



EXCAVATION

7

SEALANT



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MSDS - Material Safety Data Sheet**Product Name: PUNCTURE SEAL INSTANT TIRE REPAIR (UPC: 078698131566)****MSDS No.: M1118****I. Basic Information:****Manufacturer:** RADIATOR SPECIALTY COMPANY**Address:** 600 RADIATOR ROAD**City, ST Zip:** INDIAN TRAIL, NC 28079**Country:****Contact:** Robert Geer**Information Telephone Number:** 704-684--181 1**Emergency Contact:** Rocky Mountain Poison and Drug Center**Emergency Telephone Number:** 303-623-5716**Emergency Restrictions:****Product Name:** PUNCTURE SEAL INSTANT TIRE REPAIR (UPC: 078698131566)**MSDS No.:** M1118**Issue Date:** 06/01/2010**Supersedes Date:** 03/18/2010**II. Hazards Identification:****EMERGENCY OVERVIEW**

Caution: Eye and Skin Irritant. Contents Under Pressure.

Level 1 Aerosol

OSHA Regulatory Status

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Potential Health Effects**Route(s) of Entry:**

Absorption, Inhalation, and Ingestion.

Health Hazards (Acute and Chronic):

See signs and symptoms below

Signs and Symptoms:

Eye Contact: Direct spray of vapors may be irritating or harmful to eyes.

Skin Contact: Product may cause irritation due to defatting of skin.

Inhalation: High concentration of vapors may irritate nose and throat and cause headaches and nausea.

Ingestion: Can cause irritation, gastric disturbances, nausea.

Medical Conditions Generally Aggravated by Exposure:

None known

Other Health Warnings:

None known

Potential Environmental Effects

Not Available

III. Composition/Information on Ingredients:

Chemical Name	CAS No.	% Range	Trade Secret
1,1,1,2, Tetrafluoroethane	811-97-2	10.0 - 30.0	
2-Butoxyethanol	111-76-2	10.0 - 30.0	
Ammonium hydroxide	1336-21-6	0.1 - 1.0	
Ethylene glycol	107-21-1	1.0 - 5.0	
Polyvinylacetate Latex	9003-20-7	3.0 - 7.0	

MSDS - Material Safety Data Sheet

Product Name: PUNCTURE SEAL INSTANT TIRE REPAIR (UPC: 078698131566)

MSDS No.: M1118

IV. First Aid Measures:

Emergency and First Aid Procedures:

Eye Contact: Flush eyes with water for 15 minutes while lifting upper and lower eyelid. Get prompt medical attention.

Skin Contact: Wash with soap and water. If irritation persists, get prompt medical attention.

Inhalation: Move to fresh air. If breathing becomes difficult get prompt medical attention.

Ingestion: Drink water or milk. Call Poison Control Center, physician, or hospital emergency room immediately.

Note to Physicians:

N/A

V. Fire Fighting Measures:

Suitable Extinguishing Media:

Water Fog, Foam, Carbon Dioxide, Dry Chemical

Unsuitable Extinguishing Media:

N/D

Products of Combustion:

Combustion products from fire: products of carbon Oxides, Nitrogen Oxides, Halogen acids.

Protection of Firefighters:

Wear self-contained positive pressure breathing apparatus and protective clothes. Use shield to protect from rupturing and venting containers. At elevated temperatures containers may vent, rupture or burst, even violently

VI. Accidental Release Measures:

Personal Precautions:

Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed.

Environmental Precautions:

Prevent run-off to sewers, streams, or other bodies of water. If run-off occurs, notify proper authorities as required that a spill has occurred.

Methods for Containment:

Dike or contain spill and absorb with inert materials (sand, sawdust, absorbent sweeping compounds, rags, etc).

Methods for Cleanup:

Neutralize remaining traces of material and flush with water followed by liberal covering with sodium bicarbonate. All clean-up material should be removed and placed in approved containers for disposal. Rinse water may be disposed of down a sanitary sewer system if authorized by the local municipality.

Other Information:

Eliminate all ignition sources. Persons not wearing protective equipment should be excluded from area of spill until clean up has been completed. Prevent run-off to sewers, streams, or other bodies of water. If run-off occurs, notify proper authorities as required that a spill has occurred.

VII. Handling and Storage:

Handling Precautions:

Handling: Use with adequate ventilation and proper protective equipment.

Do not use or store near fire, sparks, or flame. Do not puncture or incinerate container. Exposure to temperatures above 120° may cause container to vent, rupture, or burst.

Storage Precautions:

Store in cool, dry, well-ventilated area away from acids and oxidizing agents. Do not store above temperature of 120°F.

VIII. Exposure Controls/Personal Protection:

MSDS - Material Safety Data Sheet**Product Name: PUNCTURE SEAL INSTANT TIRE REPAIR (UPC: 078698131566)****MSDS No.: M1118**

Chemical Name	OSHA PEL	ACGIH TLV	Other Limits
Ethylene glycol	50 ppm	100 mg/m3	Not Available
2-Butoxyethanol	25 ppm	25 ppm	Not Available
Ammonium hydroxide	50 ppm (TWA)	25 ppm	Not Available
1,1,1,2, Tetrafluoroethane	N/E	N/E	1000 ppm (TWA)
Polyvinylacetate Latex	Not Available	Not Available	Not Available

Engineering Controls:

See Section above for applicable exposure limits. Use with adequate ventilation. If TLV is exceeded, wear NIOSH approved respirator.

Personal Protective Equipment:

Use with adequate ventilation. For prolonged exposure wear protective safety glasses, gloves, and apron.

IX. Physical and Chemical Properties:**Boiling Point:** 212 F**Boiling Range:** N/D**Solubility In Water:** Soluble**Flash Point:** None**Odor Threshold:** N/D**Vapor Density (AIR = 1):** >1**pH Range:** 10.2 - 11.6**Decomposition Temp:** N/A**Lower Explosive Limit:** N/A**Specific Gravity (H2O = 1):** 1.00**Other Information:** VOC Content: 15.64%**Melting Point:** N/A**Freezing Point:** 31°F**Evaporation Rate (Butyl Acetate = 1):** 0.2**Flash Point Method:** TCC**Appearance and Odor:** White milky liquid with slight ammonia odor**Vapor Pressure (mm Hg.):** N/D**Partition Coefficient:** N/D**Auto-Ignition Temp:** N/A**Upper Explosive Limit:** N/A**X. Stability and Reactivity:****Stability:**

Stable

Conditions to Avoid:

See incompatible materials

Incompatible Materials:

Strong acids and oxidizers

Hazardous Decomposition Products:

Combustion products from fire: products of carbon Oxides, Nitrogen Oxides, Halogen acids.

Possibility of Hazardous Reactions:

Will not occur

XI. Toxicological Information:

N/D

MSDS - Material Safety Data Sheet**Product Name: PUNCTURE SEAL INSTANT TIRE REPAIR (UPC: 078698131566)****MSDS No.: M1118****XII. Ecological Information:**

N/D

XIII. Disposal Considerations:

DISPOSAL: This container may be recycled in aerosol recycling centers when empty. Before offering for recycling, empty the can by using the product according to the label. DO NOT PUNCTURE! If recycling is not available, wrap the container and discard in the trash. Dispose of unused product in accordance with all local, state government and federal laws and regulations.

XIV. Transport Information:**Shipping Name:** Not Available**DOT Hazard Class:** Not Available**DOT Subsidiary Hazard Class:** Not Available**UN/NA#:** Not Available**Packing Group:** Not Available**Transportation Information:**

DOT Hazard Class: ORM-D

Shipping Name: Consumer Commodity

The DOT description is provided to assist in the proper shipping classification of this product and may not be suitable for international and air shipping purposes.

ICAO/IATA (US)
Shipping Name: Aerosols
Class: 2.2
UN number: UN1950

International:
ICAO/IATA
UN number: UN1950
Shipping Name: Aerosols
Class: 2.2

IMDG
UN number: UN1950
Shipping Name: Aerosols
Class: 2.2
EmS: F-D, S-U

XV. Regulatory Information:

SARA 313 Reportable Chemicals.
Ethylene Glycol - 107-21-1
2-Butoxyethanol - 111-76-2
Ammonium Hydroxide - 1336-21-6

USA TSCA: All components of this material are listed on the US TSCA Inventory.

State RTK Chemicals:
Ethylene Glycol - 107-21-1
2-Butoxyethanol - 111-76-2
Ammonium Hydroxide - 1336-21-6

MSDS - Material Safety Data Sheet**Product Name: PUNCTURE SEAL INSTANT TIRE REPAIR (UPC: 078698131566)****MSDS No.: M1118****XVI. Other Information:****Chemical State:**

Liquid



Gas



Solid

Chemical Type:

Pure



Mixture

Hazard Category:

Acute



Chronic



Fire

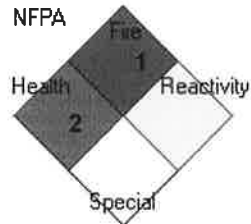


Pressure



Reactive

NFPA

**Additional Manufacturer Warnings:**

Do not used in confined area without proper ventilation. Contact lenses may cause further damage in case of splash into eye. KEEP AWAY FROM CHILDREN AND ANIMALS!

N/E: Not Established

N/D: Not Determined

N/A: Not Applicable

N/AV: Not Available

Additional Product Information:

While Radiator Specialty Company believes this data is accurate as of the revision date, we make no warranty with respect to the data and we expressly disclaim all liability for reliance thereon. The data is offered solely for information, investigation, and verification. Various government agencies may have specific regulations regarding the transportation, handling, storage, use, or disposal of this product which may not be covered by this MSDS. The user is responsible for full compliance.

