



Safety Data Sheet

24 Hour Emergency Phone Numbers
Medical/Poison Control:
In U.S.: Call 1-800-222-1222

Outside U.S.: Call your local poison control center

Transportation/National Response Center:

1-800-535-5053
1-352-323-3500

NOTE: The National Response Center emergency numbers to be used only in the event of chemical emergencies involving a spill, leak, fire, exposure or accident involving chemicals.

IMPORTANT: Provide this information to employees, customers, and users of this product. Read this SDS before handling or disposing of this product. This product is covered by the OSHA Hazard Communication Standard and this document has been prepared in accordance with requirements of this standard. All abbreviated terms used in this SDS are further described in Section 16.

1. Identification

This Safety Data Sheet is available in American Spanish upon request.
 Los Datos de Seguridad pueden obtenerse en Espanol si lo requiere.

| | | | |
|---------------------------------------|---|-------------------------|-----------------------|
| Product Name: | 0306/0307 HHR Spray Contact Adhesive | Revision Date: | 6/19/2015 |
| Product UPC Number: | 00097, 00095, 04051, 04054 | Supercedes Date: | New SDS |
| Product Use/Class: | Contact Adhesive | SDS No: | 00030513001 |
| Manufacturer: | DAP Products Inc. 2400 Boston Street Suite 200 Baltimore, MD 21224-4723 888-327-8477 (non - emergency matters) | Preparer: | Regulatory Department |
| Emergency Telephone: | 1-800-535-5053, 1-352-323-3500, 1-800-222-1222 | | |
| Safety Data Sheet Coordinator: | MSDS@DAP.com | | |

2. Hazards Identification

EMERGENCY OVERVIEW: DANGER! Extremely flammable liquid and vapor. Vapors may cause flash fire or explosion. Vapors can form an ignitable mixture with air. Vapors can flow along surfaces to a distant ignition source and flash back. Do not smoke. Extinguish all flames and pilot lights, and turn off stoves, heaters, electric motors and other sources of ignition during use and until all vapors are gone. Keep container closed and away from heat, sparks, and open flame. Store away from caustics and oxidizers. Avoid breathing vapor. Avoid skin and eye contact. Use only with adequate ventilation. Prevent build-up of vapors by opening all windows and doors to achieve cross-ventilation. Irritating to eyes, respiratory system and skin. Harmful or fatal if swallowed. Aspiration hazard if swallowed - can enter lungs and cause damage. May affect the brain or nervous system causing dizziness, headache or nausea.

GHS Classification

Eye Irrit. 2, Flam. Liq. 1, Skin Irrit. 2, STOT RE 2, STOT SE 3 NE

Symbol(s) of Product**Signal Word**

Danger

GHS HAZARD STATEMENTS

| | | |
|---------------------------------------|------|--|
| Flammable Liquid, category 1 | H224 | Extremely flammable liquid and vapour. |
| Skin Irritation, category 2 | H315 | Causes skin irritation. |
| Eye Irritation, category 2 | H319 | Causes serious eye irritation. |
| STOT, single exposure, category 3, NE | H336 | May cause drowsiness or dizziness. |
| STOT, repeated exposure, category 2 | H373 | May cause damage to organs <or state all organs affected, if known> through prolonged or repeated exposure <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>. |

GHS LABEL PRECAUTIONARY STATEMENTS

| | |
|----------------|--|
| P210 | Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. |
| P260 | Do not breathe dust/fume/gas/mist/vapours/spray. |
| P280 | Wear protective gloves/protective clothing/eye protection/face protection. |
| P302+P352 | IF ON SKIN: Wash with plenty of soap and water. |
| P305+P351+P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| P312 | Call a POISON CENTER or doctor/physician if you feel unwell. |
| P337+P313 | If eye irritation persists: Get medical advice/attention. |
| P362 | Take off contaminated clothing. |
| P403+P233 | Store in a well-ventilated place. Keep container tightly closed. |
| P403+P235 | Store in a well-ventilated place. Keep cool. |

GHS SDS PRECAUTIONARY STATEMENTS

| | |
|------|---|
| P240 | Ground/bond container and receiving equipment. |
| P241 | Use explosion-proof electrical/ventilating/lighting/.../ equipment. |
| P242 | Use only non-sparking tools. |
| P243 | Take precautionary measures against static discharge. |

