SAFETY DATA SHEET

1. Identification

Product identifier Hercules Grrip

Other means of identification

Product code 7383E

Part Numbers: 15510, 15515, 15520, 15525 **Synonyms**

Recommended use Pipe thread sealant.

Recommended restrictions None known.

Manufacturer/Importer/Supplier/Distributor information

Company Name HCC Holdings, Inc. an Oatey Affiliate

4700 West 160th Street Address

Cleveland, OH 44135

Telephone 216-267-7100 E-mail info@oatey.com

Transport Emergency Chemtrec 1-800-424-9300 (Outside the US 1-703-527-3887)

Emergency First Aid 1-877-740-5015 **MSDS** Coordinator **Contact person**

2. Hazard(s) identification

Physical hazards Flammable liquids Category 4

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

> Sensitization, skin Category 1

Environmental hazards Hazardous to the aquatic environment, acute Not applicable

hazard

Hazardous to the aquatic environment, Not applicable

long-term hazard

OSHA defined hazards Not classified.

Label elements



Signal word Warning

Hazard statement Combustible liquid. May cause an allergic skin reaction. Causes serious eye irritation.

Precautionary statement

Prevention Keep away from flames and hot surfaces-No smoking. Avoid breathing mist or vapor. Wash

thoroughly after handling. Contaminated work clothing must not be allowed out of the workplace.

Wear protective gloves/eye protection/face protection.

If on skin: Wash with plenty of water. If in eyes: Rinse cautiously with water for several minutes. Response

Remove contact lenses, if present and easy to do. Continue rinsing. If skin irritation or rash occurs: Get medical advice/attention. If eye irritation persists: Get medical advice/attention. Wash

contaminated clothing before reuse. In case of fire: Use appropriate media to extinguish.

Store in a well-ventilated place. Keep cool. Storage

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

Hazard(s) not otherwise

Frequent or prolonged contact may defat and dry the skin, leading to discomfort and dermatitis. classified (HNOC) Static accumulating flammable liquid can become electrostatically charged even in bonded and

grounded equipment. Sparks may ignite liquid and vapor. May cause flash fire or explosion.

3. Composition/information on ingredients

Mixtures

Hercules Grrip SDS US

924572 Version #: 01 Revision date: -Issue date: 05-February-2015

Chemical name	CAS number	%
Castor Oil	68187-84-8	20-30
Rosin	8050-09-7	20-30
Isopropyl alcohol	67-63-0	10-20
Talc	14807-96-6	10-20
Magnesium carbonate	546-93-0	5-15
Graphite	7782-42-5	1-5
Silica, amorphous, fumed	112945-52-5	1-5
Crystalline silica (Quartz)	14808-60-7	<0.5
Other components below reportable levels		0.27

^{*}Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. First-aid measures

Eye contact

Inhalation Move to fresh air.

Skin contactRemove 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.

Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

Ingestion Get medical attention if symptoms occur.

Most important Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred

symptoms/effects, acute and vision. Irritation of no delayed

Indication of immediate medical attention and special treatment needed

General information

vision. Irritation of nose and throat. May cause an allergic skin reaction. Dermatitis. Rash.

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

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

Alcohol resistant foam. Water fog. Carbon dioxide (CO2). Dry chemical powder, carbon dioxide, sand or earth may be used for small fires only.

Unsuitable extinguishing media

Specific hazards arising from the chemical

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

The product is combustible, and heating may generate vapors which may form explosive vapor/air mixtures. This product is a poor conductor of electricity and can become electrostatically charged. If sufficient charge is accumulated, ignition of flammable mixtures can occur. To reduce potential for static discharge, use proper bonding and grounding procedures. This liquid may accumulate static electricity when filling properly grounded containers. Static electricity accumulation may be significantly increased by the presence of small quantities of water or other contaminants. Material will float and may ignite on surface of water. 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

In case of fire and/or explosion do not breathe fumes. Move containers from fire area if you can do so without risk.

