

# SAFETY DATA SHEET

#### 1. Identification

Product identifier High Performance Engine RTV Silicone

Other means of identification

**FIR No.** 500108

Recommended use Automotive engine gasketing applications

Recommended restrictions None known.

Manufacturer/Importer/Supplier/Distributor information

Company Name Ford Motor Company

Address Attention: SDS Information, P.O. Box 1899

Dearborn, Michigan 48121

USA

**Telephone** 1-800-392-3673

SDS Information 1-800-448-2063 (USA and Canada)

fordsds.com

**Emergency telephone** 

numbers

Poison Control Center: USA and Canada: 1-800-959-3673 INFOTRAC (Transportation): USA and Canada 1-800-535-5053

## 2. Hazard(s) identification

Hazards for the product as sold

Physical hazards Not classified.

**Health hazards** Serious eye damage/eye irritation Category 2

Sensitization, skin Category 1
Carcinogenicity Category 1B

Specific target organ toxicity, single exposure Category 1 (upper respiratory tract)

Category 2

Specific target organ toxicity, repeated

exposure

Environmental hazards Not classified.

OSHA defined hazards Not classified.

Label elements



Signal word Danger

**Hazard statement** May cause an allergic skin reaction. Causes serious eye irritation. May cause cancer. Causes

damage to organs (upper respiratory tract). May cause damage to organs through prolonged or

repeated exposure.

Precautionary statement

Prevention Obtain special instructions before use. Do not handle until all safety precautions have been read

and understood. Do not breathe dust/fume/gas/mist/vapors/spray. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Contaminated work clothing must

not be allowed out of the workplace. Wear protective gloves/protective clothing/eye

protection/face protection.

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Response If on skin: Wash with plenty of water. Wash contaminated clothing before reuse. IF IN EYES:

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If exposed or concerned: Call a poison center/doctor. If skin irritation or rash occurs: Get medical advice/attention. If eye irritation persists: Get medical advice/attention.

Storage Store locked up.

**Disposal** Dispose of contents/container in accordance with local/regional/national/international

regulations.

Hazard(s) not otherwise

classified (HNOC)

None known.

Supplemental information

None.

## 3. Composition/information on ingredients

#### **Mixtures**

Chemical name	Common name and synonyms	CAS No./Unique ID	%
CALCIUM CARBONATE		471-34-1	40 - 45
Butanone oxime		96-29-7	1 - 3
CARBON BLACK		1333-86-4	1 - 3
Silane, dichlorodimethyl-, reaction products with silica		68611-44-9	1 - 3

Specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.

## 4. First-aid measures

**Inhalation** Move to fresh air. Call a physician if symptoms develop or persist.

**Skin contact** Remove contaminated clothing immediately and wash skin with soap and water. In case of

eczema or other skin disorders: Seek medical attention and take along these instructions.

**Eye contact** Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if

present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.

**Ingestion** Rinse mouth. Get medical attention if symptoms occur.

Most important

symptoms/effects, acute and

delayed

Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Coughing. May cause an allergic skin reaction. Dermatitis. Rash. Prolonged exposure may cause chronic effects.

Indication of immediate medical attention and special treatment

needed

Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.

General information

IF exposed or concerned: Get medical advice/attention. If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Wash contaminated clothing before reuse.

### 5. Fire-fighting measures

Suitable extinguishing media

Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).

Unsuitable extinguishing media

Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from

the chemical

During fire, gases hazardous to health may be formed.

Special protective equipment and precautions for firefighters

Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Fire fighting

equipment/instructions

Use water spray to cool unopened containers.

Specific methods

Use standard firefighting procedures and consider the hazards of other involved materials.

General fire hazards

No unusual fire or explosion hazards noted.

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### 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Keep people away from and upwind of spill/leak. Keep unnecessary personnel away. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. Wear appropriate protective equipment and clothing during clean-up. For personal protection, see section 8 of the SDS.

Methods and materials for containment and cleaning up

Large Spills: Stop the flow of material, if this is without risk. Following product recovery, flush area with water.

Small Spills: Clean surface thoroughly to remove residual contamination.

Never return spills to original containers for re-use. Put material in suitable, covered, labeled containers. For waste disposal, see section 13 of the SDS. The product is insoluble in water.

**Environmental precautions** 

Avoid discharge into drains, water courses or onto the ground.

## 7. Handling and storage

Precautions for safe handling

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. When using, do not eat, drink or smoke. Provide adequate ventilation. Should be handled in closed systems, if possible. Observe good industrial hygiene practices. Wash hands thoroughly after handling. Wear appropriate personal protective equipment.

Conditions for safe storage, including any incompatibilities

Store locked up. Store in tightly closed container. Store away from incompatible materials (see Section 10 of the SDS).

### 8. Exposure controls/personal protection

#### Occupational exposure limits

The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit. At this time, the other constituents have no known exposure limits.

