



Safety Data Sheet

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial preparation date: 06.07.2017

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Revision date: 10.13.2020

Flow Seal Vulcanizing Fluid

SECTION 1: Identification

Product identifier

Product name: Flow Seal Vulcanizing Fluid

Product code: 768, 768EL

Additional information: Rev 4

Recommended use of the product and restriction on use

Relevant identified uses: Rubber adhesive

Uses advised against: Not determined or not applicable.

Reasons why uses advised against: Not determined or not applicable.

Manufacturer or supplier details

Manufacturer:

North America

Tech International

200 East Coshocton Street

Johnstown, OH 43031

1-740-967-9015

www.tech-international.com

Emergency telephone number:

United States

CHEMTREC

Within USA and Canada: 1-800-424-9300

Outside USA and Canada: +1-703-527-3887

SECTION 2: Hazard(s) identification

GHS classification:

Flammable liquids, category 2

Skin irritation, category 2

Specific target organ toxicity - single exposure, category 3, central nervous system

Label elements

Hazard pictograms:



Signal word: Danger

Hazard statements:

H225 Highly flammable liquid and vapor.

H315 Causes skin irritation.

H336 May cause drowsiness or dizziness.

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Precautionary statements:

- 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.
- P370+P378 In case of fire: Use agents recommended in Section 5 to extinguish.
- P321 Specific treatment (see supplemental first aid instructions on this label).
- P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
- P362 Take off contaminated clothing and wash before reuse
- P332+P313 If skin irritation occurs: Get medical advice/attention
- P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
- P312 Call a POISON CENTER or doctor/physician if you feel unwell.
- P403+P235 Store in a well ventilated place. Keep cool.
- P405 Store locked up.
- P403+P233 Store in a well ventilated place. Keep container tightly closed.
- P501 Dispose of contents/container in accordance with Section 13.

Hazards not otherwise classified: None

SECTION 3: Composition/information on ingredients

Identification	Name	Weight %
CAS number: 64742-49-0	Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	>80
CAS number: 9003-31-0	Natural Rubber	<10
CAS number: 142-82-5	Heptane	<5

Additional Information:

The specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret in accordance with paragraph (i) of the OSHA Hazard Communication Standard (29 CFR §1910.1200).

SECTION 4: First aid measures

Description of first aid measures

General notes:

Show this Safety Data Sheet to the doctor in attendance

After inhalation:

If inhaled, remove person to fresh air and place in a position comfortable for breathing. Keep person at rest. If breathing is difficult, administer oxygen. If breathing has stopped, provide artificial respiration. If experiencing respiratory symptoms, seek medical advice/attention

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After skin contact:

Remove contaminated clothing and shoes. Rinse skin with copious amounts of water [shower] for several minutes. Launder contaminated clothing before reuse. If symptoms develop or persist, seek medical advice/attention

After eye contact:

Rinse eyes with plenty of gently flowing lukewarm water for 15 minutes. Remove contact lenses if present and easy to do so. Protect unexposed eye. If symptoms develop or persist, seek medical advice/attention

After swallowing:

If swallowed, DO NOT induce vomiting unless told to do so by a physician or poison control center. Rinse mouth with water. Never give anything by mouth to an unconscious person. If spontaneous vomiting occurs, place on the left side with head down to prevent aspiration of liquid into the lungs. If symptoms develop or persist, seek medical advice/attention

Most important symptoms and effects, both acute and delayed

Acute symptoms and effects:

Product is highly flammable. Exposure to sources of ignition may cause physical injury
Skin contact may result in redness, pain, burning and inflammation
Inhalation may have adverse effects on the central nervous system. Symptoms may include drowsiness, dizziness, headache, nausea and lowering of consciousness. Acute overexposure via inhalation may result in respiratory distress, confusion and unconsciousness

Delayed symptoms and effects:

Effects are dependent on exposure (dose, concentration, contact time)

Immediate medical attention and special treatment

Specific treatment:

Skin/eye burns require immediate treatment
Overexposure via inhalation requires urgent medical treatment

Notes for the doctor:

Treat symptomatically

SECTION 5: Firefighting measures

Extinguishing media

Suitable extinguishing media:

Use Water (fog only), dry chemical, chemical foam, carbon dioxide, or alcohol-resistant foam

Unsuitable extinguishing media:

Do not use water jet

Specific hazards during fire-fighting:

Highly flammable liquid. Will be easily ignitable by heat, sparks or flames. Vapors may form explosive mixtures with air. Vapors may travel to source of ignition and flash back. Most vapors are heavier than air. They will spread along ground and collect in low or confined areas (sewers, basements, tanks). Vapor explosion hazard indoors, outdoors or in sewers. Runoff to sewer may create fire or explosion hazard. Containers may explode when heated. Inhalation or contact with material may irritate or burn skin and eyes. Fire may produce irritating, corrosive and/or toxic gases. Vapors may cause dizziness or suffocation

Special protective equipment for firefighters:

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full-face piece operated in positive pressure mode

Special precautions:

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Evacuate non-essential personnel. Ventilate closed spaces before entering. Consider initial evacuation for 300 meters in all directions. If tank/rail car is involved in the fire, ISOLATE for 800 meters in all directions. Fight fire from a maximum distance. Move containers from fire area if you can do it without risk. Use water spray/fog for cooling fire exposed containers. Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank. Always stay away from tanks engulfed in fire. For massive fire, use unmanned hose holders or monitor nozzles. If this is impossible, withdraw from area and let fire burn. Stand by, at a safe distance, with extinguisher ready for possible re-ignition. A vapor-suppressing foam may be used to reduce vapors. Avoid unnecessary run-off of extinguishing media which may cause pollution. Do not handle damaged containers unless specialized to do so

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures:

Evacuate unnecessary personnel. Ventilate area. Extinguish any sources of ignition. All equipment used when handling the product must be grounded. Wear recommended personal protective equipment (see Section 8). Avoid contact with skin, eyes and clothing. Avoid breathing mist, vapor, dust, fume and spray. Do not walk through spilled material. Wash thoroughly after handling

Environmental precautions:

Prevent further leakage or spillage if safe to do so. Prevent from reaching drains, sewers and waterways. Discharge into the environment must be avoided

Methods and material for containment and cleaning up:

Do not touch damaged containers or spilled material unless wearing appropriate personal protective clothing. Stop leak if you can do it without risk. A vapor-suppressing foam may be used to reduce vapors. Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers for future disposal. Dispose of in accordance with all applicable regulations (see Section 13)

Reference to other sections:

For personal protective equipment see Section 8. For disposal see Section 13

SECTION 7: Handling and storage

Precautions for safe handling:

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use explosion-proof electrical, ventilating and lighting equipment. Take action to prevent static discharges. Handle containers with caution. Use appropriate personal protective equipment (see Section 8). Use only with adequate ventilation. Avoid breathing mist/vapor/spray/dust. Do not eat, drink, smoke, or use personal products when handling chemical substances. Avoid contact with skin, eyes and clothing. Wash affected areas thoroughly after handling. Keep away from incompatible materials (See Section 10). Keep containers tightly closed when not in use.

Conditions for safe storage, including any incompatibilities:

Store in cool, dry, well-ventilated location out of direct sunlight. Keep away from food and beverages. Protect from freezing and physical damage. Store away from heat, open flames and other sources of ignition. Keep container tightly sealed. Store away from incompatible materials (See Section 10).

SECTION 8: Exposure controls/personal protection

Only those substances with limit values have been included below.

Occupational Exposure limit values:

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Country (Legal Basis)	Substance	Identifier	Permissible concentration
ACGIH	Natural Rubber	9003-31-0	ACGIH TLV TWA: 0.0001 mg/m ³ , inhalable fraction
	Heptane	142-82-5	8-hour TWA: 400 ppm
	Heptane	142-82-5	15-minute STEL: 500 ppm
NIOSH	Heptane	142-82-5	10-hour REL: 350 mg/m ³ (85 ppm)
	Heptane	142-82-5	Ceiling limit: 1800 mg/m ³ (440 ppm) [15-minutes]
	Heptane	142-82-5	IDLH: 750 ppm
United States (California)	Heptane	142-82-5	8-hour TWA: 400 ppm
	Heptane	142-82-5	15-minute STEL: 500 ppm
United States (OSHA)	Heptane	142-82-5	8-hour PEL-TWA: 2000 mg/m ³ (500 ppm)

Biological limit values:

No biological exposure limits noted for the ingredient(s).

Information on monitoring procedures:

Monitoring of the concentration of substances in the breathing zone of workers or in the general workplace may be required to confirm compliance with an OEL and adequacy of exposure controls.

Biological monitoring may also be appropriate for some substances.

Appropriate engineering controls:

Emergency eye wash fountains and safety showers should be available in the immediate vicinity of use or handling.

