SAFETY DATA SHEET
Nashua 398 Spray Adhesive

1. IDENTIFICATION

Product Name	Nashua 398 Spray Adhesive
Recommended use of the chemical and restrictions on use	
Identified uses	Spray Adhesive
Company Identification	Berry Plastics Corporation 25 Forge Parkway Franklin, MA 02038
Customer Information Number	(800) 248-7659 (Monday – Friday 8:00 am to 5:00 pm) msdstechnical@berryplastics.com
Emergency Telephone Number	
Chemtrec Number	Within USA and Canada: 1-800-424-9300 CCN22955 Outside USA and Canada: +1 703-741-5970 (collect calls accepted)
Issue Date	May 16, 2014
Supersedes Date	May 29, 2013

Safety Data Sheet prepared in accordance with OSHA's Hazard Communication Standard (29 CFR 1910.1200)and the Globally Harmonized System of Classification and Labelling of Chemicals (GHS)

2. HAZARD IDENTIFICATION

Hazard Classification
Flammable Aerosols - Category 1
Serious eye damage/eye irritation - Category 2A
Skin corrosion/irritation - Category 2
Specific Target Organ Toxicity Repeat Exposure - Category 2
Specific Target Organ Toxicity Single Exposure - Category 3
Toxic to Reproduction - Category 2
Aspiration hazard - Category 1

Label Elements
Hazard Symbols

Signal Word: Danger

Hazard Statements
Extremely flammable aerosol.
Causes serious eye irritation.
Causes skin irritation.
May cause drowsiness or dizziness
May cause damage to organs (nervous system) through prolonged or repeated exposure (Inhalation).
May be fatal if swallowed and enters airways.

2. HAZARD IDENTIFICATION

Precautionary Statements

Prevention

Pressurized container: Do not pierce or burn, even after use.
Do not spray on an open flame or other ignition source.
Keep away from heat/sparks/open flame/hot surfaces. - No smoking.
Wear eye protection/face protection/protective gloves/protective clothing.
Do not handle until all safety precautions have been read and understood.
Obtain special instructions before use.
Avoid breathing fume/gas/mist/vapors/spray.
Wash hands thoroughly after handling.
Use only outdoors or in a well-ventilated area.

Response

If swallowed: Immediately call a poison center/doctor/physician. Do not induce vomiting.
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.
Take off contaminated clothing and wash before re-use.
If exposed or concerned: Get medical attention/advice.
If on skin: Wash with plenty of soap and water.
If skin irritation occurs, get medical advice/attention.
If inhaled: Remove person to fresh air and keep comfortable for breathing.
Call a poison center or doctor/physician if you feel unwell.

Storage

Protect from sunlight.
Store in a well-ventilated place. Keep container tightly closed.
Do not expose to temperatures exceeding 50 °C/122 °F.
Store locked up.

Disposal

Dispose of contents/container in accordance with local regulation.

Other Hazards

None identified.

2. HAZARD IDENTIFICATION

Specific Concentration Limits

The values listed below represent the percentages of ingredients of unknown toxicity.

Acute oral toxicity	55 - 65 %
Acute dermal toxicity	55 - 65 %
Acute inhalation toxicity	70 - 80%
Acute aquatic toxicity	70 - 80%

3. COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms:
This product is a mixture.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS Number	Concentration
Acetone	67-64-1	20 - 30%
Propane	74-98-6	20 - 30%
n-Hexane	110-54-3	10 - 20%
Dimethyl Ether	115-10-6	10 - 20%
2-methylpentane	107-83-5	1 - 10%
3-methylpentane	96-14-0	1 - 10%

4. FIRST- AID MEASURES

Description of necessary first-aid measures

Eyes

Immediately flood the eye with plenty of water for at least 15 minutes, holding the eye open. Obtain medical attention if soreness or redness persists.

Skin

Immediately flood the skin with large quantities of water for at least 15 minutes, preferably under a shower. Remove contaminated clothing and continue washing. Contaminated clothing should be washed or dry-cleaned before re-use. Obtain medical attention if blistering occurs or redness persists.

Ingestion

Do not induce vomiting. Have victim drink 1-3 glasses of water to dilute stomach contents. If there is difficulty in breathing, give oxygen. Obtain medical attention immediately. Never give anything by mouth to an unconscious or convulsing person.

Inhalation

Remove from exposure. If there is difficulty in breathing, give oxygen. Obtain medical attention immediately.

Most important symptoms/effects, acute and delayed

Aside from the information found under Description of necessary first aid measures (above) and Indication of immediate medical attention and special treatment needed, no additional symptoms and effects are anticipated.

Indication of immediate medical attention and special treatment needed

Notes to Physicians

Treat symptomatically.

5. FIRE - FIGHTING MEASURES

Suitable Extinguishing Media

Use foam, dry chemical or carbon dioxide. Be aware of the possibility of re-ignition. Keep containers and surroundings cool with water spray.

