

## Safety Data Sheet

According to Regulation (EC) No. 1272/2008 (CLP) and (EC) No. 1907/2006 (REACH)

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### Flow Seal Vulcanizing Fluid

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

##### 1.1 Product identifier

**Product Name:** Flow Seal Vulcanizing Fluid

**Product code:** 770

**Additional information:** Rev. 10

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

**Relevant identified uses:** Tire & Tube repair

**Uses advised against:** Not determined or not applicable.

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

##### 1.3 Details of the manufacturer/supplier of the safety data sheet

**Manufacturer:**

**North America**

Tech International

200 East Coshocton Street

Johnstown, OH 43031

1-740-967-9015

www.tech-international.com

**Supplier:**

**European Union**

Tech International Europe

Koeybleuken 16

2300 Turnhout, Belgium

00 32 1442 3103

info@techeurope.co.uk

##### 1.4 Emergency telephone number:

**Belgium**

CHEMTREC

Brussels +(32) - 28083237

#### SECTION 2: Hazard(s) identification

##### 2.1 Classification of the substance or mixture:

**Classification according to Regulation (EC) No. 1272/2008 (CLP):**

Flammable liquids, category 2

Skin irritation, category 2

Skin sensitization, category 1

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

Chronic aquatic hazard, category 2

**Hazard-determining components of labeling:**

N-Ethylcyclohexylamine

Zinc bis(dibutyldithiocarbamate)

Heptane, branched, cyclic and linear

Heptane

##### 2.2 Label elements

**Hazard pictograms:**



**Signal word:** Danger

**Hazard statements:**

H225 Highly flammable liquid and vapor.

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H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H336 May cause drowsiness or dizziness.

H411 Toxic to aquatic life with long lasting effects.

### Precautionary statements:

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P233 Keep container tightly closed.

P240 Ground and bond container and receiving equipment.

P241 Use explosion-proof [electrical/ventilating/lighting] equipment.

P242 Use non-sparking tools.

P243 Take action to prevent static discharges.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P264 Wash skin thoroughly after handling.

P261 Avoid breathing dust/fume/gas/mist/vapors/spray.

P272 Contaminated work clothing should not be allowed out of the workplace.

P271 Use only outdoors or in a well-ventilated area.

P273 Avoid release to the environment.

P302+P352 IF ON SKIN: Wash with plenty of water/soap.

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P333+P313 If skin irritation or a rash occurs: Get medical advice/attention

P321 Specific treatment (see supplemental first aid instructions on this label).

P370+P378 In case of fire: Use agents recommended in Section 5 to extinguish.

P312 Call a POISON CENTER/doctor/physician if you feel unwell.

P362+P364 Take off contaminated clothing and wash it before reuse.

P391 Collect spillage

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 local/regional/national/international regulations.

**2.3 Other hazards:** None known

## SECTION 3: Composition/information on ingredients

**3.1 Substance:** Not applicable.

**3.2 Mixture:**

Identification	Name	Classification according to Regulation (EC) No. 1272/2008 (CLP)	Weight %
CAS number: 426260-76-6	Heptane, branched, cyclic and linear	Asp. Tox. 1; H304 Aquatic Chronic 2; H411 Flam. Liq. 2; H225 Stot SE 3; H336 Skin Irrit. 2 ; H315	85-95
CAS number: 9003-31-0	Natural Rubber	Not classified	2-8

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CAS number: 136-23-2 EC number: 205-232-8	Zinc bis(dibutyldithiocarbamate)	Skin Sens. 1; H317 Skin Irrit. 2 ; H315 Stot SE 3; H335 Aquatic Acute 1; H400 Aquatic Chronic 1; H410 Eye Irrit. 2; H319	1-5
CAS number: 142-82-5 EC number: 205-563-8	Heptane	Asp. Tox. 1; H304 Skin Irrit. 2 ; H315 Stot SE 3; H336 Flam. Liq. 2; H225 Aquatic Acute 1; H400 Aquatic Chronic 1; H410	<4
CAS number: 5459-93-8 EC number: 226-733-8	N-Ethylcyclohexylamine	Acute Tox. 4; H302 Acute Tox. 3; H311 Acute Tox. 4; H332 Skin Corr. 1A; H314 Flam. Liq. 3; H226	<1

**Additional information:** None

**Full Text of H and EUH statements:** See section 16

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

**General notes:**

Not determined or not available.