2	Health
1	Flammability
0	Physical Hazard
C	Pers. Protection

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MATERIAL SAFETY DATA SHEET

HITEC 11100 SERIES SILICONE SEALANT

FILE NO.: 11100
MSDS DATE: 01/08/08

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: HI TEC 11100 SERIES 100% INDUSTRIAL RTV SILICONE SEALANT
PRODUCT CODES: 11101, 11102, 11103, 11105, 11107, 11108, 3101, 3102, 3103, 3105, 3107

MANUFACTURER: HI TEC INDUSTRIES
ADDRESS: 6100 SOUTH FAIRFAX ROAD
BLOOMINGTON, IN 47401

EMERGENCY PHONE 800-457-1313:
OTHER CALLS: 812-824-8000
FAX PHONE: 812-824-8185

CHEMICAL NAME: SILICONE ELASTOMER
PHYSICAL FORM: PASTE
ODOR: ACETIC ACID

NFPA PROFILE: HEALTH 2 FLAMMABILITY 1 INSTABILITY/REACTIVITY 0

PREPARED BY: HI TEC INDUSTRIES

SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS

<u>CAS NO.</u>	<u>% WT</u>	<u>INGREDIENT</u>
64742-46-7	<=26.0	HYDROTREATED MIDDLE PETROLEUM DISTILLATES
4253-34-3	<=2.0	METHYLTRIACTOXYLANE
17689-77-9	<=2.0	ETHYLTRIACTOXYLANE

THE ABOVE COMPONENTS ARE HAZARDOUS AS DEFINED IN 29 CFR 1910.1200

SECTION 3: HAZARDS IDENTIFICATION

ROUTES OF ENTRY: EYE, SKIN, INHALATION, INGESTION

POTENTIAL HEALTH EFFECTS

ACUTE EFFECTS

EYES: DIRECT CONTACT MAY CAUSE MODERATE IRRITATION

SKIN: MAY CAUSE MODERATE IRRITATION

INGESTION: LOW INGESTION HAZARD IN NORMAL USE

INHALATION: IRRITATES RESPIRATORY PASSAGES VERY SLIGHTLY.

PROLONGED/CHRONIC EXPOSURE EFFECTS

SKIN: NO KNOWN APPLICABLE INFORMATION

INHALATION: NO KNOWN APPLICABLE INFORMATION

INGESTION: NO KNOWN APPLICABLE INFORMATION

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: NO KNOWN APPLICABLE INFORMATION

The above listed potential effects of overexposure are based on actual data, results of studies performed upon similar compositions, component data, and/or expert review of the product. Please refer to Section 11 for the detailed toxicology information.

MATERIAL SAFETY DATA SHEET

HITEC 11100 SERIES SILICONE SEALANT

FILE NO.: 11100
MSDS DATE: 01/08/08

SECTION 4: FIRST AID MEASURES

EYES: IMMEDIATELY FLUSH WITH WATER FOR 15 MINUTES. GET MEDICAL ATTENTION

SKIN: REMOVE FROM SKIN AND WASH THOROUGHLY WITH SOAP AND WATER OR WATERLESS CLEANER. GET MEDICAL ATTENTION IF IRRITATION OR OTHER ILL EFFECTS DEVELOP OR PERSIST.

INGESTION: NO FIRST AID SHOULD BE NEEDED.

INHALATION: NO FIRST AID SHOULD BE NEEDED.

NOTES TO PHYSICIANS OR FIRST AID PROVIDERS: TREAT ACCORDING TO PERSON'S CONDITION AND SPECIFICS OF EXPOSURE.

SECTION 5: FIRE-FIGHTING MEASURES

FLAMMABLE LIMITS IN AIR: NOT DETERMINED

FLASH POINT:

F: > 212°

C: >100°

METHOD USED: CLOSED CUP

AUTOIGNITION TEMPERATURE: NOT DETERMINED

EXTINGUISHING MEDIA: ON LARGE FIRES USE DRY CHEMICAL, FOAM, OR WATER SPRAY. ON SMALL FIRES USE CARBON DIOXIDE (CO₂), DRY CHEMICAL OR WATER SPRAY. WATER CAN BE USED TO COOL FIRE EXPOSED CONTAINERS.

SPECIAL FIRE FIGHTING PROCEDURES: SELF-CONTAINED BREATHING APPARATUS AND PROTECTIVE CLOTHING SHOULD BE WORN IN FIGHTING LARGE FIRES INVOLVING CHEMICALS. DETERMINE THE NEED TO EVACUATE OR ISOLATE THE AREA ACCORDING TO YOUR LOCAL EMERGENCY PLAN. USE WATER SPRAY TO KEEP FIRE EXPOSED CONTAINERS COOL.

UNUSUAL FIRE AND EXPLOSION HAZARDS: NONE

HAZARDOUS DECOMPOSITION PRODUCTS

Thermal breakdown of this product during fire or very high heat conditions may evolve the following hazardous decomposition products: Carbon dioxide and traces of incompletely burned carbon compounds. Silicon dioxide. Formaldehyde.

SECTION 6: ACCIDENTAL RELEASE MEASURES

ACCIDENTAL RELEASE MEASURES:

OBSERVE ALL PERSONAL PROTECTION EQUIPMENT RECOMMENDATIONS DESCRIBED IN SECTION 5 AND 8. WIPE UP OR SCRAPE UP AND CONTAIN FOR SALVAGE OR DISPOSAL. CLEAN AREA AS APPROPRIATE SINCE SPILLED MATERIALS, EVEN IN SMALL QUANTITIES, MAY PRESENT A SLIP HAZARD. FINAL CLEANING MAY REQUIRE USE OF STEAM, SOLVENTS, OR DETERGENTS. DISPOSE OF SATURATED ABSORBANT OR CLEANING MATERIALS APPROPRIATELY, SINCE SPONTANEOUS HEATING MAY OCCUR. LOCAL, STATE, AND FEDERAL LAWS AND REGULATIONS MAY APPLY TO RELEASES AND DISPOSAL OF THIS MATERIAL AS WELL AS THOSE MATERIALS AND ITEMS EMPLOYED IN THE CLEANUP OF RELEASES. YOU WILL NEED TO DETERMINE WHICH FEDERAL, STATE AND LOCAL LAWS AND REGULATIONS ARE APPLICABLE. SECTIONS 13 AND 15 OF THIS MSDS PROVIDE INFORMATION REGARDING CERTAIN FEDERAL AND STATE REQUIREMENTS.

SECTION 6 NOTES: SEE SECTION 8 FOR PERSONAL PROTECTIVE EQUIPMENT FOR SPILLS.

SECTION 7: HANDLING AND STORAGE

HANDLING AND STORAGE: USE WITH ADEQUATE VENTILATION. PRODUCT EVOLVES ACETIC ACID (HOAc) WHEN EXPOSED TO WATER OR HUMID AIR. PROVIDE VENTILATION DURING USE TO CONTROL HOAc WITHIN EXPOSURE GUIDELINES OR USE RESPIRATORY PROTECTION. AVOID EYE CONTACT. AVOID SKIN CONTACT.

OTHER PRECAUTIONS: USE REASONABLE CARE AND STORE AWAY FROM OXIDIZING MATERIALS. KEEP CONTAINERS CLOSED AND STORE AWAY FROM WATER OR MOISTURE.

MATERIAL SAFETY DATA SHEET

HITEC 11100 SERIES SILICONE SEALANT

FILE NO.: 11100
MSDS DATE: 01/08/08

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS

GENERAL VENTILATION : RECOMMENDED

RESPIRATORY PROTECTION: NOT NEEDED UNDER AMBIENT CONDITIONS.

EYE PROTECTION: USE PROPER PROTECTION- SAFETY GLASSES AS A MINIMUM. FOR SPILLS, FULL FACE RESPIRATOR.

SKIN PROTECTION: WASH AT MEALTIME AND END OF SHIFT. CONTAMINATED CLOTHING AND SHOES SHOULD BE REMOVED AS SOON AS PRACTICAL AND THOROUGHLY CLEANED BEFORE REUSE.

CHEMICAL PROTECTIVE GLOVES RECOMMENDED: BUTYL RUBBER. NEOPRENE RUBBER®. NITRILE RUBBER.

WORK HYGIENIC PRACTICES: AVOID EYE CONTACT. AVOID SKIN CONTACT. USE REASONABLE CARE.

EXPOSURE GUIDELINES:

<u>CAS NUMBER</u>	<u>COMPONENT NAME</u>	<u>EXPOSURE LIMITS</u>
64742-46-7	HYDROTREATED MIDDLE PETROLEUM DISTILLATES	OSHA PEL (final rule) AND ACGIH TLV FOR OIL MISTS: TWA 5 mg/m3
4253-34-3 COMMENTS	METHYLTRIACETOXSILANE	SEE ACETIC ACID
17689-77-9	ETHYLTRIACETOXSILANE	SEE ACETIC ACID COMMENTS

ACETIC ACID IS FORMED UPON CONTACT WITH WATER OR HUMID AIR. PROVIDE ADEQUATE VENTILATION TO CONTROL EXPOSURES WITHIN GUIDELINES OF OSHA PEL: TWA 10 ppm AND ACHIH TLV: TWA 10ppm, STEL 15 ppm.