Specific hazards arising from the chemical

Vapors can travel a considerable distance to a source of ignition and flashback. Flashback can occur if air temperature exceeds flash point. Be aware of possibility of re-ignition. For aerosol products – exposure to temperature over 130^{o}F may cause containers to burst and release highly flammable gas.

Special Protective Actions for Fire-Fighters

Wear full protective clothing and self-contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures
Wear appropriate protective clothing. Eliminate all sources of ignition. Use non-sparking scoops for flammable materials.

Environmental Precautions
Prevent the material from entering drains or watercourses. Notify authorities if spill has entered watercourse or sewer or has contaminated soil or vegetation. Dispose in accordance with federal, state and local regulations.

Methods and materials for containment and cleaning up
Contain and absorb using earth, sand or other insert material. Transfer into suitable containers for recovery or disposal.

7. HANDLING AND STORAGE

Precautions for safe handling
Keep from reach of children. Do not puncture, incinerate or place aerosol product containers in compactors. Use in well ventilated area. Use local exhaust ventilation. Avoid inhaling vapor. Avoid contact with eyes, skin and clothing. Keep container tightly closed when not in use. Do not flame cut, braze or use welding torch on container. Intentional misuse by deliberately concentrating or inhaling the vapors from this product may be harmful or fatal.

Conditions for safe storage
Store away from sources of heat or ignition. Storage area should be: cool - dry - well ventilated - away from incompatible materials - out of direct sunlight - away from sources of ignition (heat, sparks, flames, and pilot lights) Do not store above 120^{o}F.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters
Exposure limits are listed below, if they exist.

Hexane
ACGIH: TLV 50ppm 8h TWA. (skin)
OSHA: PEL 500ppm (1800 mg/m^3) 8h TWA.
Can be absorbed through skin.
Acetone
ACGIH: TLV 500 ppm 8h TWA.
ACGIH (STEL): 750 ppm 15min.
OSHA: PEL 1000 ppm (2400 mg/m^3) 8h TWA.
Propane
ACGIH: See ACGIH Appendix F: Minimal Oxygen Content.
OSHA: PEL 1000ppm (1800 mg/m^3) 8h TWA.
2-Methylpentane as Hexane, Isomers other than n-Hexane
ACGIH: TLV 500 ppm 8h TWA.
ACGIH (STEL): 1000 ppm 15min
3-Methylpentane as Hexane, Isomers other than n-Hexane
ACGIH: TLV 500 ppm 8h TWA.
ACGIH (STEL): 1000 ppm 15min

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Appropriate engineering controls
Engineering methods to prevent or control exposure are preferred. Methods include process or personnel enclosure, mechanical ventilation (dilution and local exhaust), and control of process conditions.

Individual protection measures
Respiratory Protection
Wear respiratory protection if there is a risk of exposure to high vapor concentrations, aerosols or if applied to hot surfaces. The specific respirator selected must be based on the airborne concentration found in the workplace and must not exceed the working limits of the respirator.
Skin Protection
Butyl gloves are recommended.
Eye/Face Protection
Chemical goggles or safety glasses with side shields.
Body Protection
If there is danger of splashing, wear: overall or apron

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Physical State	Aerosol
Color	No data available
Odor	No data available
Odor Threshold	No data available
pH	Not applicable
Specific Gravity	0.769 estimated
Boiling Range/Point (°C/F)	Not determined
Melting Point (°C/F)	Not determined
Flash Point (PMCC) (°C/F)	-104.44 °C/-156°F Propellant estimated
Vapor Pressure	Not determined
Evaporation Rate	Faster than butyl acetate
Solubility in Water	No data available
Vapor Density (Air = 1)	Heavier than air
VOC (g/l)	No data available
VOC (%)	No data available
Partition coefficient (n-octanol/water)	Not applicable
Viscosity	No data available
Auto-ignition Temperature	No data available
Decomposition Temperature	No data available
Upper explosive limit	No data available
Lower explosive limit	No data available
Flammability (solid, gas)	No data available

10. STABILITY AND REACTIVITY

Reactivity
Data is not available

Chemical Stability
Stable under normal conditions.

Possibility of hazardous reactions
Hazardous polymerization will not occur.

Conditions to Avoid
Heat, sparks, flames - contact with incompatible materials

Incompatible Materials
Strong oxidizers

Hazardous Decomposition Products
Oxides of carbon - aldehydes

11. TOXICOLOGICAL INFORMATION

Acute Toxicity
Acetone
Oral LD50 (rat) 5800 mg/kg
Dermal LD50 (rabbit) 20,000 mg/kg
Inhalation LC50 (rat) 76 mg/l 4hr
n-Hexane
Oral LD50 (rat) >16,000 mg/kg
Dermal LD50 (rabbit) >2000 mg/kg

Specific Target Organ Toxicity (STOT) – single exposure
Inhalation of this product may cause narcotic effects such as drowsiness or dizziness (Hexane, Acetone, 2-methylpentane, 3-methylpentane).