Specific methods
General fire hazards

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

Combustible liquid.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Wear appropriate protective equipment and clothing during clean-up. Avoid breathing mist or vapor. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Use appropriate containment to avoid environmental contamination. Transfer by mechanical means such as vacuum truck to a salvage tank or other suitable container for recovery or safe disposal. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

Methods and materials for containment and cleaning up

Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil, etc.) away from spilled material.

Large Spills: Stop the flow of material, if this is without risk. Use water spray to reduce vapors or divert vapor cloud drift. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Following product recovery, flush area with water.

Small Spills: Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Environmental precautions

Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS. Avoid discharge into drains, water courses or onto the ground. Use appropriate containment to avoid environmental contamination.

7. Handling and storage

Precautions for safe handling

Keep away from open flames, hot surfaces and sources of ignition. When using do not smoke. Minimize fire risks from flammable and combustible materials (including combustible dust and static accumulating liquids) or dangerous reactions with incompatible materials. Handling operations that can promote accumulation of static charges include but are not limited to: mixing, filtering, pumping at high flow rates, splash filling, creating mists or sprays, tank and container filling, tank cleaning, sampling, gauging, switch loading, vacuum truck operations. Avoid breathing mist or vapor. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.

For additional information on equipment bonding and grounding, refer to the Canadian Electrical Code in Canada, (CSA C22.1), or the American Petroleum Institute (API) Recommended Practice 2003, "Protection Against Ignitions Arising out of Static, Lightning, and Stray Currents" or National Fire Protection Association (NFPA) 77, "Recommended Practice on Static Electricity" or National Fire Protection Association (NFPA) 70, "National Electrical Code".

Conditions for safe storage, including any incompatibilities

Keep away from heat, sparks and open flame. Eliminate sources of ignition. Avoid spark promoters. Ground/bond container and equipment. These alone may be insufficient to remove static electricity. Store in a cool, dry place out of direct sunlight. Store in original tightly closed container. Store in a well-ventilated place. Keep in an area equipped with sprinklers. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Туре	Value	Form
Graphite (CAS 7782-42-5)	PEL	5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.
Isopropyl alcohol (CAS 67-63-0)	PEL	980 mg/m3	
,		400 ppm	
Magnesium carbonate (CAS 546-93-0)	PEL	5 mg/m3	Respirable fraction.
(/		15 mg/m3	Total dust.

US. OSHA Table Z-3 (29 CFR 1910.1000)

Components	Туре	Value	Form	
Crystalline silica (Quartz) (CAS 14808-60-7)	TWA	0.3 mg/m3	Total dust.	
		0.1 mg/m3	Respirable.	
Graphite (CAS 7782-42-5)	TWA	15 mppcf		
Silica, amorphous, fumed (CAS 112945-52-5)	TWA	0.8 mg/m3		
		20 mppcf		
Talc (CAS 14807-96-6)	TWA	0.3 mg/m3	Total dust.	
		0.1 mg/m3	Respirable.	
		20 mppcf		
		2.4 mppcf	Respirable.	

US. ACGIH Threshold Limit Values

Components	Туре	Value	Form
Crystalline silica (Quartz) (CAS 14808-60-7)	TWA	0.025 mg/m3	Respirable fraction.
Graphite (CAS 7782-42-5)	TWA	2 mg/m3	Respirable fraction.
Isopropyl alcohol (CAS 67-63-0)	STEL	400 ppm	
·	TWA	200 ppm	
Talc (CAS 14807-96-6)	TWA	2 mg/m3	Respirable fraction.

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Туре	Value	Form
Crystalline silica (Quartz) (CAS 14808-60-7)	TWA	0.05 mg/m3	Respirable dust.
Graphite (CAS 7782-42-5)	TWA	2.5 mg/m3	Respirable.
Isopropyl alcohol (CAS 67-63-0)	STEL	1225 mg/m3	
•		500 ppm	
	TWA	980 mg/m3	
		400 ppm	
Magnesium carbonate (CAS 546-93-0)	TWA	5 mg/m3	Respirable.
		10 mg/m3	Total
Rosin (CAS 8050-09-7)	TWA	0.1 mg/m3	
Silica, amorphous, fumed (CAS 112945-52-5)	TWA	6 mg/m3	
Talc (CAS 14807-96-6)	TWA	2 mg/m3	Respirable.