3. Composition/Information on Ingredients

| <u>Chemical Name</u> | <u>CAS-No.</u> | <u>Wt. %</u> | <u>GHS Symbols</u> | <u>GHS Statements</u> |
|----------------------|----------------|--------------|-------------------------|--------------------------------------|
| Acetone | 67-64-1 | 10-25 | GHS02-GHS03-GHS07 | H225-270-319-336 |
| Toluene | 108-88-3 | 10-25 | GHS02-GHS03-GHS07-GHS08 | H225-270-302-304-315-332-335-336-373 |
| n-Hexane | 110-54-3 | 10-25 | GHS02-GHS03-GHS07-GHS08 | H225-270-304-315-336-373 |
| 2-Methylpentane | 107-83-5 | 2.5-10 | GHS02-GHS03-GHS07-GHS08 | H225-270-304-315-336 |
| 3-Methylpentane | 96-14-0 | 2.5-10 | GHS02-GHS03-GHS07-GHS08 | H225-270-304-315-336 |
| Methylcyclopentane | 96-37-7 | 2.5-10 | GHS03-GHS08 | H270-304 |
| Isoheptane | 591-76-4 | 1.0-2.5 | GHS02-GHS03-GHS07-GHS08 | H225-270-304-315-336 |
| 2,3-Dimethylbutane | 79-29-8 | 1.0-2.5 | GHS02-GHS03-GHS07-GHS08 | H225-270-304-315-336 |
| Magnesium oxide fume | 1309-48-4 | 1.0-2.5 | GHS03 | H270 |
| 2,4-Dimethylpentane | 108-08-7 | 1.0-2.5 | GHS02-GHS03-GHS07-GHS08 | H225-270-304-315-336 |

The text for GHS Hazard Statements shown above (if any) is given in the "Other information" Section.

4. First-aid Measures

FIRST AID - INHALATION: If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately. NOTE: Only trained personnel should administer artificial respiration or give oxygen.

FIRST AID - SKIN CONTACT: Wash skin with soap and water for 15 minutes. Get medical aid if symptoms persist. Remove and wash contaminated clothing. DO NOT try to peel the solidified material from the skin or use solvents or thinners to dissolve it. The use of vegetable oil or mineral oil is recommended for removal of this material from the skin. Flush exposed area with water while removing contaminated clothing. Get medical attention if irritation persists. To remove from skin, remove completely with a dry cloth or paper towel, before washing with detergent and water.

FIRST AID - EYE CONTACT: If material gets into eyes, flush with water immediately for 15 minutes. Consult a physician.

FIRST AID - INGESTION: If swallowed, DO NOT INDUCE VOMITING. Get medical attention immediately.

5. Fire-fighting Measures

UNUSUAL FIRE AND EXPLOSION HAZARDS: Eliminate sources of ignition: heat, electrical equipment, sparks and flames. Vapors can form an ignitable mixture with air. Vapors can flow along surfaces to a distant ignition source and flash back. Vapors may form explosive mixtures with air. Containers may explode if exposed to extreme heat. Empty containers retain product residue (liquid and/or vapor). Vapor can ignite potentially causing an explosion.

SPECIAL FIREFIGHTING PROCEDURES: Wear self-contained breathing apparatus pressure-demand (NIOSH approved or equivalent) and full protective gear. Use water spray to cool exposed surfaces. Cool fire-exposed containers using water spray.

EXTINGUISHING MEDIA: Carbon Dioxide, Dry Chemical, Foam

6. Accidental Release Measures

ENVIRONMENTAL MEASURES: No Information

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED: NOTE: Review fire hazards before proceeding with clean up. Immediately eliminate sources of ignition. Keep people away from and upwind of spill/leak. Contain spilled material and remove with inert absorbent. Dispose of contaminated absorbent, container and unused contents in accordance with local, state and federal regulations. Scrape up dried material and place into containers. Prevent product from entering drains. Soak up with inert absorbent material and dispose of as hazardous waste. Read all product instructions before using. Personal protective equipment should include impervious gloves, protective eye wear, and suitable work clothes.

7. Handling and Storage

HANDLING: KEEP OUT OF REACH OF CHILDREN! DO NOT TAKE INTERNALLY. Remove all sources of ignition. Make sure nozzle is directed away from yourself prior to discharge. Keep away from open flames, hot surfaces and sources of ignition. Provide adequate ventilation. Avoid heat, sparks and open flames. Wear appropriate personal protection. Use in well ventilated area. Open all windows and doors or use other means to ensure cross-ventilation and fresh air entry during application and drying. Odor is not an adequate warning for hazardous conditions. Avoid contact with eyes, skin and clothing. Empty containers retain product residue (liquid and/or vapor). Vapor can ignite potentially causing an explosion. Wash thoroughly after handling. Do not use in areas where static sparks may be generated. Intentional misuse by deliberately concentrating and inhaling vapors may be harmful or fatal. Construction and repair activities can adversely affect indoor air quality. Consult with occupants or a representative (i.e. maintenance, building manager, industrial hygienist, or safety officer) to determine ways to minimize impact.