**Following inhalation:**

Loosen clothing as necessary and position individual in a comfortable position

Maintain an unobstructed airway

Get medical advice/attention if you feel unwell

**Following skin contact:**

Rinse affected area with soap and water

If symptoms develop or persist, seek medical attention

Take off all contaminated clothing

Gently blot or brush away excess product

Wash with plenty of lukewarm, gently flowing water

Get medical advice if skin irritation occurs or you feel unwell

**Following eye contact:**

Rinse/flush exposed eye(s) gently using water for 15-20 minutes

If symptoms develop or persist, seek medical attention

**Following ingestion:**

Rinse mouth thoroughly

Seek medical attention if irritation, discomfort, or vomiting persists

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

**Acute symptoms and effects:**

Not determined or not available.

**Delayed symptoms and effects:**

Not determined or not available.

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

**Specific treatment:**

Not determined or not available.

**Notes for the doctor:**

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Not determined or not available

### SECTION 5: Firefighting measures

#### 5.1 Extinguishing media

##### Suitable extinguishing media:

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

##### Unsuitable extinguishing media:

Not determined or not applicable.

#### 5.2 Special hazards arising from the substance or mixture:

Thermal decomposition can lead to release of irritating gases and vapors.

Vapors can flow to distant ignition sources and flashback.

Liquid is volatile and may generate an explosive atmosphere.

May form corrosive mixtures with water.

#### 5.3 Advice for firefighters

##### Personal protection equipment:

Use typical firefighting equipment, self-contained breathing apparatus, special tightly sealed suit.

##### Special precautions:

Shut off sources of ignition.

Carbon monoxide and carbon dioxide may form upon combustion.

Heating causes a rise in pressure, risk of bursting and combustion.

### SECTION 6: Accidental release measures

#### 6.1 Personal precautions, protective equipment and emergency procedures:

Ensure adequate ventilation.

Ensure air handling systems are operational.

Wear protective eye wear, gloves and clothing.

Beware of vapors accumulating to form explosive concentrations.

Vapors can accumulate in low areas.

#### 6.2 Environmental precautions:

Should not be released into the environment.

Prevent from reaching drains, sewer or waterway.

#### 6.3 Methods and material for containment and cleaning up:

Wear protective eye wear, gloves and clothing.

Use spark-proof tools and explosion-proof equipment.

Absorb with non-combustible liquid-binding material (sand, diatomaceous earth (clay), acid binders, universal binders).

Dispose of contents / container in accordance with local regulations.

#### 6.4 Reference to other sections:

Not determined or not applicable.

### SECTION 7: Handling and storage

#### 7.1 Precautions for safe handling:

Use only with adequate ventilation.

Avoid breathing mist or vapor.

Do not eat, drink, smoke or use personal products when handling chemical substances.

Take precautionary measures against electrostatic discharges.

Use only non-sparking tools.

#### 7.2 Conditions for safe storage, including any incompatibilities:

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Keep container tightly sealed.

Protect from freezing and physical damage.

Store in a cool, well-ventilated area.

Store away from all ignition sources (open flames, hot surfaces, direct sunlight, spark sources).

### 7.3 Specific end use(s):

Not determined or not applicable.

## SECTION 8: Exposure controls/personal protection



### 8.1 Control parameters

Only those substances with limit values have been included below.