Biological limit values

ACGIH Biological Exposure Indices

Components	Value	Determinant	Specimen	Sampling Time	
Isopropyl alcohol (CAS 67-63-0)	40 mg/l	Acetone	Urine	*	

^{* -} For sampling details, please see the source document.

Appropriate engineering controls

Good general ventilation (typically 10 air changes per hour) 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 Face shield is recommended. Wear safety glasses with side shields (or goggles).

Skin protection

Hand protection Wear appropriate chemical resistant gloves.

Other Wear appropriate chemical resistant clothing. Use of an impervious apron is recommended.

Respiratory protection If engineering controls do not maintain airborne concentrations below recommended exposure

limits (where applicable) or to an acceptable level (in countries where exposure limits have not

been established), an approved respirator must be worn.

Thermal hazards Wear appropriate thermal protective clothing, when necessary.

When using do not smoke. Contaminated work clothing should not be allowed out of the General hygiene

workplace. considerations

9. Physical and chemical properties

Appearance

Liquid. Physical state Liquid paste. **Form**

Color Black. Odor Alcohol. **Odor threshold** Not available.

Not available. pН Melting point/freezing point Not available. Not available.

Initial boiling point and boiling

range

175.0 °F (79.4 °C) Flash point **Evaporation rate** Not available. Flammability (solid, gas) Not available.

Upper/lower flammability or explosive limits

Flammability limit - lower

Not available.

1.29

Not available.

(%)

Flammability limit - upper

Not available. Explosive limit - lower (%) Explosive limit - upper (%) Not available. 33 mm Ha

Vapor pressure Not available. Vapor density

Relative density

Solubility(ies)

Slightly Soluble Solubility (water) Partition coefficient Not available.

(n-octanol/water)

Auto-ignition temperature Not available. Not available. **Decomposition temperature** 10000 cP **Viscosity**

Other information

VOC (Weight %) 186 g/l

10. Stability and reactivity

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

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

Possibility of hazardous

reactions

No dangerous reaction known under conditions of normal use.

Avoid heat, sparks, open flames and other ignition sources. Avoid temperatures exceeding the Conditions to avoid

flash point. Contact with incompatible materials.

Acids. Strong oxidizing agents. Isocyanates. Chlorine. Incompatible materials

Hazardous decomposition

No hazardous decomposition products are known.

products

11. Toxicological information

Information on likely routes of exposure

InhalationProlonged inhalation may be harmful.Skin contactMay cause an allergic skin reaction.

Eye contact Causes serious eye irritation.

Ingestion Expected to be a low ingestion hazard.

Symptoms related to the physical, chemical and toxicological characteristics

Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Irritation of nose and throat. May cause an allergic skin reaction. Dermatitis. Rash.

Information on toxicological effects

Acute toxicity

Components	Species	Test Results	
Isopropyl alcohol (CAS 67-63-0)			
Acute			
Dermal			
LD50	Rabbit	12800 mg/kg	
Oral			
LD50	Rat	4.7 a/ka	

^{*} Estimates for product may be based on additional component data not shown.

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

Serious eye damage/eye

9

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 In 1997, IARC (the International Agency for Research on Cancer) concluded that crystalline silica

inhaled from occupational sources can cause lung cancer in humans. However in making the

overall evaluation, IARC noted that "carcinogenicity was not detected in all industrial circumstances studied. Carcinogenicity may be dependent on inherent characteristics of the

crystalline silica or on external factors affecting its biological activity or distribution of its polymorphs." (IARC Monographs on the evaluation of the carcinogenic risks of chemicals to humans, Silica, silicates dust and organic fibres, 1997, Vol. 68, IARC, Lyon, France.) Risk of

cancer cannot be excluded with prolonged exposure.

IARC Monographs. Overall Evaluation of Carcinogenicity

Crystalline silica (Quartz) (CAS 14808-60-7) 1 Carcinogenic to humans.