WHEN HEATED TO TEMPERATURES ABOVE 150°C (300°F) IN THE PRESENCE OF AIR, PRODUCT MAY FORM FORMALDEHYDE VAPORS. PHYSICAL AND HEALTH HAZARD INFORMATION IS READILY AVAILABLE FROM HI TEC INDUSTRIES AND THE MATERIAL SAFETY DATA SHEET.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

ODOR:	VINEGAR-LIKE (ACETIC ACID) SMELL
COLOR:	CLEAR, WHITE, BLACK, ALUMINUM, BLUE
PHYSICAL STATE:	PASTE
pH AS SUPPLIED:	NOT DETERMINED
SPECIFIC GRAVITY @25°C:	1.02
BOILING POINT:	> 100°C
MELTING POINT/FREEZING POINT:	NOT DETERMINED
VAPOR PRESSURE (mmHg):	NOT DETERMINED
VAPOR DENSITY:	NOT DETERMINED
SOLUBILITY IN WATER:	NOT DETERMINED
VISCOSITY:	NOT DETERMINED
VOLATILE CONTENT:	29 G/L

The above information is not intended for use in preparing product specifications.

SECTION 10: STABILITY AND REACTIVITY

CHEMICAL STABILITY: STABLE

INCOMPATIBILITY (MATERIAL TO AVOID):

OXIDIZING MATERIAL CAN CAUSE A REACTION. WATER, MOISTURE, OR HUMID AIRE CAN CAUSE HAZARDOUS VAPORS TO FORM AS DESCRIBED IN SECTION 8.

HAZARDOUS POLYMERIZATION: HAZARDOUS POLYMERIZATION WILL NOT OCCUR.

MATERIAL SAFETY DATA SHEET

HITEC 11100 SERIES SILICONE SEALANT

FILE NO.: 11100
MSDS DATE: 01/08/08

CONDITIONS TO AVOID (POLYMERIZATION): NONE

SECTION 11: TOXICOLOGICAL INFORMATION

TOXICOLOGICAL INFORMATION: NO KNOWN APPLICABLE INFORMATION

SECTION 12: ECOLOGICAL INFORMATION

ENVIRONMENTAL FATE AND DISTRIBUTION: Complete Information Not Available

ENVIRONMENTAL EFFECTS: Complete Information is Not Yet Available

FATE AND EFFECTS IN WASTE WATER TREATMENT PLANTS: Complete Information is Not Yet Available

Hazard Parameters (LC50 or EC50)	Ecotoxicity Classification Criteria		
	High	Medium	Low
Acute Aquatic Toxicity (mg/L)	<=1	<1 and <=100	>100
Acute Terrestrial Toxicity	<=100	>100 and <=2000	>2000

This table is adapted from "Environmental Toxicology and Risk Assessment". ASTM STP 1179, p.34, 1993

This table can be used to classify the ecotoxicity of this product when ecotoxicity data is listed above. Please read the other information presented in the section concerning the overall ecological safety of this material.

SECTION 13: DISPOSAL CONSIDERATIONS

RCRA HAZARD CLASS (40 CFR 261)

SECTION 13 NOTES: When a decision is made to discard this material, as received, is it classified as a hazardous waste? NO

Check State and Local laws for additional regulatory requirements regarding disposal.

SECTION 14: TRANSPORT INFORMATION

DOT Road Shipment Information (49 CFR 172.101)

Not subject to DOT

Ocean Shipment (IMDG)

Not subject to IMDG code.

Air Shipment (IATA)

Not subject to IATA regulations

SECTION 15: REGULATORY INFORMATION

U.S. FEDERAL REGULATIONS

Contents of this MSDS comply with the OSHA Hazard Communication Standard 29 CFR 1910.1200

TSCA (TOXIC SUBSTANCE CONTROL ACT): All chemical substances in this material are included on or exempted from listing on the TSCA

Inventory of Chemical Substances.

Section 304 CERCLA Hazardous Substances (40 CFR 302): None

EPA SARA TITLE III: Section 302 Extremely Hazardous Substances (40 CFR 355): None

311/312 HAZARD CLASS (40 CFR 370):

Acute:: Yes
Chronic: No
Fire: No

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Pressure: No

Reactive: No

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313 REPORTABLE INGREDIENTS: None present or none present in regulated quantities.

SECTION 15: REGULATORY INFORMATION (continued)

STATE REGULATIONS:

CALIFORNIA

Warning: This product contains the following chemical(s) listed by the State of California under the Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65) as being known to cause cancer, birth defects or other reproduction harm. **None Known.**

MASSACHUSETTS

<u>CAS Number</u>	<u>Wt%</u>	<u>Component Name</u>
7631-86-9	<=8.0	Silica, amorphous
58-36-6	0.1	10, 10-Oxydiphenoxarsine

SECTION 15: Continued

NEW JERSEY

<u>CAS Number</u>	<u>Wt%</u>	<u>Component Name</u>
70131-67-8	<=64.0	Dimethyl siloxane, hydroxyl-terminated
64742-46-7	<=26.0	Hydrotreated middle petroleum distillates
7631-86-9	<=8.0	Silica, amorphous
63148-62-9	<=3.0	Polydimethylsiloxane
4253-34-3	<=2.0	Methyltriacetoxysilane
17689-77-9	<=2.0	Ethyltriacetoxysilane

PENNSYLVANIA

<u>CAS Number</u>	<u>Wt%</u>	<u>Component Name</u>
70131-67-8	<=64.0	Dimethyl siloxane, hydroxyl-terminated
64742-46-7	<=26.0	Hydrotreated middle petroleum distillates
7631-86-9	<=8.0	Silica, amorphous

SECTION 16: OTHER INFORMATION

PREPARATION INFORMATION: Prepared by HI TEC Industries, Inc

DISCLAIMER:

These data are offered in good faith as typical values and not as product specifications. No warranty, either expressed or implied, is hereby made.

The recommended industrial hygiene and safe handling procedures are believed to be generally applicable. However, each user should review these recommendations in the specific context of the intended use and determine whether they are appropriate.

MATERIAL SAFETY DATA SHEET
HITEC 11100 SERIES SILICONE SEALANT

FILE NO.: 11100
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<http://www.hitecindustries.com>

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Safety Data Sheet according to (EC) No 1907/2006

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Loctite 243

sds no. : 316211

V004.6

Revision: 09.10.2012

printing date: 15.10.2012

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Loctite 243

1.2. Relevant identified uses of the substance or mixture and uses advised against

Intended use:

Adhesive

1.3. Details of the supplier of the safety data sheet

Henkel Ireland Limited

Product Safety & Regulatory Affairs

Tallaght Business Park, Whitestown

Dublin 24

Ireland

Phone: +353 (14046444)

Fax-no.: +353 (14519926)

ua-productsafety.uk@uk.henkel.com

1.4. Emergency telephone number

24 Hours Emergency Tel: +44 (0)1442 278497

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (DPD):

Dangerous for the environment

R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Sensitizing

R43 May cause sensitisation by skin contact.

2.2. Label elements

Label elements (DPD):

Xi - Irritant



Risk phrases:

R43 May cause sensitisation by skin contact.

R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Safety phrases:

S24 Avoid contact with skin.

S37 Wear suitable gloves.

S61 Avoid release to the environment. Refer to special instructions/Safety data sheets.

Additional labeling:

For consumer use only: S2 Keep out of the reach of children

S46 If swallowed, seek medical advice immediately and show this container or label.

Contains:

Maleic acid

2.3. Other hazards

None if used properly.

SECTION 3: Composition/information on ingredients

General chemical description:

Anaerobic adhesive

Declaration of the ingredients according to CLP (EC) No 1272/2008:

Hazardous components CAS-No.	EC Number REACH-Reg No.	content	Classification
2,4,6-Triallyloxy-s-triazine 101-37-1	202-936-7	>= 2,5- < 10 %	Acute toxicity 4; Oral H302 Chronic hazards to the aquatic environment 2 H411
Undecanoic acid, 11-amino-, homopolymer 25587-80-8		>= 0,25- < 2,5 %	Acute hazards to the aquatic environment 1 H400 Chronic hazards to the aquatic environment 1 H410
Cumene hydroperoxide 80-15-9	201-254-7	>= 0,1- < 0,9 %	Acute toxicity 4; Dermal H312 Specific target organ toxicity - repeated exposure 2 H373 Acute toxicity 3; Inhalation H331 Acute toxicity 4; Oral H302 Organic peroxides E H242 Chronic hazards to the aquatic environment 2 H411 Skin corrosion 1B H314
Maleic acid 110-16-7	203-742-5	>= 0,1- < 0,5 %	Acute toxicity 4; Oral H302 Serious eye irritation 2 H319 Specific target organ toxicity - single exposure 3 H335 Skin irritation 2 H315 Skin sensitizer 1 H317
Cumene 98-82-8	202-704-5	>= 0,05- < 0,5 %	Flammable liquids 3 H226 Aspiration hazard 1 H304 Specific target organ toxicity - single exposure 3 H335 Chronic hazards to the aquatic environment 2 H411

For full text of the H - statements and other abbreviations see section 16 "Other information".
Substances without classification may have community workplace exposure limits available.

Declaration of ingredients according to DPD (EC) No 1999/45:

Hazardous components CAS-No.	EC Number REACH-Reg No.	content	Classification
2,4,6-Triallyloxy-s-triazine 101-37-1	202-936-7	>= 2,5- < 10 %	Xn - Harmful; R22 N - Dangerous for the environment; R51/53
Undecanoic acid, 11-amino-, homopolymer 25587-80-8		>= 0,25- < 2,5 %	N - Dangerous for the environment; R50/53
Cumene hydroperoxide 80-15-9	201-254-7	>= 0,1- < 0,9 %	T - Toxic; R23 Xn - Harmful; R21/22, R48/20/22 O - Oxidizing; R7 C - Corrosive; R34 N - Dangerous for the environment; R51/53
Maleic acid 110-16-7	203-742-5	>= 0,1- < 0,5 %	Xn - Harmful; R22 Xi - Irritant; R36/37/38 R43
Cumene 98-82-8	202-704-5	>= 0,05- < 0,5 %	R10 Xn - Harmful; R65 Xi - Irritant; R37 N - Dangerous for the environment; R51/53

For full text of the R-Phrases indicated by codes see section 16 "Other Information".
Substances without classification may have community workplace exposure limits available.