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapor and mists below the applicable workplace exposure limits (Occupational Exposure Limits-OELs) indicated above. Use explosion-proof ventilation equipment.

Personal protection equipment

Eye and face protection:

Safety goggles or glasses, or appropriate eye protection.

Skin and body protection:

Select glove material impermeable and resistant to the substance.

Wear appropriate clothing to prevent any possibility of skin contact.

For continuous contact we recommend nitrile gloves with breakthrough time of more than 240 minutes with preference for > 480 minutes where suitable gloves can be identified.

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.

Use a positive pressure air supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air purifying respirators may not provide adequate protection.

Use a NIOSH/MSHA approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced. Comply with the OSHA respirator regulations found in 29 CFR 1910.134.

General hygienic measures:

Avoid contact with skin, eyes and clothing.

Wash hands before breaks and at the end of work.

Wash contaminated clothing before reuse.

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SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Appearance	Tan viscous liquid
Odor	Strong Solvent
Odor threshold	Not determined or not available.
pH	Not determined or not available.
Melting point/freezing point	Not determined or not available.
Initial boiling point/range	190°F (88°C)
Flash point (closed cup)	15°F (-9°C)
Evaporation rate	>1 (n-BuAC=1)
Flammability (solid, gas)	Not determined or not available.
Upper flammability/explosive limit	6.7% (V)
Lower flammability/explosive limit	1.2% (V)
Vapor pressure	119 mmHg at 20°C (68°F)
Vapor density	> 1.0 (Air = 1.0)
Density	Not determined or not available.
Relative density	0.7 g/cm ³ (6.20 lbs./gal) at 20°C (68°F)
Solubilities	Not determined or not available.
Partition coefficient (n-octanol/water)	Not determined or not available.
Auto/Self-ignition temperature	Not determined or not available.
Decomposition temperature	Not determined or not available.
Dynamic viscosity	Not determined or not available.
Kinematic viscosity	400 mm ² /sec @ 40°C
Explosive properties	Not determined or not available.
Oxidizing properties	Not determined or not available.

Other information

SECTION 10: Stability and reactivity

Reactivity:

Does not react under normal conditions of use and storage.

Chemical stability:

Stable under normal conditions of use and storage.

Possibility of hazardous reactions:

None under normal conditions of use and storage.

Conditions to avoid:

Excess heat, ignition sources.

Incompatible materials:

None known.

Hazardous decomposition products:

None known.

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SECTION 11: Toxicological information

Acute toxicity

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data:

Name	Route	Result
Heptane	inhalation	LC50 Rat: > 29.29 mg/L (4 hr)
	oral	LD50 Rat: > 5000 mg/kg
	dermal	LD50 Rabbit: > 2000 mg/kg
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	oral	LD50 Rat: > 5000 mg/kg
	dermal	LD50 Rabbit: > 2000 mg/kg
	inhalation	LC50 Rat: > 4.42 mg/L (4 hr, vapor)

Skin corrosion/irritation

Assessment:

Causes skin irritation

Product data:

No data available.

Substance data:

Name	Result
Heptane	Causes skin irritation.
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	Causes skin irritation.

Serious eye damage/irritation

Assessment: Based on available data, the classification criteria are not met.

Product data:

No data available.

Substance data: No data available.

Respiratory or skin sensitization

Assessment: Based on available data, the classification criteria are not met.

Product data:

No data available.

Substance data: No data available.

Carcinogenicity

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data:

Name	Species	Result
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	Not applicable	The carcinogenic classification applies to naphtha streams containing >0.1% Benzene.

International Agency for Research on Cancer (IARC): None of the ingredients are listed.

National Toxicology Program (NTP): None of the ingredients are listed.

Germ cell mutagenicity

Assessment: Based on available data, the classification criteria are not met.

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Product data:

No data available.

Substance data:

Name	Result
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	The mutagenic classification applies to naphtha streams containing >0.1% Benzene.

Reproductive toxicity

Assessment: Based on available data, the classification criteria are not met.

Product data:

No data available.

Substance data:

Name	Result
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	The classification as a reproductive toxicant only applies when the naphtha stream contains >3% toluene and/or n-hexane.

Specific target organ toxicity (single exposure)

Assessment:

May cause drowsiness or dizziness

Product data:

No data available.

Substance data:

Name	Result
Heptane	May cause drowsiness or dizziness.
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	May cause drowsiness or dizziness.

Specific target organ toxicity (repeated exposure)

Assessment: Based on available data, the classification criteria are not met.

Product data:

No data available.