STORAGE: Store away from sources of ignition and heat. Protect material from direct sunlight. Do not store at temperatures above 120 degrees F. Store containers away from excessive heat and freezing. Store away from caustics and oxidizers. Keep containers tightly closed.

8. Exposure Controls/Personal Protection

Ingredients with Occupational Exposure Limits

| <u>Chemical Name</u> | <u>ACGIH TLV-TWA</u> | <u>ACGIH-TLV STEL</u> | <u>OSHA PEL-TWA</u> | <u>OSHA PEL-CEILING</u> |
|----------------------|------------------------------|------------------------------|---|-------------------------|
| Acetone | 500 ppm TWA | 750 ppm STEL | 1000 ppm TWA, 2400 mg/m ³ TWA | N.E. |
| Toluene | 20 ppm TWA | N.E. | 200 ppm TWA | 300 ppm Ceiling |
| n-Hexane | 50 ppm TWA | N.E. | 500 ppm TWA, 1800 mg/m ³ TWA | N.E. |
| 2-Methylpentane | N.E. | N.E. | N.E. | N.E. |
| 3-Methylpentane | N.E. | N.E. | N.E. | N.E. |
| Methylcyclopentane | N.E. | N.E. | N.E. | N.E. |
| Isoheptane | 400 ppm TWA | 500 ppm STEL | N.E. | N.E. |
| 2,3-Dimethylbutane | Heptane, all isomers N.E. | Heptane, all isomers N.E. | N.E. | N.E. |

| | | | | |
|----------------------|-------------------------------------|--------------------------------------|--|------|
| Magnesium oxide fume | 10 mg/m3 TWA inhalable fraction | N.E. | 15 mg/m3 TWA fume, total particulate | N.E. |
| 2,4-Dimethylpentane | 400 ppm TWA Heptane, all isomers | 500 ppm STEL Heptane, all isomers | N.E. | N.E. |

Further Advice: MEL = Maximum Exposure Limit OES = Occupational Exposure Standard SUP = Supplier's Recommendation
Sk = Skin Sensitizer N.E. = Not Established

Personal Protection



RESPIRATORY PROTECTION: A NIOSH-approved air purifying respirator with an organic vapor cartridge or canister may be necessary under certain circumstances where airborne concentrations are expected to exceed exposure limits. If concentrations exceed the exposure limits specified, use of a NIOSH-approved supplied air respirator is recommended. Where the protection factor is exceeded, use of a Self Contained Breathing Apparatus (SCBA) may be necessary. If you experience eye watering, headache or dizziness or if air monitoring demonstrates vapor/mist levels are above applicable limits, wear and appropriate, properly fitted respirator (NIOSH approved) during and after application. A respiratory protection program that meets the OSHA 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use.



SKIN PROTECTION: Solvent-resistant gloves.



EYE PROTECTION: Goggles or safety glasses with side shields.



OTHER PROTECTIVE EQUIPMENT: Provide eyewash and solvent impervious apron if body contact may occur.



HYGIENIC PRACTICES: Remove and wash contaminated clothing before re-use.

9. Physical and Chemical Properties

| | | | |
|---------------------------------------|-----------------------------|---|-----------------|
| Appearance: | Tan | Physical State: | Liquid |
| Odor: | Strong Solvent | Odor Threshold: | Not Established |
| Density, g/cm3: | 0.80 - 0.80 | pH: | Not Applicable |
| Freeze Point, °C: | Not Established | Viscosity (mPa.s): | Not Established |
| Solubility in Water: | No Information | Partition Coeff., n-octanol/water: | Not Established |
| Decomposition Temperature, °C: | Not Established | Explosive Limits, %: | N.I. - N.I. |
| Boiling Range, °C: | N.I. - N.I. | Auto-Ignition Temperature, °C | Not Established |
| Minimum Flash Point, °C: | -45.5 | Vapor Pressure, mmHg: | No Information |
| Evaporation Rate: | Faster Than n-Butyl Acetate | Flash Method: | Seta Closed Cup |
| Vapor Density: | Heavier Than Air | Flammability: | No Information |
| Combustibility: | Does not support combustion | | |

(See "Other information" Section for abbreviation legend)

(If product is an aerosol, the flash point stated above is that of the propellant.)