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation:

Move to fresh air. If symptoms persist, seek medical advice.

Skin contact:

Rinse with running water and soap.
Seek medical advice.

Eye contact:

Rinse immediately with plenty of running water (for 10 minutes). Seek medical attention if necessary.

Ingestion:

Rinse out mouth, drink 1-2 glasses of water, do not induce vomiting.
Seek medical advice.

4.2. Most important symptoms and effects, both acute and delayed

SKIN: Redness, inflammation.

4.3. Indication of any immediate medical attention and special treatment needed

See section: Description of first aid measures

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:

Carbon dioxide, foam, powder
Fine water spray

Extinguishing media which must not be used for safety reasons:

None known

5.2. Special hazards arising from the substance or mixture

In the event of a fire, carbon monoxide (CO) and carbon dioxide (CO₂) can be released.
In case of fire, keep containers cool with water spray.

5.3. Advice for firefighters

Wear self-contained breathing apparatus and full protective clothing, such as turn-out gear.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Avoid skin and eye contact.
Ensure adequate ventilation.

6.2. Environmental precautions

Do not let product enter drains.

6.3. Methods and material for containment and cleaning up

For small spills wipe up with paper towel and place in container for disposal.
For large spills absorb onto inert absorbent material and place in sealed container for disposal.

6.4. Reference to other sections

See advice in chapter 8

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Use only in well-ventilated areas.

Prolonged or repeated skin contact should be avoided to minimise any risk of sensitisation.

Hygiene measures:

Good industrial hygiene practices should be observed.

Do not eat, drink or smoke while working.

Wash hands before work breaks and after finishing work.

7.2. Conditions for safe storage, including any incompatibilities

Ensure good ventilation/extraction.

Store in original containers at 8-21°C (46.4-69.8°F) and do not return residual materials to containers as contamination may reduce the shelf life of the bulk product.

7.3. Specific end use(s)

Adhesive

SECTION 8: Exposure controls/personal protection**8.1. Control parameters**

Valid for

Great Britain

Ingredient	ppm	mg/m ³	Type	Category	Remarks
CUMENE 98-82-8			Skin designation:	Can be absorbed through the skin.	EH40 WEL
CUMENE 98-82-8	50	250	Short Term Exposure Limit (STEL):		EH40 WEL
CUMENE 98-82-8	25	125	Time Weighted Average (TWA):		EH40 WEL
CUMENE 98-82-8	50	250	Short Term Exposure Limit (STEL):	Indicative	ECTLV
CUMENE 98-82-8	20	100	Time Weighted Average (TWA):	Indicative	ECTLV

Biological Exposure Indices:**8.2. Exposure controls:****Respiratory protection:**

Use only in well-ventilated areas.

An approved mask or respirator fitted with an organic vapour cartridge should be worn if the product is used in a poorly ventilated area

Filter type: A

Hand protection:

Chemical-resistant protective gloves (EN 374).

Suitable materials for short-term contact or splashes (recommended: at least protection index 2, corresponding to > 30 minutes permeation time as per EN 374):

nitrile rubber (NBR; ≥ 0.4 mm thickness)

Suitable materials for longer, direct contact (recommended: protection index 6, corresponding to > 480 minutes permeation time as per EN 374):

nitrile rubber (NBR; ≥ 0.4 mm thickness)

This information is based on literature references and on information provided by glove manufacturers, or is derived by analogy with similar substances. Please note that in practice the working life of chemical-resistant protective gloves may be considerably shorter than the permeation time determined in accordance with EN 374 as a result of the many influencing factors (e.g. temperature). If signs of wear and tear are noticed then the gloves should be replaced.

Eye protection:

Wear protective glasses.

Skin protection:
Wear suitable protective clothing.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	liquid blue
Odor	characteristic
pH	No data available / Not applicable
Initial boiling point	> 70 °C (> 158 °F)
Flash point	> 110 °C (> 230 °F)
Decomposition temperature	No data available / Not applicable
Vapour pressure (25 °C (77 °F))	1,7 mbar
Density	No data available / Not applicable
Bulk density	No data available / Not applicable
Viscosity	No data available / Not applicable
Viscosity (kinematic)	No data available / Not applicable
Explosive properties	No data available / Not applicable
Solubility (qualitative) (Solvent: Water)	Insoluble
Solubility (qualitative) (Solvent: Acetone)	Soluble
Solidification temperature	No data available / Not applicable
Melting point	No data available / Not applicable
Flammability	No data available / Not applicable
Auto-ignition temperature	No data available / Not applicable
Explosive limits	No data available / Not applicable
Partition coefficient: n-octanol/water	No data available / Not applicable
Evaporation rate	No data available / Not applicable
Vapor density	No data available / Not applicable
Oxidising properties	No data available / Not applicable

9.2. Other information

No data available / Not applicable

SECTION 10: Stability and reactivity

10.1. Reactivity

Peroxides.

10.3. Possibility of hazardous reactions

See section reactivity

10.4. Conditions to avoid

Stable

10.5. Incompatible materials

None if used properly.

10.6. Hazardous decomposition products

carbon oxides.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

General toxicological information:

The preparation is classified based on the conventional method outlined in Article 6(1)(a) of Directive 1999/45/EC. Relevant available health/ecological information for the substances listed under Section 3 is provided in the following.

Oral toxicity:

May cause irritation to the digestive tract.

Skin irritation:

Prolonged or repeated contact may cause skin irritation.

Eye irritation:

May cause mild irritation to the eyes.

Sensitizing:

May cause sensitization by skin contact.

Acute toxicity:

Hazardous components CAS-No.	Value type	Value	Route of application	Exposure time	Species	Method
Cumene hydroperoxide 80-15-9	LD50	550 mg/kg	oral	4 h	rat	
	LC50	220 ppm	inhalation		rat	
	LD50	500 mg/kg	dermal		rat	

Skin corrosion/irritation:

Hazardous components CAS-No.	Result	Exposure time	Species	Method
Cumene hydroperoxide 80-15-9	corrosive		rabbit	

Germ cell mutagenicity:

Hazardous components CAS-No.	Result	Type of study / Route of administration	Metabolic activation / Exposure time	Species	Method
Cumene hydroperoxide 80-15-9	positive	bacterial reverse mutation assay (e.g. Ames test)	without		OECD Guideline 471 (Bacterial Reverse Mutation Assay)
Cumene hydroperoxide 80-15-9	negative	dermal		mouse	

SECTION 12: Ecological information**General ecological information:**

Do not empty into drains / surface water / ground water.

Harmful to aquatic organisms.

May cause long-term adverse effects in the aquatic environment.

The preparation is classified based on the conventional method outlined in Article 6(1)(a) of Directive 1999/45/EC. Relevant available health/ecological information for the substances listed under Section 3 is provided in the following.

Ecotoxicity:

Harmful to aquatic organisms.

May cause long-term adverse effects in the aquatic environment.

Mobility:

Cured adhesives are immobile.

Persistence and Biodegradability:

The product is not biodegradable.

12.1. Toxicity

Hazardous components CAS-No.	Value type	Value	Acute Toxicity Study	Exposure time	Species	Method
2,4,6-Triallyloxy-s-triazine 101-37-1	LC50	4,36 mg/l	Fish	96 h	Oncorhynchus mykiss	OECD Guideline 203 (Fish, Acute Toxicity Test)
2,4,6-Triallyloxy-s-triazine 101-37-1	EC50	19,4 mg/l	Daphnia	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
Undecanoic acid, 11-amino-, homopolymer 25587-80-8	NOEC	> 0,024 mg/l	Fish	96 h		OECD Guideline 203 (Fish, Acute Toxicity Test)
Undecanoic acid, 11-amino-, homopolymer 25587-80-8	NOEC	> 0,024 mg/l	Daphnia	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
Undecanoic acid, 11-amino-, homopolymer 25587-80-8	NOEC	> 0,0073 mg/l	Algae	72 h		OECD Guideline 201 (Alga, Growth Inhibition Test)
Cumene hydroperoxide 80-15-9	LC50	3,9 mg/l	Fish	96 h	Oncorhynchus mykiss	OECD Guideline 203 (Fish, Acute Toxicity Test)
Cumene hydroperoxide 80-15-9	EC50	18 mg/l	Daphnia	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
Cumene hydroperoxide 80-15-9	ErC50	3,1 mg/l	Algae	72 h	Pseudokirchnerella subcapitata	OECD Guideline 201 (Alga, Growth Inhibition Test)
Maleic acid 110-16-7	LC50	> 245 mg/l	Fish	48 h	Leuciscus idus	
Maleic acid 110-16-7	EC50	245 mg/l	Daphnia	24 h	Daphnia magna	
Cumene 98-82-8	LC50	4,8 mg/l	Fish	96 h	Oncorhynchus mykiss	OECD Guideline 203 (Fish, Acute Toxicity Test)
Cumene 98-82-8	EC50	4 mg/l	Daphnia	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
Cumene 98-82-8	EC50	2,6 mg/l	Algae	72 h	Selenastrum capricornutum (new name: Pseudokirchnerella subcapitata)	OECD Guideline 201 (Alga, Growth Inhibition Test)

12.2. Persistence and degradability

Hazardous components CAS-No.	Result	Route of application	Degradability	Method
2,4,6-Triallyloxy-s-triazine 101-37-1		aerobic	7 - 9 %	OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test)
Undecanoic acid, 11-amino-, homopolymer 25587-80-8		no data	7 %	
Cumene hydroperoxide 80-15-9			18 %	OECD Guideline 301 E (Ready biodegradability: Modified OECD Screening Test)
Maleic acid 110-16-7	readily biodegradable	aerobic	87 - 88 %	EU Method C.4-E (Determination of the "Ready" Biodegradability Closed Bottle Test)
Cumene 98-82-8		aerobic	86 %	

12.3. Bioaccumulative potential / 12.4. Mobility in soil

Hazardous components CAS-No.	LogKow	Bioconcentration factor (BCF)	Exposure time	Species	Temperature	Method
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2,4,6-Triallyloxy-s-triazine 101-37-1	2,8				20 °C	
Cumene hydroperoxide 80-15-9		9,1		calculation		OECD Guideline 305 (Bioconcentration: Flow- through Fish Test)
Cumene hydroperoxide 80-15-9	2,16					
Maleic acid 110-16-7	-0,48					
Cumene 98-82-8		35,5		Carassius auratus		OECD Guideline 305 (Bioconcentration: Flow- through Fish Test)
Cumene 98-82-8	3,55				23 °C	OECD Guideline 107 (Partition Coefficient (n- octanol / water), Shake Flask Method)

SECTION 13: Disposal considerations**13.1. Waste treatment methods****Product disposal:**

Dispose of in accordance with local and national regulations.