US. OSHA Table Z-1 Permissible Exposu	re Limits (PEL) for Air Contaminant	s (29 CFR 1910.1000)

Components	Туре	Value	Form
CALCIUM CARBONATE (CAS 471-34-1)	PEL	5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.
CARBON BLACK (CAS 1333-86-4)	PEL	3.5 mg/m3	

US. OSHA Table Z-3 Permissible Exposure Components	e Limits (PEL) for Mineral Dusts (29 Type	CFR 1910.1000) Value	Form
CALCIUM CARBONATE (CAS 471-34-1)	TWA	5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.
		50 mppcf	Total dust.
		15 mppcf	Respirable fraction.
CARBON BLACK (CAS 1333-86-4)	TWA	5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.
		50 mppcf	Total dust.
		15 mppcf	Respirable fraction.
Silane, dichlorodimethyl-, reaction products with silica (CAS 68611-44-9)	TWA	5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.
		0.8 mg/m3	
		20 mppcf	

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**US. ACGIH Threshold Limit Values (TLV)** 

Value **Form** Components Type

CARBON BLACK (CAS **TWA** 3 mg/m3 Inhalable fraction.

1333-86-4)

NIOSH. Immediately Dangerous to Life or Health (IDLH) Values, as amended

Components Type Value

CARBON BLACK (CAS **IDLH** 1750 mg/m3

1333-86-4)

**IDLH** Silane, dichlorodimethyl-, 3000 mg/m3

reaction products with silica (CAS 68611-44-9)

US. NIOSH: Pocket Guide to Chemical Hazards Recommended Exposure Limits (REL)

**Form** Components Value Type **TWA CALCIUM CARBONATE** 5 mg/m3 Respirable.

(CAS 471-34-1)

10 mg/m3 Total

CARBON BLACK (CAS

**TWA** 0.1 mg/m3 1333-86-4)

Silane, dichlorodimethyl-, **TWA** 6 mg/m3 reaction products with

silica (CAS 68611-44-9)

US. OARS. Workplace Environmental Exposure Level (WEEL) Guide

Components Value **Type** 

TWA

Butanone oxime (CAS

96-29-7)

10 ppm

36 mg/m3

**Biological limit values** No biological exposure limits noted for the ingredient(s).

Appropriate engineering controls

Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been

established, maintain airborne levels to an acceptable level. Provide eyewash station.

Individual protection measures, such as personal protective equipment

Eye/face protection Wear safety glasses with side shields (or goggles).

Skin protection

Hand protection For prolonged or repeated skin contact use suitable protective gloves. The choice of an

> appropriate glove does not only depend on its material but also on other quality features and is different from one producer to the other. Nitrile or butyl rubber gloves are recommended. Polyvinyl

alcohol (PVA) gloves are recommended.

Other Wear appropriate chemical resistant clothing. Wear appropriate chemical resistant clothing if

applicable.

If engineering controls do not maintain airborne concentrations to a level which is adequate to Respiratory protection

> protect worker health, an approved respirator must be worn. Respirator selection, use and maintenance should be in accordance with the requirements of OSHA Respiratory Protection

Standard 29 CFR 1910.134 and/or Canadian Standard CSA Z94.4.

Thermal hazards Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations Observe any medical surveillance requirements. Always observe good personal hygiene

> measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

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

9. Physical and chemical properties

Physical state Solid. **Form** Paste. Black Color

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FIR No.: 500108 SDS US Odor Odorless.

Melting point/freezing point >752 °F (>400 °C) Boiling point or initial boiling

point and boiling range

>392 °F (>200 °C)

**Flammability** Not available.

Upper/lower flammability or explosive limits Explosive limit - lower (%) Not available.

Explosive limit - upper (%) Not available. Flash point Not available.

**Auto-ignition temperature** Not available. **Decomposition temperature** >212 °F (>100 °C)

7 - 9 pН

Kinematic viscosity Not available.

Solubility

Insoluble Solubility (water) Partition coefficient Not available.

(n-octanol/water)

Vapor pressure <6.67 hPa @ 20 °C

Density and/or relative density

Relative density 1.31 (Water=1) 68 °F (20 °C) Relative density

temperature

Vapor density Not available. Particle characteristics Not available.

Other information

VOC 0.5 %

### 10. Stability and reactivity

Reactivity The product is stable and non-reactive under normal conditions of use, storage and transport.

**Chemical stability** Material is stable under normal conditions.

Possibility of hazardous

reactions

No dangerous reaction known under conditions of normal use.

Conditions to avoid Avoid temperatures exceeding the decomposition temperature. Contact with incompatible

materials.

Incompatible materials Fluorine.

Hazardous decomposition

products

No hazardous decomposition products are known.

## 11. Toxicological information

Information on likely routes of exposure

Inhalation Based on available data, the classification criteria are not met. Prolonged inhalation may be

harmful.

Skin contact May cause an allergic skin reaction.

Eye contact Causes serious eye irritation. Ingestion May be harmful if swallowed.

Symptoms related to the physical, chemical and toxicological characteristics Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred

vision. Coughing. May cause an allergic skin reaction. Dermatitis. Rash.