10. Stability and Reactivity

STABILITY: Stable under recommended storage conditions.

CONDITIONS TO AVOID: Keep away from open flames, hot surfaces and sources of ignition. Keep away from oxidizing agents, strongly alkaline and strongly acid materials in order to avoid exothermic reactions. Avoid contact with skin, eyes and clothing. Do not smoke.

INCOMPATIBILITY: Open flames, hot surfaces and sources of ignition. Keep away from strong oxidizing agents, heat and open

flames. Exothermic reaction with strong acids. Strong bases.

HAZARDOUS DECOMPOSITION PRODUCTS: Normal decomposition products, i.e., COx, NOx.

11. Toxicological Information

EFFECT OF OVEREXPOSURE - INHALATION: Inhalation of vapors may cause irritation of the nose, throat, lungs and respiratory tract. Inhalation of vapors in high concentration may cause shortness of breath (lung edema). Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal. Prolonged, repeated or high exposures may cause central nervous system depression leading to headaches, nausea, drowsiness, dizziness, and possibly narcosis. In extreme cases, may cause loss of consciousness.

EFFECT OF OVEREXPOSURE - SKIN CONTACT: Harmful if absorbed through the skin. May cause skin irritation. Prolonged and repeated skin contact may cause dermatitis, drying and defatting due to the solvent properties.

EFFECT OF OVEREXPOSURE - EYE CONTACT: May cause eye irritation. Signs and symptoms may include: pain, tears, swelling, redness and blurred vision.

EFFECT OF OVEREXPOSURE - INGESTION: Harmful or fatal if swallowed. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. May cause gastrointestinal disturbances with dizziness and central nervous system depression. If ingested, may cause depressed respiration. Aspiration hazard if swallowed. Aspiration of material into the lungs due to vomiting can cause chemical pneumonitis, which can be fatal.

CARCINOGENICITY: No Information

EFFECT OF OVEREXPOSURE - CHRONIC HAZARDS: Repeated or prolonged exposure may cause irregular heartbeat and heart failure as well as respiratory system, kidney, cardiovascular and liver damage. May cause kidney and liver damage as well as developmental and reproductive toxicity. NOTICE: Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage. Symptoms include: loss of memory, loss of intellectual ability and loss of coordination. Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal. Overexposure or misuse of toluene can cause liver, kidney, and brain damage as well as cardiac abnormalities. There have been cases of aplastic anemia from toluene in industrial exposures (ACGIH, 1992). Increased coagulation time and reduced clotting factors have also been found, which are indicators of damage to the bone marrow (Clayton & Clayton, 1994). n-Hexane exposure can cause nerve damage to arms and legs causing numbness of the fingers and toes, effect may be permanent. Symptoms include: loss of memory, loss of intellectual ability and loss of coordination.

PRIMARY ROUTE(S) OF ENTRY: Eye Contact, Inhalation, Skin Contact

Acute Toxicity Values

The acute effects of this product have not been tested. Data on individual components are tabulated below

| <u>CAS-No.</u> | <u>Chemical Name</u> | <u>Oral LD50</u> | <u>Dermal LD50</u> | <u>Vapor LC50</u> |
|----------------|----------------------|------------------|---------------------|-------------------|
| 67-64-1 | Acetone | 5250 mg/kg mouse | >15688 mg/kg rabbit | 50 mg/L Rat |
| 108-88-3 | Toluene | 636 mg/kg Rat | 8390 mg/kg Rabbit | 12.5 mg/L Rat |
| 110-54-3 | n-Hexane | 28710 mg/kg Rat | 3000 mg/kg Rabbit | > 31.86 mg/L Rat |
| 107-83-5 | 2-Methylpentane | 28710 mg/kg Rat | 3000 mg/kg Rabbit | > 31.86 mg/L Rat |
| 96-14-0 | 3-Methylpentane | 28710 mg/kg Rat | 3000 mg/kg Rabbit | > 31.86 mg/L Rat |
| 96-37-7 | Methylcyclopentane | 28710 mg/kg Rat | 3000 mg/kg Rabbit | > 31.86 mg/L Rat |
| 591-76-4 | Isoheptane | 28710 mg/kg Rat | 3000 mg/kg Rabbit | > 31.86 mg/L Rat |
| 79-29-8 | 2,3-Dimethylbutane | 28710 mg/kg Rat | 3000 mg/kg Rabbit | > 31.86 mg/L Rat |
| 1309-48-4 | Magnesium oxide fume | >2000 mg/kg | >2000 mg/kg | >20 mg/L |
| 108-08-7 | 2,4-Dimethylpentane | 28710 mg/kg Rat | 3000 mg/kg Rabbit | > 31.86 mg/L Rat |

N.I. = No Information

12. Ecological Information

ECOLOGICAL INFORMATION: Ecological injuries are not known or expected under normal use.