Substance data: No data available.

Aspiration toxicity

Assessment: Based on available data, the classification criteria are not met.

Product data:

No data available.

Substance data:

Name	Result
Heptane	May be fatal if swallowed and enters airways.
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	May be fatal if swallowed and enters airways.

Information on likely routes of exposure:

No data available.

Symptoms related to the physical, chemical and toxicological characteristics:

Refer to Section 4 of this SDS.

Other information:

No data available.

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SECTION 12: Ecological information

Acute (short-term) toxicity

Assessment:

Toxic to aquatic life

Product data: No data available.

Substance data:

Name	Result
Heptane	EC50 Daphnia magna: 1.5 mg/L (48 hr)
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	ErC50 Selenastrum capricornutum: 3.1 mg/L (72 hr) EC50 Daphnia magna: 4.5 mg/L (48 hr)

Chronic (long-term) toxicity

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data:

Name	Result
Heptane	NOEC Oncorhynchus mykiss: 1.28 mg/L (28 days)
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	EC50 Daphnia magna: 10 mg/L (10 days)

Persistence and degradability

Product data: No data available.

Substance data:

Name	Result
Heptane	Readily biodegradable in water.
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	Standard tests for this endpoint are intended for single substances and are not appropriate for this complex substance (UVCB).

Bioaccumulative potential

Product data: No data available.

Substance data:

Name	Result
Heptane	Calculated BCF: 552 (Not expected to bioaccumulate).
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	Standard tests for this endpoint are intended for single substances and are not appropriate for this complex substance (UVCB).

Mobility in soil

Product data: No data available.

Substance data:

Name	Result
Heptane	Moderately Mobile (log Koc: 2.38)

Other adverse effects: No data available.

SECTION 13: Disposal considerations

Disposal methods:

Dispose in accordance with all applicable regulations. It is the responsibility of the waste generator to properly characterize all waste materials according to applicable regulatory entities

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SECTION 14: Transport information



United States Transportation of dangerous goods (49 CFR DOT)

UN number	UN1133
UN proper shipping name	Adhesives
UN transport hazard class(es)	3  
Packing group	II
Environmental hazards	Marine Pollutant (Heptane and Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics)
Special precautions for user	None

International Maritime Dangerous Goods (IMDG)

UN number	UN1133
UN proper shipping name	Adhesives
UN transport hazard class(es)	3  
Packing group	II
Environmental hazards	Marine Pollutant (Heptane and Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics)
Special precautions for user	None

International Air Transport Association Dangerous Goods Regulations (IATA-DGR)

UN number	UN1133
UN proper shipping name	Adhesives
UN transport hazard class(es)	3  
Packing group	II
Environmental hazards	Marine Pollutant (Heptane and Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics)
Special precautions for user	None

SECTION 15: Regulatory information

United States regulations

Inventory listing (TSCA): All ingredients are listed or exempt.

Significant New Use Rule (TSCA Section 5): None of the ingredients are listed.

Export notification under TSCA Section 12(b): None of the ingredients are listed.

SARA Section 302 extremely hazardous substances: None of the ingredients are listed.

SARA Section 313 toxic chemicals: None of the ingredients are listed.

CERCLA: None of the ingredients are listed.

RCRA: None of the ingredients are listed.

Section 112(r) of the Clean Air Act (CAA): None of the ingredients are listed.

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Massachusetts Right to Know:

9003-31-0	Natural Rubber	Not Listed
142-82-5	Heptane	Listed
64742-49-0	Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	Listed

New Jersey Right to Know:

9003-31-0	Natural Rubber	Not Listed
142-82-5	Heptane	Listed
64742-49-0	Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	Listed

New York Right to Know:

9003-31-0	Natural Rubber	Not Listed
142-82-5	Heptane	Listed
64742-49-0	Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	Not Listed

Pennsylvania Right to Know:

9003-31-0	Natural Rubber	Not Listed
142-82-5	Heptane	Listed
64742-49-0	Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	Listed

California Proposition 65: None of the ingredients are listed.

SECTION 16: Other information

Abbreviations and Acronyms: None

Disclaimer:

This product has been classified in accordance with OSHA HCS 2012 guidelines. The information provided in this SDS is correct, to the best of our knowledge, based on information available. The information given is designed only as a guidance for safe handling, use, storage, transportation and disposal and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials, unless specified in the text. The responsibility to provide a safe workplace remains with the user.

NFPA: 2-3-0

HMIS: 2-3-0

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End of Safety Data Sheet