Date Prepared: 06/26/2015
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MSDS Reference No.: R-236

1. Identification

Material Identity
Product Name: Permaseal No. 950 White
Manufacturer's Product Number: 56716D
Generic ID: Nitrile Rubber Sealant

Manufacturer
The Ruscoe Company
485 Kenmore Blvd.
Akron, Ohio 44301
Telephone: 330-253-8148
Fax: 330-253-2933

Distributor
Kelley Technical Coatings
1445 South 15th Street
P.O. Box 3726
Louisville KY, 40201
502-636-2561 (Day)

Chemtrec-24 hours/day Emergency Telephone: 800-424-9300

2. Hazards identification

Classification of the substance or mixture

Flammable liquids	Category 2
Serious eye damage/ eye irritation	Category 2A
Acute toxicity; inhalation	Category 4
Specific target organ toxicity - single exposure respiratory system, central nervous system	Category 3

GHS classification scale (1=severe hazard; 4=slight hazard)

Label elements
GHS label elements
The mixture is classified and labeled according to the Globally Harmonized System (GHS).
Hazard pictograms

Signal Word: Danger
Hazard statements
H225 Highly flammable liquid and vapor.
H319 Causes serious eye irritation.

Continued on next page

H332 Harmful if inhaled
H335 May cause respiratory irritation.
H336 May cause drowsiness or dizziness
Precautionary statements
Prevention

P210	Keep away from heat/sparks/open flames/hot surfaces. No smoking
P233	Keep container tightly closed.
P240	Ground/bond container and receiving equipment
P241	Use explosion-proof electrical/ventilating/lighting/equipment.
P242	Use only non-sparking tools.
P243	Take precautionary measures against static discharge.
P261	Avoid breathing dust/fume/gas/mist/vapors/spray.
P264	Wash hands thoroughly after handling.
P271	Use only outdoors or in a well-ventilated area
P280	Wear protective gloves/protective clothing/eye protection/face protection.

Response

P370+P378	In case of fire; use water spray, carbon dioxide, dry chemical or alcohol foam for extinction.
P303+P361+P353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313	If eye irritation persists: Get medical attention.
P304+P340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P312	Call a POISON CENTER or doctor/physician if you feel unwell.

Storage

P405	Store locked up.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P403+P235	Store in a well-ventilated place. Keep cool.

Disposal

P501	Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

Hazards not otherwise classified: Potential peroxide former.

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3. Composition/information on ingredients

Ingredients	CAS Number	% (by weight)
Methyl acetate	79-20-9	27-34
Copolymer of: vinyl chloride + vinyl acetate	N/A	17-23
Limestone/dolomite	1317-65-3	12-16
Calcium carbonate 55%-87%, Magnesium carbonate 12%-44%		
Copolymer of: vinyl acetate + vinyl chloride + dicarbonic acid	N/A	7-10
Synthetic rubber	9002-18-3	4-7
Acetone	67-64-1	3-6
Methyl isobutyl ketone	108-10-1	3-6
Benzoate esters	Proprietary	3-5
Siloxanes and silicones, di-me, reaction products with silica	67762-90-2	2-4
Titanium dioxide	13463-67-7	2-3
Methyl ethyl ketone	78-93-3	1-2
Cyclohexanone	108-94-1	0.2-0.4

VOC Content 140 g/l

4. First aid measures

Description of first aid measures

Inhalation: Remove to fresh air and keep at rest in apposition comfortable for breathing. If it is suspected that gas or vapor is still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs give artificial respiration or oxygen by trained personnel. Get medical attention. If necessary, call a poison center or physician.

Skin contact: Remove contaminated clothing as needed. Wash with plenty of soap and water. Immediately flush plenty of water for at least 15 minutes. Wash contaminated clothing before reuse. Seek medical attention if ill effect or irritation develops.

Eye contact: Immediately flush with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. If easy to do remove contact lenses. If irritation persists seek medical attention.

Ingestion: Call a physician or poison control center immediately. Only induce vomiting at the instruction of medical personnel. If a person vomits when lying on his back, place him in the recovery position. Never give anything by mouth to an unconscious person.

Most important symptoms and effects, both acute and delayed

May irritate and cause redness and pain. Vapors have a narcotic effect and may cause headache, fatigue, dizziness and nausea.