#### Occupational Exposure limit values:

Country (Legal Basis)	Substance	Identifier	Permissible concentration
Czech Republic	Heptane, branched, cyclic and linear	426260-76-6	8-hour TWA: 1000 mg/m <sup>3</sup>
	Heptane, branched, cyclic and linear	426260-76-6	Ceiling limit: 2000 mg/m <sup>3</sup>
	Heptane	142-82-5	8-hour TWA: 1000 mg/m <sup>3</sup>
	Heptane	142-82-5	Ceiling limit (NPK-P): 2000 mg/m <sup>3</sup>
Slovakia	Zinc bis(dibutyldithiocarbamate)	136-23-2	8-hour TWA (NPEL): 2 mg/m <sup>3</sup> (inhalable fraction)
	Zinc bis(dibutyldithiocarbamate)	136-23-2	8-hour TWA (NPEL): 0.1 mg/m <sup>3</sup> (respirable fraction)
	Heptane	142-82-5	8-hour TWA (NPEL): 500 ppm (2085 mg/m <sup>3</sup> )
Romania	N-Ethylcyclohexylamine	5459-93-8	8-hour TWA: 15 mg/m <sup>3</sup> , 2.9 ppm
	N-Ethylcyclohexylamine	5459-93-8	15-minute STEL: 30 mg/m <sup>3</sup> , 5.8 ppm
	Heptane	142-82-5	8-hour TWA: 2085 mg/m <sup>3</sup> (500 ppm)
Bulgaria	Heptane	142-82-5	TWA: 1600 mg/m <sup>3</sup>
Croatia	Heptane	142-82-5	Maximum (8 hr) allowable concentration: 500 ppm (2085 mg/m <sup>3</sup> )
Estonia	Heptane	142-82-5	8-hour TWA: 500 ppm (2085 mg/m <sup>3</sup> )
Hungary	Heptane	142-82-5	8-hour TWA (ÁK Value): 2000 mg/m <sup>3</sup>
	Heptane	142-82-5	60-minute STEL (CK value): 8000 mg/m <sup>3</sup>
Latvia	Heptane	142-82-5	8-hour TWA: 350 mg/m <sup>3</sup> (85 ppm)
	Heptane	142-82-5	15-minute STEL: 2085 mg/m <sup>3</sup> (500 ppm)
Lithuania	Heptane	142-82-5	8-hour TWA: 2085 mg/m <sup>3</sup> (500 ppm)

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Country (Legal Basis)	Substance	Identifier	Permissible concentration
	Heptane	142-82-5	15-minute STEL: 3128 mg/m <sup>3</sup> (750 ppm)
Malta	Heptane	142-82-5	TWA: 500 ppm (2085 mg/m <sup>3</sup> )
Poland	Heptane	142-82-5	8-hour TWA (NDS): 1200 mg/m <sup>3</sup>
	Heptane	142-82-5	15-minute STEL (NDSch): 2000 mg/m <sup>3</sup>
Slovenia	Heptane	142-82-5	8-hour TWA: 2085 mg/m <sup>3</sup> (500 ppm)
European Union	Heptane	142-82-5	IOEL threshold limit: 2085 mg/m <sup>3</sup> (500 ppm)
	Heptane	142-82-5	SCOEL 8-hour TWA: 500 ppm (2085 mg/m <sup>3</sup> )
Belgium	Heptane	142-82-5	8-hour TWA: 400 ppm (1664 mg/m <sup>3</sup> )
	Heptane	142-82-5	15-minute STEL: 500 ppm (2085 mg/m <sup>3</sup> )
Denmark	Heptane	142-82-5	TWA: 200 ppm (820 mg/m <sup>3</sup> )
Finland	Heptane	142-82-5	8-hour limit: 300 ppm (1200 mg/m <sup>3</sup> )
	Heptane	142-82-5	15-minute limit: 500 ppm (2100 mg/m <sup>3</sup> )
France	Heptane	142-82-5	Time weighted average (VME): 400 ppm (1668 mg/m <sup>3</sup> )
	Heptane	142-82-5	Short term exposure limit: 500 ppm (2085 mg/m <sup>3</sup> )
Germany	Heptane	142-82-5	AGW limit value: 500 ppm (2100 mg/m <sup>3</sup> )
	Heptane	142-82-5	AGW Short term (15 min) exposure limit: 500 ppm (2100 mg/m <sup>3</sup> )
Greece	Heptane	142-82-5	8-hour TWA: 500 ppm (2000 mg/m <sup>3</sup> )
	Heptane	142-82-5	15-minute STEL: 500 ppm (2000 mg/m <sup>3</sup> )
Ireland	Heptane	142-82-5	8-hour OEL (TWA): 500 ppm (2085 mg/m <sup>3</sup> )
Italy	Heptane	142-82-5	8-hour TWA: 500 ppm (2085 mg/m <sup>3</sup> )
Netherlands	Heptane	142-82-5	Binding 8-hour TWA: 1200 mg/m <sup>3</sup>
	Heptane	142-82-5	Binding STEL (15 min): 1600 mg/m <sup>3</sup>
Portugal	Heptane	142-82-5	Decree-Law No. 24/2012 8-hour TWA: 500 ppm (2085 mg/m <sup>3</sup> )
	Heptane	142-82-5	NP 1796-2007 8-hour exposure limit: 400 ppm
	Heptane	142-82-5	NP 1796-2007 Short-term exposure limit: 500 ppm
Spain	Heptane	142-82-5	8-hour daily exposure limit (VLA-ED): 500 ppm (2085 mg/m <sup>3</sup> )

