000 ppm TWA 2400 mg/m ³ TWA	500 ppm TWA 750 ppm STEL

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Thick tan liquid
 Odor: Sweet/pungent
 Odor Threshold: 62 ppm (acetone)
 Physical State: Liquid
 pH: Not available
 Melting/Freezing Point: -137.2° F
 Boiling Point: 133° F (acetone)
 Flash Point: -15° F (hexane)
 Evaporation Rate: 8.10 (nBuAc = 1)
 Flammability: Flammable
 Upper Explosive Limits: 12.8 %
 Lower Explosive Limits: 1.0 %
 Vapor Pressure: 5.6 psi @ 100° F
 Vapor Density: 3
 Specific Gravity or Relative Density: 0.8
 Solubility: Not soluble in water
 Oil/Water Coefficient: 3.9 (hexane)
 Autoignition Temperature: 437° F
 Decomposition Temperature: 437° F

SECTION 10 - STABILITY AND REACTIVITY

CHEMICAL STABILITY: Stable.
CONDITIONS TO AVOID: Heat, spark, flames, and contact with oxidizers. Prevent vapor accumulation.
INCOMPATIBLE MATERIALS: Strong oxidizing materials such as liquid chlorine, concentrated oxygen, sodium or calcium hypochlorite. Acetone may form explosive mixtures with chromic anhydride, chromyl alcohol, hexachloroelamine, permonosulfuric acid, potassium tertbutoxide, and thioglycol.
HAZARDOUS DECOMPOSITION PRODUCTS: Oxides of carbon, unidentified organic compounds, acrolein, irritating aldehydes, carboxylic acids, and ketones.
POSSIBILITY OF HAZARDOUS REACTIONS: Will not occur.

SECTION 11 - TOXICOLOGICAL INFORMATION

This formulation has not been tested for acute toxicity.

Oral LD ₅₀ (rat): 5800 mg/kg	Acetone
Oral LD ₅₀ (rat): >5000 mg/kg	Hexane
Inhalation LC ₅₀ (rat): 50,100 mg/m ³ /8H	Acetone
Inhalation LC ₅₀ (rat): >3,367 ppm/4H	Hexane
Dermal LD ₅₀ (rabbit): 20 mL/kg	Acetone
Dermal LD ₅₀ (rabbit): >2000 mg/kg	Hexane

Carcinogenicity: Not listed by IARC, NTP, or OSHA
Reproductive data(RTECS): Reported for acetone and hexane.
Mutagenicity data (RTECS): Reported for acetone and hexane.
Fetotoxicity data: None known
Teratology data: Reported for hexane.

Irritation: May cause irritation to skin, eyes, and respiratory tract.
Corrosivity: Not corrosive.
Sensitization: May cause sensitization by dermal exposure.
Neurological effects: CNS, Peripheral nervous system.
Target organ effects: CNS, skin, eyes, lungs, peripheral nerves, male reproductive system.

SECTION 12 - ECOLOGICAL INFORMATION

This formulation has not been tested for environmental effects.

The following data is for acetone:

BOD₅: 56% bio. Ox. Fresh water

BOD₁₀: 67% bio. Ox. Fresh water

COD: 100% ThOD

TOD: 2.20

Biological Effects (Toxicity threshold):

Bacteria: 1700 mg/l

Algae: 530 mg/l

Protozoa: 28 mg/l

The following data is for hexane:

BOD₅: 2.21

COD: 0.04

ThOD: 3.52

Biological Effects:

Algae: giant kelp: little or no effect on the photosynthetic activity:

10mg/l

Fish: goldfish: LD₅₀ (24hr) = 4 mg/l

SECTION 13 - DISPOSAL CONSIDERATIONS

Dispose in accordance with all applicable federal, state, and local environmental regulations.

Information applies to the material as manufactured. Processing, use, or contamination may make the information inappropriate, inaccurate, or incomplete.

If discarded in its original form, material may be regulated by Resource Conservation and Recovery Act (RCRA) as a hazardous waste due to the characteristic of ignitability (D001). As a waste, this material may be subject to land disposal restrictions.

SECTION 14 - TRANSPORT INFORMATION

Proper Shipping Name: Adhesives, containing a flammable liquid

Hazard Class: 3 – Flammable Liquid

ID Number: UN1133

Packing Group: II

Marine Pollutant: Not regulated by 49 CFR 172.101.

Canadian TDG Not Regulated

SECTION 15 - REGULATORY INFORMATION

OSHA: This material is classified as hazardous under OSHA regulations.

TSCA: All components are listed on the TSCA 8(b) inventory.

DSL: All components are listed.

EINECS: All components are listed or exempt from listing.

SARA Title III - Toxic chemicals list 40 CFR 372.65:
Hexane

SARA HAZARD CATEGORIES:

Acute Health Hazard	Chronic Health Hazard	Fire Hazard	Reactive Hazard	Sudden Release of Pressure
Yes	Yes	Yes	No	No

CERCLA Hazardous Substances List 40 CFR 302:

Acetone RQ = 5000lbs.
Hexane RQ = 5000lbs.

RCRA Hazardous Waste Codes 40 CFR 261.21:

D001 Ignitable

WHMIS: This material is considered a B2, D2B Controlled Product. This material has been classified in accordance with the hazard criteria of the Controlled Product Regulations. This MSDS has been prepared in compliance with the CPR. Ingredients requiring reporting under WHMIS IDL are:

Hexane
Acetone

CALIFORNIA PROPOSITION 65: The following statement is made in order to comply with the California Safe Drinking Water and Toxic Enforcement Act of 1986.
None is needed.

SECTION 16 - OTHER INFORMATION

HMIS Ratings:

Health 2*
Flammability 3
Reactivity 0

where 0=minimal, 1=slight, 2=moderate, 3=serious, 4=severe

R: 8, 11, 20/21/22, 43

S: 16, 26, 36/37/39, 60

Key/Legend:

ACGIH: American Conference of Governmental Industrial Hygienists
ACGIH TLV: ACGIH Threshold Limit Values
CAS: Chemical Abstract Service
CERCLA: Comprehensive Environmental Response, Compensation, and Liability Act
CFR: Code of Federal Regulations
CNS: Central Nervous System
CPR: Controlled Product Regulations
DSL: Domestic Substances List
EINECS: European Inventory of Existing Commercial Chemical Substances
IARC: International Agency for Research on Cancer
IDL: Ingredient Disclosure List
NIOSH: National Institute of Occupational Safety and Health
OSHA: Occupational Safety and Health Administration
OSHA PEL: OSHA Permissible Exposure Limits
RCRA: Resource Conservation and Recovery Act
RTECS: Registry of Toxic Effects of Chemical Substances

SARA: Superfund Amendments and Reauthorization Act
TSCA: Toxic Substances Control Act
TWA: Time Weighted Average
WHMIS: Workplace Hazardous Materials Information System

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