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Indication of any immediate medical attention and special treatment needed

Treat symptomatically. Treatment of overexposure should be directed at the control of symptoms and the clinical condition of the patient.

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5. Fire-fighting measures

Extinguishing media

Suitable extinguishing agents: Water spray, carbon dioxide, dry chemical, alcohol foam.

For safety reasons unsuitable extinguishing agents: Solid water stream - may spread fire.

Special hazards arising from the substance or mixture: Vapors may cause a flash fire or ignite explosively. Vapors may travel a considerable distance to a source of ignition and flash back. Prevent buildup of vapors or gases to explosive concentrations. Runoff to sewer may create fire or explosion hazard. Water contaminated with this material be contained and prevented from being discharged to any waterway, sewer or drain.

Advice for firefighters

Hazardous thermal decomposition products: Carbon dioxide, carbon monoxide.

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

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6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away. Immediately evacuate personnel to safe areas. Keep people away and upwind of spill/leak. Remove all sources of ignition.

Environmental precautions:

Do not allow product to reach sewage system or any water course.

Inform respective authorities in case of seepage into water course or sewage system.

Do not allow to enter sewers/surface or ground water.

Methods and material for containment or cleaning up:

Absorb with liquid-binding material (i.e. Sand, diatomite, dry earth, acid binders, or other non-combustible material).

Ensure adequate ventilation.

Do not flush with water or aqueous cleansing agents.

Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

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7. Handling and storage

Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace.

Open and handle receptacle with care.

Prevent formation of aerosols.

Information about protection against explosions and fire:

Keep ignition sources away - Do not smoke.

Protect from heat.

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Protect against electrostatic charges.

Conditions for safe storage, including any incompatibilities
Storage
Requirements to be met by storerooms and receptacles: Store in a cool location.
Information about storage in one common storage facility: Not required.
Further information about storage conditions:
Keep receptacle tightly sealed.
Store in cool, dry conditions in well-sealed receptacles.
Protect from heat and direct sunlight.
Specific end use(s) No further relevant information available.

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8. Exposure controls/personal protection
Additional information about design of technical systems: No further data; see section 7.
Control parameters
Components with limit values that require monitoring at the workplace:
79-20-9 methyl acetate
TWA 200 ppm - ACGIH
STEL 250 ppm - ACGIH
PEL 200 ppm - OSHA
67-64-1 acetone
TWA 500 ppm - ACGIH
STEL 750 ppm - ACGIH
REL 250 ppm - NIOSH
PEL 1000 ppm - OSHA
TWA 750 ppm - OSHA
STEL 1000 ppm - OSHA
108-10-1 methyl isobutyl ketone
TWA 20 ppm - ACGIH
STEL 75 ppm - ACGIH
PEL 100 ppm - OSHA Table Z-1
78-93-3 methyl ethyl ketone
TWA 200 ppm - ACGIH
STEL 300 ppm - ACGIH
TWA 200 ppm - NIOSH REL
590 mg/m^3 –NIOSH REL
ST 300 ppm - NIOSH REL
885 mg/m^3 –NIOSH REL
TWA 200 ppm - OSHA Z-1
590 mg/m^3- OSHA Z-1
TWA 200 ppm - OSHA P0
590 mg/m^3- OSHA P0
STEL 300 ppm - OSHA P0
885 mg/m^3 - OSHA P0

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Ingredients with biological limit values:
108-10-1 methyl ethyl ketone: 1/mg/l urine ACGIH BEL, Sample: end of shift.
Additional Information: Not available.
Exposure controls
Engineering measures: Good general ventilation (typically 10 air changes/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.
Personal protective equipment:
General protective and hygienic measures:
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing.
Wash hands before breaks and at the end of work.
Avoid contact with the eyes.
Avoid contact with the eyes and skin.
Protection of hands:
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.
Select the glove material based on penetration times, rates of diffusion and degradation.
Material of gloves
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.
Penetration time of glove material
The exact break-through time has to be determined and observed by the manufacturer of the protective gloves.
Eye protection: Wear safety glasses with side shields or tightly sealed goggles. Wear a respirator if needed.