Specific Target Organ Toxicity (STOT) – repeat exposure
Hexane: May cause adverse effects to the nervous system through repeated inhalation exposure..

Serious Eye damage/Irritation
Acetone: Undiluted acetone was severely irritating to rabbit eyes, mild irritation was observed for acetone concentrations of 30% and lower.
Hexane: Not irritating to eyes in rabbit studies.

Skin Corrosion/Irritation
Acetone: Repeated exposure may cause skin dryness and cracking.
Hexane: Irritating to skin in animal studies.
2-methylpentane: May cause skin irritation.
3-methylpentane: May cause skin irritation.

Respiratory or Skin Sensitization
Acetone: No indications of a sensitizing potential of acetone were found in a guinea pig maximization test.
Hexane: Not sensitizing to skin in Mouse local lymph node assay (LLNA)

11. TOXICOLOGICAL INFORMATION

Carcinogenicity
Not considered carcinogenic by NTP, IARC, and OSHA.

Germ Cell Mutagenicity
Available data indicates this product is not expected to be mutagenic.

Reproductive Toxicity
Hexane: In animal studies adverse reproductive and developmental effects were seen.

Aspiration Hazard
Available data indicates this product may be an aspiration hazard. May be fatal if swallowed and enters airways.

12. ECOLOGICAL INFORMATION

Ecotoxicity
Hexane: Aquatic Chronic 2: Toxic to aquatic life with long lasting effects. (ECHA)
2-methylpentane: Aquatic Chronic 2: Toxic to aquatic life with long lasting effects. (ECHA)
3-methylpentane: Aquatic Chronic 2: Toxic to aquatic life with long lasting effects. (ECHA)

Mobility in soil
No relevant studies identified.

Persistence/Degradability
No relevant studies identified.

Bioaccumulative Potential
No relevant studies identified.

Other adverse effects
No relevant studies identified.

13. DISPOSAL CONSIDERATIONS

Disposal Methods
Dispose of in accordance with all applicable local and national regulations. Labels should not be removed from containers until they have been cleaned. Do not cut, puncture or weld on or near to the container. Use non-sparking tools. Do not incinerate closed containers. Empty containers may contain hazardous residues. Dispose of containers with care.

14. TRANSPORT INFORMATION

DOT CFR 172.101 Data	Consumer Commodity, ORM-D (US ground shipment only)
UN Proper Shipping Name	Aerosols
UN Class	(2.1)
UN Number	UN1950
UN Packaging Group	None
Classification for AIR Transportation (IATA)	Consult current IATA Regulations prior to shipping by air.
Environmental Hazards	Not a marine pollutant

15. REGULATORY INFORMATION

United States TSCA Inventory
All ingredients have been verified for inclusion or are exempt from listing on the EPA Toxic Substance Control Act Chemical Substance Inventory.

Canada DSL and NDSL Inventory
All ingredients in this product have been verified for inclusion or are exempt from listing on the Domestic Substance List (DSL).

WHMIS Classification
B5. D.2 A

This product was classified in accordance with the hazard criteria of the Canadian Controlled Products Regulations and the MSDS contains all the information required by these regulations.

California Proposition 65
This product does not contain materials which the State of California has found to cause cancer, birth defects or other reproductive harm.

SARA Title III Sect. 311/312 Categorization
Immediate (Acute) Health Hazard, Delayed (Chronic) Health Hazard, Fire Hazard, Sudden Release of Pressure

SARA Title III Sect. 313
This product contains a chemical that is listed in Section 313 at or above de minimis concentrations. The following listed chemicals are present: Hexane (110-54-3)

16. OTHER INFORMATION

NFPA Ratings
NFPA Code for Health - 2
NFPA Code for Flammability - 4
NFPA Code for Reactivity - 0
NFPA Code for Special Hazards – None

HMIS Ratings
HMIS Code for Health - 2*
HMIS Code for Flammability - 4
HMIS Code for Physical Hazard - 0
HMIS Code for Personal Protection - See Section 8
*Chronic

Legend
ACGIH: American Conference of Governmental Industrial Hygienists
CAS#: Chemical Abstracts Service Number
ECHA: European Chemicals Agency
EC50: Effect Concentration 50%
IARC: International Agency for Research on Cancer
LC50: Lethal Concentration 50%
LD50: Lethal Dose 50%
N/A: Denotes no applicable information found or available
OSHA: Occupational Safety and Health Administration
PEL: Permissible Exposure Limit
STEL: Short Term Exposure Limit

16. OTHER INFORMATION

TLV: Threshold Limit Value
TSCA: Toxic Substance Control Act

Information Source and References
This SDS is prepared by Hazard Communication Specialists based on information provided by internal company references.

Prepared By: EnviroNet LLC.

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