Contribution of this product to waste is very insignificant in comparison to article in which it is used

Disposal of uncleaned packages:

After use, tubes, cartons and bottles containing residual product should be disposed of as chemically contaminated waste in an authorised legal land fill site or incinerated.

Disposal must be made according to official regulations.

Waste code

08 04 09 waste adhesives and sealants containing organic solvents and other dangerous substances

SECTION 14: Transport information**General information:**

Not hazardous according to RID, ADR, ADN, IMDG, IATA-DGR.

SECTION 15: Regulatory information**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**

VOC content < 3 %
(1999/13/EC)

SECTION 16: Other information

The labelling of the product is indicated in Section 2. The full text of all abbreviations indicated by codes in this safety data sheet are as follows:

R10 Flammable.
R21/22 Harmful in contact with skin and if swallowed.
R22 Harmful if swallowed.
R23 Toxic by inhalation.
R34 Causes burns.
R36/37/38 Irritating to eyes, respiratory system and skin.
R37 Irritating to respiratory system.
R43 May cause sensitisation by skin contact.
R48/20/22 Harmful: danger of serious damage to health by prolonged exposure through inhalation and if swallowed.
R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R65 Harmful: may cause lung damage if swallowed.
R7 May cause fire.
H226 Flammable liquid and vapour.
H242 Heating may cause a fire.
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.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.
H331 Toxic if inhaled.
H335 May cause respiratory irritation.
H373 May cause damage to organs through prolonged or repeated exposure.
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.
H411 Toxic to aquatic life with long lasting effects.

Further information:

This information is based on our current level of knowledge and relates to the product in the state in which it is delivered. It is intended to describe our products from the point of view of safety requirements and is not intended to guarantee any particular properties.

This safety data sheet was prepared in accordance with Council Directive 67/548/EEC and its subsequent amendments, and Commission Directive 1999/45/EC.

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Material Safety Data Sheet

1. PRODUCT IDENTIFICATION

Product Name: 14H THREAD SEALANT W/PTFE 4 FL.OZ.
Item No: 80632
Product Type: Sealant

2. COMPOSITION/INFORMATION ON INGREDIENTS

Component	Weight%	ACGIH; TLV-TWA	OSHA PEL
TALC 14807-96-6	20-40	2 mg/m ³	20 mppcf
ETHANOL 64-17-5	20-40	1000 ppm	1000 ppm; 1900 mg/m ³
CASTOR OIL 8001-79-4	20-40	Not listed	Not listed
POLYVINYL RESIN 63148-65-2	<10	Not listed	Not listed
2-PROPANOL 67-63-0	<5	200 ppm	400 ppm; 980 mg/m ³
TITANIUM DIOXIDE 13463-67-7	<3	10 mg/m ³	15 mg/m ³
METHANOL 67-56-1	<2	200 ppm	200 ppm; 260 mg/m ³
POLYTETRAFLUOROETHYLENE 9002-84-0	<2	Not listed	Not listed

3. HAZARDS IDENTIFICATION

Toxicity: May cause eye, skin and respiratory irritation. Methanol may cause blindness or death if swallowed.
Primary Routes of Entry: Eye and skin contact, ingestion, inhalation
Signs and Symptoms of Exposure: Excessive accidental exposure may cause headache, dizziness, nausea and mild respiratory irritation. Overexposure may cause eye and skin redness.

Component	Weight%	NTP	ACGIH Carcinogens	IARC Carcinogen
TALC 14807-96-6	20-40	male rat-some evidence, female rat-clear evidence, male mice-no evidence, female mice-no evidence	A4- Not classifiable as a human carcinogen	Group 3 Supplement 7, 1987 Monograph 42, 1987
ETHANOL 64-17-5	20-40		A4 - Not Classifiable as a Human Carcinogen	Group 1; Monograph 100E, Monograph 96 (2010)
2-PROPANOL 67-63-0	<5		A4 - Not classifiable as a human carcinogen	Group 3 Monograph 71, 1999; Supp.7, 1987; Monograph 15, 1977
TITANIUM DIOXIDE 13463-67-7	<3	male rat-negative, female rat-negative, male mice-negative, female mice-negative	A4	Group 2B; Vol 93,2006; Vol 47,1989
POLYTETRAFLUOROETHYLENE 9002-84-0	<2			Group 3 Supplement 7, 1987; Monograph 19, 1979

Aggravated Medical Condition: Preexisting eye, skin and respiratory disorders may be aggravated by overexposure to this product.

4. FIRST AID MEASURES

Ingestion: Do not induce vomiting. Slowly dilute with 1-2 glasses of water or milk and seek medical attention. Never give anything by mouth to an unconscious person.

Product Name: 14H THREAD SEALANT W/PTFE 4 FL.OZ.

Item No. 80632

4. FIRST AID MEASURES

Inhalation: Move to fresh air in case of accidental inhalation of vapours. Oxygen or artificial respiration if needed. Obtain medical attention.

Skin Contact: Wash off with soap and water. If skin irritation persists, call a physician.

Eye Contact: In case of contact, immediately flush eyes with plenty of water for at least 15 minutes and get medical attention if irritation persists.

5. FIRE FIGHTING MEASURES

Flash Point °F(C°): 74°F TCC

Recommended Extinguishing Media: Carbon Dioxide, Dry Chemicals, Foam.

Special Fire-Fighting Procedures: Firefighters should wear self-contained breathing apparatus. Water spray may be ineffective on flames but should be used to keep fire-exposed containers cool.

Hazardous Products of Combustion: Oxides of carbon, Fluoride compounds

Unusual Fire/Explosion Hazards: Closed containers may rupture or explode when exposed to extreme heat.

Lower Explosive Limit: 2.3

Upper Explosive Limit: 12.7

6. ACCIDENTAL RELEASE MEASURES

Spill Procedures: Eliminate all sources of ignition. Maintain good ventilation. Take up with an inert absorbent. Store in a closed waste container until disposal. Residues may be cleaned up with isopropyl alcohol.

7. HANDLING AND STORAGE

Storage: Store away from heat, sparks or open flame. Do not store at temperatures above 100°F (38°C).

Handling: Avoid contact with skin and eyes. Do not inhale vapors. Wash hands before eating and smoking. Keep container closed when not in use.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Eyes: Safety glasses.

Skin: Neoprene or nitrile gloves recommended.

Ventilation: General; local exhaust ventilation as necessary to control any air contaminants to within their exposure limits (or to the lowest feasible levels when limits have not been established) during the use of this product.

Respiratory Protection: An approved organic vapor respirator should be worn when exposures are expected to exceed the applicable limits.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: White paste

Odor: Alcoholic

Boiling Point: 180° F

pH: Does not apply

Solubility in Water: Partial

Specific Gravity: 1.06-1.10

VOC(Wt.%): 36.5%; 395 g/L

Vapor Pressure: 33 mm Hg @ 68°F

Vapor Density (Air=1): 2.07

Evaporation Rate: 7.7 (ether = 1)

10. STABILITY AND REACTIVITY

Chemical Stability: Stable at normal conditions

Hazardous Polymerization: Will not occur

Incompatibilities: Strong oxidizers

Conditions to Avoid: Keep away from heat, sparks and open flame. - No smoking.

Hazardous Products of Combustion: Oxides of carbon, Fluoride compounds

11. TOXICOLOGICAL INFORMATION

See Section 3

12. ECOLOGICAL INFORMATION

No data available

Product Name: 14H THREAD SEALANT W/PTFE 4 FL.OZ.

Item No. 80632

13. DISPOSAL CONSIDERATIONS

Recommended Method of Disposal: Disposal should be made in accordance with federal, state and local regulations.
US EPA Waste Number: D001 as per 40CFR 261.21

14. TRANSPORTATION INFORMATION

DOT (49CFR 172)

U.S. Department of Transportation - DOT - 49 CFR (Ground)

DOT Shipping Name: Adhesives, Limited Quantity
Hazard Class: Class 3 PGIII
UN/ID Number: UN 1133

IATA (Air)

Proper Shipping Name: Consumer Commodity (Not more than 1 liter)
Class or Division: Class 9
UN/ID Number: ID 8000

IMDG (Vessel)

Proper Shipping Name: Adhesives, Limited Quantity
Hazard Class: Class 3 PGIII
UN Number: UN 1133

Marine Pollutant: None

15. REGULATORY INFORMATION

SARA 313 Chemicals: The following component(s) is listed as a SARA Section 313 Toxic Chemical.

Methanol

California Proposition 65: No California Prop 65 chemicals are known to be present.

TSCA Inventory Status: All components of this product are listed (or exempt) on the EPA TSCA inventory.