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9. Physical and chemical properties
General information
Appearance:

Form:	Thick liquid
Color:	White colored
Odor:	Pleasant to pungent ketone
Odor threshold:	Not Determined
pH-value	7
Change in condition	
Melting point/Melting range:	-99 to -94°C (-106 to -97°F)
Boiling point/Boiling range:	55 -58℃ (131 to 136°F)
Flash point:	-13 to -1°C (9 - 30°F)
Flammability (solid, gaseous):	Not applicable.
Ignition temperature:	465°C (869°F)

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Decomposition temperature:	Not determined
Auto igniting:	Not determined
Danger of explosion:	No data available
Explosion Limits:	
Lower:	1.3 Vol %
Upper:	12 Vol %
Vapor Pressure @ 20 C°(68 F)°	241 hPa (181 mm Hg)
Density @ 20 C° (68 F)°	1.17 g/cm^3(9.76 lbs/gal
Relative density	Not determined
Vapor density	Not determined
Evaporation rate	Not determined
Solubility in/ Miscibility with water:	Not miscible or difficult to mix
Partition coefficient (n-octanol/water):	Not determined
Viscosity:	
Dynamic:	Not determined
Kinematic:	Not determined
Organic solvents:	42-46%
VOC content	140 g/l
Other information	No further relevant information available.

10. Stability and reactivity
Reactivity Stable under normal conditions.
Chemical stability
Thermal decomposition/conditions to be avoided: No decomposition under normal use conditions.
Possibility of hazardous reactions No dangerous reactions known expected.
Conditions to avoid Heat, sparks and flames. .
Incompatible materials: Acids, alkalies, nitrates, amines, ammonia, reducing agents and strong oxidizing agents.
Hazardous decomposition products: Carbon dioxide, carbon monoxide.

11. Toxicological information
Information on toxicological effects
Acute toxicity:
LD/LC50 values that are relevant for classification:
79-20-9 methyl acetate
Oral LD50 6482 mg/kg (rat) (highest dose tested)
Dermal LD50 >2000 mg/l (highest dose tested)
Inhalation LC50 >49 mg/l (rat) 4h
Skin corrosion/irritation slight (rabbit) 24 h
67-64-1 acetone
Oral LD50 5800 mg/kg (rat)
Dermal LD50 >7426 mg/kg
Inhalation LC50 32000 ppm (rat) 4h

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Skin irritation Mild skin irritation (rabbit) 24h
108-10-1 methyl isobutyl ketone
Oral LD50 2080 mg/kg (rat)
Dermal LD-50: >10 ml/kg (rabbit)
Inhalation LC50 2000-4000 ppm (rat) 4h
78-93-3 methyl ethyl ketone
Oral LD50 2737 mg/kg (rat)
Dermal LD50 6480 mg/kg (rabbit)
Inhalation LC50 320 mg/l 4h
Primary irritant effect:
On the skin: Mild irritant effect.
On the eye: May cause moderate eye irritation.
Sensitization: No sensitizing effects known.
Additional toxicological information:

Carcinogenic categories
ACGIH Carcinogens
Mixture substances are not listed or below amounts requiring listing.
IARC (International Agency for Research on Cancer)
Mixture substances are not listed or below amounts requiring listing.
NTP (National Toxicology Program)
Mixture substances are not listed or below amounts requiring listing.
US OSHA Specifically Regulated Substances: Potential cancer hazard
Mixture substances are not listed or below amounts requiring listing.

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12. Ecological information
Toxicity
Aquatic toxicity: No further relevant information available.
79-20-9 methyl acetate
LC50 (fathead minnow) 320-399 mg/l 96h
EC50 (daphnid) 1027 mg/l 48h
EC50 (Selenastrum capricornutum) >120 mg/l 72h
67-64-1 acetone
LC50 (Oncorhynchus mykiss (rainbow trout)) 5540 mg/l 96h static test
LC50 (Lepomis macrochirus (bluegill sunfish)) 8300 mg/l 96h static test
LC50 (Daphnia magna (water flea)) 12600-12700 mg/l 48h
EC50 (Chlorella pyrenoidosa) 3020 mg/l 14d
EC50 (Photobacterium phosphoreum) 14500 mg/l 15min
108-10-1 methyl isobutyl ketone
LC50 (goldfish) 460 mg/l 24h
LC50 (golden orfe) 675-750 mg/l 48h
LC50 (water flea) 4300 mg/l 24h
LC50 (brown shrimp) 1250 mg/l 24h
78*-93-3 methyl ethyl ketone