Information on toxicological effects

**Acute toxicity** 

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Components Species Calculated/Test Results

CALCIUM CARBONATE (CAS 471-34-1)

Acute Oral

LD50 Mouse 6450 mg/kg

Rat 6450 mg/kg

CARBON BLACK (CAS 1333-86-4)

Acute Oral

LD50 Rat > 8000 mg/kg

**Skin corrosion/irritation** Prolonged skin contact may cause temporary irritation.

Serious eye damage/eye

irritation

Causes serious eye irritation.

Respiratory or skin sensitization

**Respiratory sensitization** Not a respiratory sensitizer.

**Skin sensitization** May cause an allergic skin reaction.

**Germ cell mutagenicity**No data available to indicate product or any components present at greater than 0.1% are

mutagenic or genotoxic.

Carcinogenicity May cause cancer.

IARC Monographs. Overall Evaluation of Carcinogenicity

CARBON BLACK (CAS 1333-86-4) 2B Possibly carcinogenic to humans.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not listed

**US. National Toxicology Program (NTP) Report on Carcinogens** 

CARBON BLACK (CAS 1333-86-4) Known To Be Human Carcinogen.

**Reproductive toxicity**This product is not expected to cause reproductive or developmental effects.

Specific target organ toxicity -

single exposure

Causes damage to organs (upper respiratory tract).

Specific target organ toxicity -

repeated exposure

May cause damage to organs through prolonged or repeated exposure. Hematopoietic system.

**Aspiration hazard** Not an aspiration hazard.

**Chronic effects** Prolonged inhalation may be harmful. May cause damage to organs through prolonged or

repeated exposure. Prolonged exposure may cause chronic effects.

12. Ecological information

**Ecotoxicity** The product is not classified as environmentally hazardous. However, this does not exclude the

possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Persistence and degradability

Bioaccumulative potential

No data is available on the degradability of any ingredients in the mixture.

Mobility in soil No data available.

Other adverse effects No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation

potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

**Disposal instructions**Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of

contents/container in accordance with local/regional/national/international regulations.

**Local disposal regulations** Dispose in accordance with all applicable regulations.

**Hazardous waste code**The waste code should be assigned in discussion between the user, the producer and the

waste disposal company.

Waste from residues / unused

products

Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner.

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Contaminated packaging

Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

# 14. Transport information

DOT

Not regulated as dangerous goods.

**IATA** 

Not regulated as dangerous goods.

**IMDG** 

Not regulated as dangerous goods.

Transport in bulk according to Not applicable.

**IMO** instruments

## 15. Regulatory information

**US federal regulations** This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication

Standard, 29 CFR 1910.1200.

**Toxic Substances Control Act (TSCA)** 

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

**CERCLA Hazardous Substance List (40 CFR 302.4)** 

Not listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Yes

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous

chemical

Classified hazard

categories

Serious eye damage or eye irritation Respiratory or skin sensitization

Carcinogenicity

Specific target organ toxicity (single or repeated exposure)

SARA 313 (TRI reporting)

Not regulated.

## Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act

(SDWA)

Contains component(s) regulated under the Safe Drinking Water Act.

**US state regulations** 

**California Proposition 65** 



WARNING: This product can expose you to chemicals including ETHYLENE OXIDE, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more

information go to www.P65Warnings.ca.gov.

California Proposition 65 - CRT: Listed date/Carcinogenic substance

ETHYLENE OXIDE (CAS 75-21-8) Listed: July 1, 1987 California Proposition 65 - CRT: Listed date/Developmental toxin

ETHYLENE OXIDE (CAS 75-21-8) Listed: August 7, 2009

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### California Proposition 65 - CRT: Listed date/Female reproductive toxin

ETHYLENE OXIDE (CAS 75-21-8) Listed: February 27, 1987

California Proposition 65 - CRT: Listed date/Male reproductive toxin

ETHYLENE OXIDE (CAS 75-21-8) Listed: August 7, 2009

#### International Inventories

All components are listed or are exempt from listing on the Toxic Substances Control Act Inventory.

## 16. Other information, including date of preparation or last revision

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**HMIS®** ratings Health: 2

> Flammability: 1 Physical hazard: 0

NFPA ratings Health: 2

> Flammability: 1 Instability: 0

**Preparation Information and** 

**Disclaimer** 

This document was prepared by FCSD-Toxicology, Ford Motor Company, Diagnostic Service Center II, 1800 Fairlane Drive, Allen Park, MI 48101, USA, based in part on information provided by the manufacturer. The information on this data sheet represents our current data and is accurate to the best of our knowledge as to the proper handling of this product under normal conditions and in accordance with the application specified on the packaging and/or technical guidance literature. Any other use of the product which involves using the product in combination with any other product or any other process is the responsibility of the user. To the extent that there are any differences between this product's Safety Data Sheet (SDS) and the consumer

packaged product labels, the SDS should be followed.

Part number(s) TA-357

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