16. OTHER INFORMATION

Estimated NFPA Rating: HEALTH 2, FLAMMABILITY 3, REACTIVITY 0.

Estimated HMIS Classification: HEALTH 2, FLAMMABILITY 3, PHYSICAL HAZARD 0

(NFPA is a registered trademark of the National Fire Protection Association)

HMIS is a registered trademark of the National Paint and Coatings Association

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Material Safety Data Sheet

1. PRODUCT IDENTIFICATION

Product Name: ANAEROBIC GASKET MAKER 50 ML
Item No: 51813
Product Type: Anaerobic

2. COMPOSITION/INFORMATION ON INGREDIENTS

Component	Weight%	ACGIH; TLV-TWA	OSHA PEL
POLYURETHANE METHACRYLATE RESIN (MIXTURE)	50-70	Not listed	Not listed
POLYGLYCOL DIMETHACRYLATE 25852-47-5	10-30	Not listed	Not listed
TREATED SILICON DIOXIDE, SYNTHETIC, CRYSTALLINE-FREE 67762-90-7	5-15	10 mg/m ³	Not listed
2-HYDROXYETHYL METHACRYLATE 868-77-9	<5	Not listed	Not listed
DIMETHYLBENZYL HYDROPEROXIDE 80-15-9	<3	Not listed	Not listed
ACRYLIC ACID 79-10-7	0.1-1.0	2 ppm	10 ppm; 30 mg/m ³

3. HAZARDS IDENTIFICATION

Toxicity: May cause eye and skin irritation. Ingestion may irritate digestive tract and cause nausea, vomiting and diarrhea. May cause skin sensitization. Note: This product does not contain microcrystalline silica.
Primary Routes of Entry: Eye and skin contact, ingestion, inhalation
Signs and Symptoms of Exposure: May cause redness to eyes and irritation to nasal passages. Repeated skin contact may cause allergic skin reactions.

Component	Weight%	NTP	ACGIH Carcinogens	IARC
ACRYLIC ACID 79-10-7	0.1-1.0		A4 - Not Classifiable as a Human Carcinogen	Group 3 Monograph 71, 1999; Supplement 7, 1987; Monograph 19, 1979

Medical Conditions Recognized as Being Aggravated by Exposure: May aggravate preexisting dermatitis.

4. FIRST AID MEASURES

Ingestion: If swallowed, DO NOT induce vomiting. Keep individual calm. Obtain medical attention.
Inhalation: Move to fresh air in case of accidental inhalation of vapours. Oxygen or artificial respiration if needed. Obtain medical attention.
Skin Contact: Wash off with soap and water. If skin irritation persists, call a physician.
Eye Contact: In case of contact, immediately flush eyes with plenty of water for at least 15 minutes and get medical attention if irritation persists.

5. FIRE FIGHTING MEASURES

Flash Point °F(C°): >200°F TCC
Recommended Extinguishing Media: Carbon dioxide, Dry chemical, Foam
Special Fire-Fighting Procedures: Firefighters should wear self-contained breathing apparatus.
Hazardous Products of Combustion: Oxides of carbon, Oxides of nitrogen
Unusual Fire/Explosion Hazards: None

5. FIRE FIGHTING MEASURES

Lower Explosive Limit: Not determined
Upper Explosive Limit: Not determined

6. ACCIDENTAL RELEASE MEASURES

Spill Procedures: Maintain good ventilation. Take up with an inert absorbent. Store in a closed waste container until disposal.

7. HANDLING AND STORAGE

Storage: Store below 100°F. Keep in cool and dark place. Avoid direct sunlight.
Handling: Avoid prolonged skin contact. Keep away from eyes.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Eyes: Safety glasses.
Skin: Neoprene or nitrile gloves recommended.
Ventilation: General; local exhaust ventilation as necessary to control any air contaminants to within their exposure limits (or to the lowest feasible levels when limits have not been established) during the use of this product.
Respiratory Protection: Not required under normal use. An approved organic vapor respirator should be worn when exposures are expected to exceed the applicable limits.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Red gel
Odor: Mild
Boiling Point: >300°F
pH: Does not apply
Solubility in Water: Slight
Specific Gravity: 1.08-1.18
VOC(Wt.%): 1.5%
Vapor Pressure: <5 mm Hg @ 25°C
Vapor Density (Air=1): >1
Evaporation Rate: Not Determined

10. STABILITY AND REACTIVITY

Chemical Stability: Stable at normal conditions
Hazardous Polymerization: Will not occur
Incompatibilities: Strong oxidizers, Metal salts, heat and amines
Conditions to Avoid: Heat
Hazardous Products of Combustion: Oxides of carbon, Oxides of nitrogen

11. TOXICOLOGICAL INFORMATION

See Section 3

12. ECOLOGICAL INFORMATION

No data available

13. DISPOSAL CONSIDERATIONS

Recommended Method of Disposal: Disposal should be made in accordance with federal, state and local regulations..
US EPA Waste Number: NH - Not a RCRA Hazardous Waste Material

14. TRANSPORTATION INFORMATION

DOT (49CFR 172)

Ground Transport (DOT)

DOT Shipping Name: Not regulated
Hazard Class: None
UN/ID Number: None

IATA

Proper Shipping Name: Not regulated
Class or Division: None
UN/ID Number: None

Product Name: ANAEROBIC GASKET MAKER 50 ML

Item No: 51813

IMDG

Proper Shipping:	Not regulated
Hazard Class:	None
UN Number:	None
Marine Pollutant:	None

15. REGULATORY INFORMATION

SARA 313 Chemicals: The following component(s) is listed as a SARA Section 313 Toxic Chemical.

DIMETHYLBENZYL HYDROPEROXIDE

California Proposition 65: No California Prop 65 chemicals are known to be present at or above the No Significant Risk Level

TSCA Inventory Status: All components of this product are listed (or exempt) on the EPA TSCA inventory.

16. OTHER INFORMATION

Estimated NFPA Rating: HEALTH 1, FLAMMABILITY 1 REACTIVITY 1 .

Estimated HMIS Classification: HEALTH 1, FLAMMABILITY 1, PHYSICAL HAZARD 0

NFPA is a registered trademark of the National Fire Protection Assn.

HMIS is a registered trademark of the National Paint and Coatings Assn.

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Material Safety Data Sheet

1. PRODUCT IDENTIFICATION

Product Name: 1C FORM-A-GASKET #1 SEALANT 11OZ
 Item No: 80003
 Product Type: Sealant

2. COMPOSITION/INFORMATION ON INGREDIENTS

Component	Weight%	ACGIH; TLV-TWA	OSHA PEL
KAOLIN 1332-58-7	40-60	2 mg/m ³	15 mg/m ³
ROSIN 8050-09-7	20-30	Not listed	Not listed
ETHANOL 64-17-5	10-30	1000 ppm	1000 ppm; 1900 mg/m ³
VEGETABLE OIL 68187-84-8	<5	5 mg/m ³	Not listed
2-PROPANOL 67-63-0	<2	200 ppm	400 ppm; 980 mg/m ³
TITANIUM DIOXIDE 13463-67-7	0.1-1.0	10 mg/m ³	15 mg/m ³
CRYSTALLINE SILICA 14808-60-7	0.1-1.0	0.025 mg/m ³	Not listed
METHANOL 67-56-1	0.1-1.0	200 ppm	200 ppm; 260 mg/m ³

3. HAZARDS IDENTIFICATION

Toxicity: May cause eye, skin and respiratory irritation. This product contains encapsulated silicon dioxide (quartz silica). No exposure to free respirable silica is anticipated during normal use of this product. Silica may be released by grinding or machining of coated material. Use NIOSH-approved dust/mist respirator when grinding or machining.

Primary Routes of Entry: Eye and skin contact, ingestion, inhalation

Signs and Symptoms of Exposure: Excessive accidental exposure may cause headache, dizziness, nausea and mild respiratory irritation. Overexposure may cause eye and skin redness.

Component	Weight%	NTP	ACGIH Carcinogens	IARC
KAOLIN 1332-58-7	40-60		A4-Not classifiable as a human carcinogen	
ETHANOL 64-17-5	10-30		A4 - Not Classifiable as a Human Carcinogen	
2-PROPANOL 67-63-0	<2		A4 - Not classifiable as a human carcinogen	Group 3 Monograph 71, 1999; Supp.7, 1987; Monograph 15, 1977
TITANIUM DIOXIDE 13463-67-7	0.1-1.0	male rat-negative, female rat-negative, male mice-negative, female mice-negative	A4	Group 2B; Vol 93,2006; Vol 47,1989
CRYSTALLINE SILICA 14808-60-7	0.1-1.0		A2 - Suspected Human Carcinogen	Group 1 Monograph 68, 1997 (inhalation of quartz)

Medical Conditions Recognized as Being Aggravated by Exposure:

Preexisting eye, skin and respiratory disorders may be aggravated by overexposure to this product.

4. FIRST AID MEASURES

Ingestion: Do not induce vomiting. Slowly dilute with 1-2 glasses of water or milk and seek medical attention. Never give anything by mouth to an unconscious person.

Product Name: 1C FORM-A-GASKET #1 SEALANT
11OZ

Item No: 80003

4. FIRST AID MEASURES

Inhalation: Move to fresh air in case of accidental inhalation of vapours. Get medical attention/advice if you feel unwell.

Skin Contact: Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes. If skin irritation persists, call a physician.

Eye Contact: In case of contact, immediately flush eyes with plenty of water for at least 15 minutes and get medical attention if irritation persists.

5. FIRE FIGHTING MEASURES

Flash Point °F(C°): Does not apply. Per ASTM D4359 this product is a solid.

Recommended Extinguishing Media: Carbon Dioxide, Dry Chemicals, Foam.