13. Disposal Information

DISPOSAL INFORMATION: Residues and spilled material are hazardous waste due to ignitability. Dispose of material in accordance with all federal, state and local regulations. State and Local regulations/restrictions are complex and may differ from Federal regulations. Responsibility for proper waste disposal is with the owner of the waste. Do not flush into surface water or sanitary sewer system. Do not empty into drains. Do not burn or use a cutting torch on the empty container. Do not re-use empty containers. The container for this product can present explosion or fire hazards, even when emptied. To avoid risk of injury, do not cut, puncture, or weld on or near this container.

14. Transport Information

SPECIAL TRANSPORT PRECAUTIONS: No Information

DOT UN/NA Number: UN1133
 DOT Proper Shipping Name: Adhesives, containing a flammable liquid
 DOT Technical Name: N.A.
 DOT Hazard Class: 3
 Hazard SubClass: N.A.
 Packing Group: II

15. Regulatory Information

U.S. Federal Regulations:

CERCLA - SARA Hazard Category

This product has been reviewed according to the EPA 'Hazard Categories' promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:

Fire Hazard, Acute Health Hazard, Chronic Health Hazard

SARA SECTION 313:

This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendment and Reauthorization Act of 1986 and 40 CFR part 372:

| <u>Chemical Name</u> | <u>CAS-No.</u> |
|----------------------|----------------|
| Toluene | 108-88-3 |
| n-Hexane | 110-54-3 |

TOXIC SUBSTANCES CONTROL ACT:

All ingredients in this product are either on TSCA inventory list, or otherwise exempt.

This product contains the following chemical substances subject to the reporting requirements of TSCA 12(B) if exported from the United States:

No TSCA 12(b) components exist in this product.

CALIFORNIA PROPOSITION 65 CARCINOGENS AND REPRODUCTIVE TOXINS

CALIFORNIA PROPOSITION 65: No Information

International Regulations: As follows -

CANADIAN WHMIS:

This SDS has been prepared in compliance with Controlled Product Regulations except for the use of the 16 headings.

WHMIS Class No Information

16. Other Information

Revision Date: 6/19/2015 Supersedes Date: New MSDS

Reason for revision: HazCom2012/GHS Conversion

Datasheet produced by: Regulatory Department

HMIS Ratings:

| | | | | | | | |
|---------|---|---------------|---|-------------|---|----------------------|---|
| Health: | 2 | Flammability: | 3 | Reactivity: | 0 | Personal Protection: | X |
|---------|---|---------------|---|-------------|---|----------------------|---|

VOC Less Water Less Exempt Solvent, g/L:619.4

VOC Material, g/L:498

VOC as Defined by California Consumer Product Regulation, Wt/Wt%:62.2

Text for GHS Hazard Statements shown in Section 3 describing each ingredient:

| | |
|------|--|
| H225 | Highly flammable liquid and vapour. |
| H270 | May cause or intensify fire; oxidiser. |
| H302 | Harmful if swallowed. |
| H304 | May be fatal if swallowed and enters airways. |
| H315 | Causes skin irritation. |
| H319 | Causes serious eye irritation. |
| H332 | Harmful if inhaled. |
| H335 | May cause respiratory irritation. |
| H336 | May cause drowsiness or dizziness. |
| H373 | May cause damage to organs through prolonged or repeated exposure. |

Icons for GHS Pictograms shown in Section 3 describing each ingredient:

GHS02



GHS03



GHS07



GHS08



Legend: N.A. - Not Applicable, N.E. - Not Established, N.D. - Not Determined

DAP believes the data and statements contained herein are accurate as of the date hereof. They are offered in good faith as typical values and not as a product specification. NO WARRANTY OF MERCHANTABILITY, WARRANTY OF FITNESS FOR ANY PARTICULAR PURPOSE OR ANY OTHER WARRANTY, EXPRESS OR IMPLIED, IS MADE WITH REGARD TO THE INFORMATION HEREIN PROVIDED OR THE PRODUCT TO WHICH THE INFORMATION REFERS. Since this document is intended only as a guide to the appropriate use and precautionary handling of the referenced product by a properly trained person, it is therefore the responsibility of the user to (i) review the recommendations with due consideration for the specific context of the intended use and (ii) determine if they are appropriate.