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LC50 (Pimephales promelas (fathead minnow)) >100 mg/ml 96h
EC50 (Daphhnia magna (Water flea)): >100 mg/l 48h Test type: immobilization
EC50 (Pseudokirchneriella subcapitata (green algae)): >100 mg/l 96h
Persistence and degradability
79-20-9 methyl acetate: 70% (28d)
67-64-1 acetone: Readily biodegradable. Biodegradation 78% OECD 301 D
78-93-3 methyl ethyl ketone: Readily biodegradable. Biodegradation 98%, 28 d, 2% solution. GLP: yes.
Bioaccumulative potential: No further relevant information available.
Mobility in soil: No further relevant information available.
Additional ecological information:
General notes:
Results of PBT and vPvB assessment
PBT: No data available.
vPvB: No data available.
Other adverse effects No further relevant information available.

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13. Disposal considerations
Waste treatment methods
Recommendation:
Contaminated product, soil, water, container residues and spill cleanup materials may be hazardous wastes. Comply with applicable federal, state, and local regulations. Since emptied containers retain product residue, follow label warnings even after container is emptied. Residual vapors may explode on ignition; do not cut, drill, grind, or weld on or near this container.

Uncleaned packages:
Recommendation: Disposal must be made according to official regulations.

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14. Transport information

UN-Number	
DOT, ADR, IMDG, IATA	UN1133
UN proper shipping name	
DOT	Adhesives, containing a flammable liquid.
ADR	Not determined
IMDG, IATA	Not determined

Transport hazard class(es)
DOT

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Class	3 Flammable liquids.
Label	3
ADR	Not determined
Class	Not determined
IMDG< IATA	Not determined
Class	Not determined
Label	Not determined
Packing group	
DOT, ADR, IMDG, IATA	II
Environmental hazards:	
Marine pollutant:	No
Special precautions for user	Warning: Flammable liquids
Danger code (Kemler)	33
EMS Number:	Not applicable.
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	Not applicable.

Transport/Additional information:
DOT
Remarks: ERG Guide Number: 128
UN "Model Regulation": UN1133, Adhesives, 3, II

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15. Regulatory information
Safety, health and environmental regulations/legislation specific for the substance or mixture
Sara
Section 355 (extremely hazardous substances):
Mixture substances are not listed.
Section 313 (Specific toxic chemical listings):

108-10-1 Methyl isobutyl ketone.	<6%
108-05-4 Vinyl acetate	<0.1%

TSCA (Toxic Substance Control Act):
1330-20-7 xylenes, mixed isomers is listed.
Proposition 65
Chemicals known to cause cancer:
75-07-0 Acetaldehyde
75-01-4 Vinyl chloride
Chemicals known to cause reproductive toxicity for females:
Mixture substances are not listed or below amounts requiring listing.
Chemicals known to cause reproductive harm to males:
Mixture substances are not listed.
Chemicals known to cause developmental toxicity:
Mixture substances are not listed or below amounts requiring listing.
TLV (Threshold Limit Value established by ACGIH)

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Not determined.
NIOSH-Ca (National Institute for Occupational Safety and Health)
Mixture substances are not listed.
OSHA-Ca (Occupational Safety & Health Administration)
Mixture substances are not listed.
GHS label elements
The mixture is classified and labeled according to the Globally Harmonized System (GHS)
Chemical safety assessment: A chemical Safety Assessment has not been carried out.

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16. Other Information

The information accumulated herein is believed to be accurate but is not warranted to be whether originating with the company or not. Recipients are advised to confirm in advance of the need that the information is current, applicable, and suitable to their circumstances.

Date of preparation/last revision 6/26/2015 -
Abbreviations and acronyms:
ADR: Accord European sur le transport des marchandises par Route (European Agreement concerning the international Carriage of Dangerous Goods
IMDG: International Maritime Code for Dangerous Goods
DOT: US Department of Transportation
IATA: International Air Transport Association
ACGIH: American Conference of Government Industrial Hygienists
EINECS: European Inventory of Existing Commercial Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
NFPA: National Fire Protection Association (USA)
HMIS: Hazardous Materials Identification System (USA)
VOC: Volatile Organic Compounds (USA, EU)
LC50: Lethal concentration, 50 percent
LD50: Lethal Dose, 50 percent

End of SDS