Special Fire-Fighting Procedures: Firefighters should wear self-contained breathing apparatus. Water spray may be ineffective on flames but should be used to keep fire-exposed containers cool.

Hazardous Products of Combustion: Aldehydes, Oxides of carbon, Carboxylic acids

Unusual Fire/Explosion Hazards: Closed containers may rupture or explode when exposed to extreme heat

Lower Explosive Limit: Not determined

Upper Explosive Limit: Not determined

6. ACCIDENTAL RELEASE MEASURES

Spill Procedures: Eliminate all sources of ignition. Maintain good ventilation. Take up with an inert absorbent. Store in a closed waste container until disposal. Residues may be cleaned up with isopropyl alcohol.

7. HANDLING AND STORAGE

Storage: Store away from heat.

Handling: Avoid contact with skin and eyes. Do not inhale vapors. Wash thoroughly after handling. Keep container closed when not in use.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Eyes: Safety glasses.

Skin: Neoprene or nitrile gloves recommended.

Ventilation: General; local exhaust ventilation as necessary to control any air contaminants to within their exposure limits (or to the lowest feasible levels when limits have not been established) during the use of this product.

Respiratory Protection: An approved organic vapor respirator should be worn when exposures are expected to exceed the applicable limits.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Reddish brown paste

Odor: Alcoholic

Boiling Point: >180°F

pH: Does not apply

Solubility in Water: Partial

Specific Gravity: 1.4-1.5

VOC(Wt.%): 13.5%

Vapor Pressure: 33 mmHg @ 68°F

Vapor Density (Air=1): 2.07

Evaporation Rate: 7.7 (ether = 1)

10. STABILITY AND REACTIVITY

Chemical Stability: Stable at normal conditions

Hazardous Polymerization: Will not occur

Incompatibilities: Strong oxidizers

Conditions to Avoid: Keep away from heat, sparks and open flame.

Hazardous Products of Combustion: Aldehydes, Oxides of carbon, Carboxylic acids

11. TOXICOLOGICAL INFORMATION

See Section 3

12. ECOLOGICAL INFORMATION

Product Name: 1C FORM-A-GASKET #1 SEALANT
11OZ

Item No: 80003

12. ECOLOGICAL INFORMATION

No data available

13. DISPOSAL CONSIDERATIONS

Recommended Method of Disposal: Disposal should be made in accordance with federal, state and local regulations..
US EPA Waste Number: NH - Not a RCRA Hazardous Waste Material

14. TRANSPORTATION INFORMATION

DOT (49CFR 172)

Ground Transport (DOT)

DOT Shipping Name: Not regulated
Hazard Class: None
UN/ID Number: None

IATA

Proper Shipping Name: Not regulated
Class or Division: None
UN/ID Number: None

IMDG

Proper Shipping: Not regulated
Hazard Class: None
UN Number: None

Marine Pollutant: None

15. REGULATORY INFORMATION

SARA 313 Chemicals: The following component(s) is listed as a SARA Section 313 Toxic Chemical.

NONE

California Proposition 65: No California Prop 65 chemicals are known to be present.

TSCA Inventory Status: All components of this product are listed (or exempt) on the EPA TSCA inventory.

16. OTHER INFORMATION

Estimated NFPA Rating: HEALTH 2, FLAMMABILITY 1, REACTIVITY 0.

Estimated HMIS Classification: HEALTH 2, FLAMMABILITY 1, PHYSICAL HAZARD 0

NFPA is a registered trademark of the National Fire Protection Assn.

HMIS is a registered trademark of the National Paint and Coatings Assn.

Prepared By: Denise Boyd, Manager-Environmental, Health & Safety
Company: Permatex, Inc. 10 Columbus Blvd. Hartford, CT USA 06106

Revision Date: June 09, 2010

Revision 3

Number:

Telephone No.: 1-87-Permatex (877) 376-2839

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ITW Permatex
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Material Safety Data Sheet

1. PRODUCT IDENTIFICATION

Product Name: 6MA POWERBEAD BLUE RTV SILICONE 7.25 OZ AE
Item No: 85860
Product Type: Elastomeric rubber (pressurized)

2. COMPOSITION/INFORMATION ON INGREDIENTS

Component	Weight%	ACGIH; TLV-TWA	OSHA PEL
POLY (DIMETHYLSILOXANE), HYDROXY TERMINATED 70131-67-8	30-50	Not listed	Not listed
LIMESTONE 1317-65-3	20-40	Not listed	15 mg/m ³
CALCIUM CARBONATE 471-34-1	15-40	10 mg/m ³	Not listed
DISTILLATES (PETROLEUM), HYDROTREATED LIGHT 64742-47-8	<5	Not listed	Not listed
VINYL OXIMINOSILANE 2224-33-1	<5	Not listed	Not listed
STEARIC ACID 57-11-4	<2	Not listed	Not listed
2-BUTANONE OXIME 96-29-7	0.5-2.0	Not listed	Not listed
NITROGEN 7727-37-9	0.5-2.0	Not listed	Not listed

3. HAZARDS IDENTIFICATION

Toxicity: May cause eye and skin irritation. When this product is exposed to moisture, butanone oxime may be formed. May be harmful if swallowed. May irritate lips, gums, tongue, mouth, nose and throat.

Primary Routes of Entry: Eye and skin contact, ingestion, inhalation

Signs and Symptoms of Exposure: Butanone oxime produced during curing is toxic and irritates eyes, nose and throat. Overexposure to the silane may cause coma and respiratory failure.

Aggravated Medical Condition: Preexisting eye, skin and respiratory disorders may be aggravated by overexposure to this product.

4. FIRST AID MEASURES

Ingestion: Rinse mouth. If swallowed, DO NOT induce vomiting. Keep individual calm. Obtain medical attention.

Inhalation: Move to fresh air in case of accidental inhalation of vapours. Obtain medical attention.

Skin Contact: Wipe off material with paper towel or cloth. Wash off with soap and water. If skin irritation persists, call a physician.

Eye Contact: In case of contact, immediately flush eyes with plenty of water for at least 15 minutes and get medical attention if irritation persists.

5. FIRE FIGHTING MEASURES

Flash Point °F(C°): >200°F TCC

Recommended Extinguishing Media: Carbon Dioxide, Dry Chemicals, Foam.

Special Fire-Fighting Procedures: ***Warning: This container is pressurized with nitrogen. Do not remove rubber plug. Keep containers cool. Use equipment or shielding required to protect against bursting or venting of containers. Oxides of nitrogen, Methyl ethyl ketone, possibly methyl ethyl ketoxime, Silica fume, Oxides of carbon, Formaldehyde

Hazardous Products of Combustion: Contents under pressure. Heated cans may burst.

Unusual Fire/Explosion Hazards:

Lower Explosive Limit: Not determined

Product Name: 6MA POWERBEAD BLUE RTV SILICONE
7.25 OZ AE

Item No. 85860

5. FIRE FIGHTING MEASURES

Upper Explosive Limit: Not determined

6. ACCIDENTAL RELEASE MEASURES

Spill Procedures: Wipe or scrape up spill material. Maintain good ventilation for large spills. Place scrap material in a well-ventilated area and allow to cure to rubber. Clean up spills thoroughly as residue is slippery.

7. HANDLING AND STORAGE

Storage: Store away from heat, sparks or open flame. Do not store at temperatures above 100°F (38°C). Exposure to high temperatures may cause container to burst.

Handling: Avoid contact with skin and eyes. Do not wear contact lenses. Do not inhale vapors. Do not take internally. Wash hands before eating and smoking.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Eyes: Safety glasses.

Skin: Neoprene or nitrile gloves recommended.

Ventilation: General; local exhaust ventilation as necessary to control any air contaminants to within their exposure limits (or to the lowest feasible levels when limits have not been established) during the use of this product.

Respiratory Protection: An approved organic vapor respirator should be worn when exposures are expected to exceed the applicable limits.

Comments: When heated to temperatures above 300 degrees F. in the presence of air, this product can form formaldehyde vapors. Formaldehyde is a potential cancer hazard and a known skin and respiratory sensitizer. Safe handling conditions may be maintained by keeping vapor concentrations below the OSHA permissible limit for formaldehyde

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Blue paste
Odor: Mild
Boiling Point: Not applicable, polymeric material
pH: Does not apply
Solubility in Water: Polymerized
Specific Gravity: 1.43
VOC(Wt.%): <4%
Vapor Pressure: <5 mm Hg @ 80°F
Vapor Density (Air=1): 3.0
Evaporation Rate: Not Determined

10. STABILITY AND REACTIVITY

Chemical Stability: Stable at normal conditions

Hazardous Polymerization: Will not occur

Incompatibilities: Polymerized by contact with moisture., Strong oxidizers, Acids, Iron

Conditions to Avoid: Keep away from heat, sparks and open flame. Exposure to moisture.

Hazardous Products of Combustion: Oxides of nitrogen, Methyl ethyl ketone, possibly methyl ethyl ketoxime, Silica fume, Oxides of carbon, Formaldehyde

11. TOXICOLOGICAL INFORMATION

See Section 3

12. ECOLOGICAL INFORMATION

No data available

13. DISPOSAL CONSIDERATIONS

Recommended Method of Disposal: Disposal should be made in accordance with federal, state and local regulations.

US EPA Waste Number: NH - Not a RCRA Hazardous Waste Material

14. TRANSPORTATION INFORMATION

DOT (49CFR 172)

U.S. Department of Transportation - DOT - 49 CFR (Ground)

DOT Shipping Name: Aerosols, Limited Quantity

Hazard Class: Class 2.2

Product Name: 6MA POWERBEAD BLUE RTV SILICONE
7.25 OZ AE

Item No. 85860

14. TRANSPORTATION INFORMATION

UN/ID Number: UN 1950

IATA (Air)

Proper Shipping Name: Consumer Commodity (Not more than 1 liter)

Class or Division: Class 9

UN/ID Number: ID 8000

IMDG (Vessel)

Proper Shipping Name: Aerosols, Limited Quantity

Hazard Class: Class 2.2

UN Number: UN 1950

Marine Pollutant: None

15. REGULATORY INFORMATION

SARA 313 Chemicals: The following component(s) is listed as a SARA Section 313 Toxic Chemical.