Silica, amorphous, fumed (CAS 112945-52-5)

3 Not classifiable as to carcinogenicity to humans.

NTP Report on Carcinogens

Crystalline silica (Quartz) (CAS 14808-60-7)

Known To Be Human Carcinogen.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

Reproductive toxicityThis product is not expected to cause reproductive or developmental effects.

Specific target organ toxicity -

single exposure

Not classified.

Specific target organ toxicity -

repeated exposure

Not classified.

Aspiration hazard Not an aspiration hazard.

Chronic effects Prolonged inhalation may be harmful. 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.

Test Results Components **Species**

Isopropyl alcohol (CAS 67-63-0)

Aquatic

LC50 Bluegill (Lepomis macrochirus) Fish > 1400 mg/l, 96 hours

Rosin (CAS 8050-09-7)

Aquatic

EC50 Crustacea Daphnia 4.5 mg/l, 48 Hours

Persistence and degradability

No data is available on the degradability of this product.

Bioaccumulative potential

Partition coefficient n-octanol / water (log Kow)

0.05 Isopropyl alcohol (CAS 67-63-0)

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

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

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

Dispose in accordance with all applicable regulations. Local disposal 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 (see:

Disposal instructions).

Empty containers should be taken to an approved waste handling site for recycling or disposal. Contaminated packaging

Since emptied containers may retain product residue, follow label warnings even after container is

emptied.

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

the IBC Code

Not established. Annex II of MARPOL 73/78 and

General information DOT: Not regulated as dangerous goods except when shipped in bulk. This material is not regulated if in a container of 119 gallon (450 L) capacity or less.

15. Regulatory information

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

Standard, 29 CFR 1910.1200.

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

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

CERCLA Hazardous Substance List (40 CFR 302.4)

Isopropyl alcohol (CAS 67-63-0) LISTED

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Immediate Hazard - Yes **Hazard categories**

> Delayed Hazard - No Fire Hazard - Yes Pressure Hazard - No Reactivity Hazard - No

^{*} Estimates for product may be based on additional component data not shown.

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous No

chemical

SARA 313 (TRI reporting)

Chemical nameCAS number% by wt.Isopropyl alcohol67-63-010-20

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

Not regulated.

(SDWA)

US state regulations

US. Massachusetts RTK - Substance List

Crystalline silica (Quartz) (CAS 14808-60-7)

Graphite (CAS 7782-42-5)

Isopropyl alcohol (CAS 67-63-0)

Magnesium carbonate (CAS 546-93-0)

Silica, amorphous, fumed (CAS 112945-52-5)

Talc (CAS 14807-96-6)

US. New Jersey Worker and Community Right-to-Know Act

Crystalline silica (Quartz) (CAS 14808-60-7)

Graphite (CAS 7782-42-5)

Isopropyl alcohol (CAS 67-63-0)

Magnesium carbonate (CAS 546-93-0)

Talc (CAS 14807-96-6)

US. Pennsylvania Worker and Community Right-to-Know Law

Crystalline silica (Quartz) (CAS 14808-60-7)

Graphite (CAS 7782-42-5)

Isopropyl alcohol (CAS 67-63-0)

Rosin (CAS 8050-09-7)

Silica, amorphous, fumed (CAS 112945-52-5)

Talc (CAS 14807-96-6)

US. Rhode Island RTK

Isopropyl alcohol (CAS 67-63-0)

US. California Proposition 65

WARNING: This product contains a chemical known to the State of California to cause cancer.

US - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance

Crystalline silica (Quartz) (CAS 14808-60-7)

International Inventories

 Country(s) or region
 Inventory name
 On inventory (yes/no)*

 Canada
 Domestic Substances List (DSL)
 Yes

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United States & Puerto Rico Toxic Substances Control Act (TSCA) Inventory Yes

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

Issue date 05-February-2015

Revision date Version # 01
HMIS® ratings Health: 2

Flammability: 2 Physical hazard: 0

Hercules Grrip SDS US

924572 Version #: 01 Revision date: - Issue date: 05-February-2015

^{*}A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s).

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

NFPA ratings



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