NONE

California Proposition 65: No California Prop 65 chemicals are known to be present at or above the No Significant Risk Level

TSCA Inventory Status: All components of this product are listed (or exempt) on the EPA TSCA inventory.

16. OTHER INFORMATION

Estimated NFPA Rating: HEALTH 1, FLAMMABILITY 1, REACTIVITY 0.

Estimated HMIS Classification: HEALTH 1, FLAMMABILITY 1, PHYSICAL HAZARD 0

(NFPA is a registered trademark of the National Fire Protection Association)

HMIS is a registered trademark of the National Paint and Coatings Association

Prepared By: Denise Boyd, Manager-Environmental, Health & Safety
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Telephone No.: 1-87-Permatex (877) 376-2839

Revision Date: February 02, 2012

Revision Number: 2

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Material Safety Data Sheet

Section 1: Product & Company Identification

Product Name: Carquest® Heavy Duty Silicone™ (CA & OTC)

Product Number (s): 1055, 1055C (CRC Part# 09685, 79685)

Manufactured By:

CRC Industries, Inc.
885 Louis Drive
Warminster, PA 18974
www.crcindustries.com

General Information	(215) 674-4300
Technical Assistance	(800) 521-3168
Customer Service	(800) 272-8963
24-Hr Emergency (CHEMTREC)	(800) 424-9300

Section 2: Hazards Identification

Emergency Overview

Appearance & Odor: Clear water-white liquid, solvent odor

DANGER

Extremely Flammable. Harmful or Fatal if Swallowed. Eye and Skin Irritant. Contents Under Pressure.

As defined by OSHA's Hazard Communication Standard, this product is hazardous.

Potential Health Effects:

EYE:	Eye irritant. Contact may cause moderate to severe eye irritation including stinging, watering and redness.
SKIN:	Skin irritant. Contact may cause redness, itching, burning, and skin damage. Prolonged or repeated contact can worsen irritation by causing drying and cracking of the skin, leading to dermatitis (inflammation).
INHALATION:	Low to moderate degree of toxicity by inhalation. Effects of overexposure may include irritation to the respiratory tract and signs of nervous system depression (headache, drowsiness, dizziness, loss of coordination, disorientation and fatigue).
INGESTION:	Main hazard is aspiration. This material can enter lungs during swallowing or vomiting and cause lung inflammation and damage. Swallowing this material may also cause nausea and diarrhea. Acetone poisoning may result in liver and kidney damage.
CHRONIC EFFECTS:	Exposure to high concentrations of this material may increase the sensitivity of the heart to certain drugs. Reports have associated repeated and prolonged overexposure to solvents with permanent brain and nervous system damage.
TARGET ORGANS:	Liver, kidney, central nervous system.

Medical Conditions Aggravated by Exposure: skin disorders, respiratory (asthma-like) disorders

See Section 11 for toxicology and carcinogenicity information on product ingredients.

Product Name: Carquest® Heavy Duty Silicone™ (CA & OTC)
Product Number (s): 1055, 1055C (CRC Part# 09685, 79685)

Section 3: Composition/Information on Ingredients

COMPONENT	CAS NUMBER	% by Wt.
Heptane isomers	various	25 - 35
Acetone	67-64-1	30 - 40
Polydimethylsiloxane	63148-62-9	2 - 5
Liquefied petroleum gas	68476-86-8	25 - 35

Section 4: First Aid Measures

Eye Contact: Immediately flush with plenty of water for 15 minutes. Call a physician if irritation persists.

Skin Contact: Remove contaminated clothing and wash affected area with soap and water. Call a physician if irritation persists. Wash contaminated clothing prior to re-use.

Inhalation: Remove person to fresh air. Keep person calm. If not breathing, give artificial respiration. If breathing is difficult give oxygen. Call a physician.

Ingestion: Do NOT induce vomiting or give anything by mouth because material can enter the lungs and cause severe lung damage. Seek medical attention immediately.

Note to Physicians: Epinephrine and other sympathomimetic drugs may initiate cardiac arrhythmias in persons exposed to high concentrations of hydrocarbon solvents. The use of other drugs with less arrhythmogenic potential should be considered.

Section 5: Fire-Fighting Measures

Flammable Properties: This product is extremely flammable in accordance with aerosol flammability definitions (16 CFR 1500.3(c)(6)).

Flash Point:	< 0 F (TCC)	Upper Explosive Limit:	12.8
Autoignition Temperature:	ND	Lower Explosive Limit:	2.5

Suitable Extinguishing Media: Dry chemical, carbon dioxide or foam is recommended.

Products of Combustion: Oxides of carbon; thermal decomposition may generate silicon dioxide and formaldehyde

Protection of Fire-Fighters: Firefighters should wear self-contained, NIOSH-approved breathing apparatus for protection against suffocation and possible toxic decomposition products. Proper eye and skin protection should be provided. Use water spray to keep fire-exposed containers cool and to knock down vapors which may result from product decomposition. Avoid spreading burning liquid with water used for cooling purposes.

Section 6: Accidental Release Measures

Personal Precautions: Use personal protection recommended in Section 8.

Product Name: Carquest® Heavy Duty Silicone™ (CA & OTC)
Product Number (s): 1055, 1055C (CRC Part# 09685, 79685)

Environmental Precautions: Take precautions to prevent contamination of ground and surface waters. Do not flush into sewers or storm drains.

Methods for Containment & Clean-up: Eliminate all potential sources of ignition. Dike area to contain spill. Ventilate the area with fresh air. If in confined space or limited air circulation area, clean-up workers should wear appropriate respiratory protection. Recover or absorb spilled material using an absorbent designed for chemical spills. Place used absorbents into proper waste containers.

Section 7: Handling and Storage

Handling Procedures: Do not use on or around any potential sources of ignition or live equipment. Do not touch container to electrical sources as container will conduct electricity. Wash thoroughly after use and before handling food.

Storage Procedures: Aerosol cans must be maintained below 120 F to prevent cans from rupturing. Use and store this material in cool, dry, well-ventilated areas away from heat, direct sunlight, hot metal surfaces, and all sources of ignition. Keep away from incompatible material.

Aerosol Storage Level: III

Section 8: Exposure Controls/Personal Protection

Exposure Guidelines:

COMPONENT	OSHA		ACGIH		OTHER		UNIT
	TWA	STEL	TWA	STEL	TWA	SOURCE	
Heptane isomers	500	NE	400	500	NE		ppm
Acetone	750 (v)	1000 (v)	500	750	NE		ppm
Polydimethylsiloxane	NE	NE	NE	NE	NE		
Liquefied petroleum gas	1000	NE	1000	NE	NE		ppm
N.E. – Not Established (c) – ceiling (s) – skin (v) – vacated							

Engineering Controls: Area should have ventilation to provide fresh air. Use local exhaust to prevent accumulation of vapors. Use mechanical means if necessary to maintain vapor levels below the exposure guidelines. If working in a confined space, follow applicable OSHA regulations

Respiratory Protection: None required for normal work where adequate ventilation is provided. Use a NIOSH-approved cartridge respirator with an organic vapor cartridge if vapors exceed exposure limits. Use a self-contained breathing apparatus in confined spaces and for emergencies.

Eye/face Protection: For normal conditions, wear safety glasses. Where there is reasonable probability of liquid contact, wear splash-proof goggles.

Skin Protection: Use protective gloves such as nitrile, PVA or Viton®. Also, use full protective clothing if there is prolonged or repeated contact of liquid with skin.

Section 9: Physical and Chemical Properties

Physical State: liquid

Product Name: Carquest® Heavy Duty Silicone™ (CA & OTC)
Product Number (s): 1055, 1055C (CRC Part# 09685, 79685)

Color: clear, water-white
Odor: solvent
Specific Gravity: 0.748
Initial Boiling Point: 132 F
Freezing Point: ND
Vapor Pressure: ND
Vapor Density: > 1 (air = 1)
Evaporation Rate: > 1 (butyl acetate = 1)
Solubility: slightly soluble in water
pH: NA
Volatile Organic Compounds: wt %: 59.5 g/L: 445.1 lbs./gal: 3.7

Section 10: Stability and Reactivity

Stability: Stable

Conditions to Avoid: Sources of ignition, temperature extremes

Incompatible Materials: Avoid contact with acids and oxidizers such as chlorine and other halogens, chromates, perchlorates, peroxides and oxygen.

Hazardous Decomposition Products: oxides of carbon

Possibility of Hazardous Reactions: No

Section 11: Toxicological Information

Long-term toxicological studies have not been conducted for this product. The following information is available for components of this product.

ACUTE EFFECTS

<u>Component</u>	<u>Test</u>	<u>Result</u>	<u>Route</u>	<u>Species</u>
n-heptane	LD50	103 g/m ³ /4H	Inhalation	Rat
acetone	LD50	76 mg/L/4H	Inhalation	Rat
acetone	LD50	1800 mg/kg	Oral	Rat
n-heptane	LD50	> 15 g/kg	Oral	Mouse

CHRONIC EFFECTS

Carcinogenicity:

	<u>Component</u>	<u>Result</u>
OSHA:	none listed	
IARC:	none listed	
NTP:	none listed	

Mutagenicity: no information available

Other: none

Section 12: Ecological Information

Ecological studies have not been conducted for this product. The following information is available for