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Country (Legal Basis)	Substance	Identifier	Permissible concentration
Sweden	Heptane	142-82-5	Level Limit Value (NGV): 200 ppm (800 mg/m <sup>3</sup> )
	Heptane	142-82-5	Short Term Limit (KTV): 300 ppm (1200 mg/m <sup>3</sup> )
United Kingdom	Heptane	142-82-5	TWA: 500 ppm (2085 mg/m <sup>3</sup> )
Luxembourg	Heptane	142-82-5	TWA: 500 ppm (2085 mg/m <sup>3</sup> )
Austria	Heptane	142-82-5	TWA: 2000 mg/m <sup>3</sup> (500 ppm)
	Heptane	142-82-5	STEL: 8000 mg/m <sup>3</sup> (2000 ppm)

### Biological limit values:

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

### Derived No Effect Level (DNEL):

Not determined or not applicable.

### Predicted No Effect Concentration (PNEC):

Not determined or not applicable.

### 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.

## 8.2 Exposure controls

### 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.

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.

Glove thickness should be typically greater than 0.35 mm depending on the glove make and model.

Always seek advice from glove suppliers.

#### 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 European Standard EN149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced. Comply with the European Standard EN149.

### General hygienic measures:

Avoid contact with skin, eyes and clothing.

Wash hands before breaks and at the end of work.

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Wash contaminated clothing before reuse.

### Environmental exposure controls:

Select controls based on a risk assessment of local conditions.

See section 6 for information on accidental release measures.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

<b>Appearance</b>	Tan viscous liquid
<b>Odor</b>	Strong solvent
<b>Odor threshold</b>	Not determined or not available.
<b>pH</b>	Not determined or not available.
<b>Melting point/freezing point</b>	Not determined or not available.
<b>Initial boiling point/range</b>	190°F (88°C)
<b>Flash point (closed cup)</b>	15 °F (-9 °C)
<b>Evaporation rate</b>	> 1 (n-BuAC=1)
<b>Flammability (solid, gas)</b>	Not determined or not available.
<b>Upper flammability/explosive limit</b>	6.7
<b>Lower flammability/explosive limit</b>	1.2
<b>Vapor pressure</b>	119 mmHg @ 20°C
<b>Vapor density</b>	Not determined or not available.
<b>Density</b>	Not determined or not available.
<b>Relative density</b>	0.71 g/cm <sup>3</sup> (6.21 lbs./gal) @ 20°C
<b>Solubilities</b>	Soluble in most organic solvents.
<b>Partition coefficient (n-octanol/water)</b>	Not determined or not available.
<b>Auto/Self-ignition temperature</b>	Not determined or not available.
<b>Decomposition temperature</b>	Not determined or not available.
<b>Dynamic viscosity</b>	Not determined or not available.
<b>Kinematic viscosity</b>	400 mm <sup>2</sup> /sec @ 40°C
<b>Explosive properties</b>	Not determined or not available.
<b>Oxidizing properties</b>	Not determined or not available.

### 9.2 Other information

<b>VOC</b>	650 g/L
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## SECTION 10: Stability and reactivity

### 10.1 Reactivity:

Does not react under normal conditions of use and storage.

### 10.2 Chemical stability:

Stable under normal conditions of use and storage.

### 10.3 Possibility of hazardous reactions:

None under normal conditions of use and storage.

### 10.4 Conditions to avoid:

Excess heat, ignition source or flames.

### 10.5 Incompatible materials:

None known.



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### 10.6 Hazardous decomposition products:

None known.

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

#### Acute toxicity

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

**Product data:** No data available.

#### Substance data:

Name	Route	Result
N-Ethylcyclohexylamine	oral	LD50: Rat - 590 mg/kg
Heptane	inhalation	LC50 Rat: > 29.29 mg/L (4 hr)
	oral	LD50 Rat: > 5000 mg/kg

#### Skin corrosion/irritation

##### Assessment:

Causes skin irritation

##### Product data:

No data available.

##### Substance data:

Name	Result
N-Ethylcyclohexylamine	Corrosive to the skin.
Zinc bis(dibutyldithiocarbamate)	Irritating to the skin.
Heptane	Causes skin irritation.
Heptane, branched, cyclic and linear	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:

Name	Result
Zinc bis(dibutyldithiocarbamate)	Irritating effect on the eyes.

#### Respiratory or skin sensitization

##### Assessment:

May cause an allergic skin reaction

##### Product data:

No data available.

##### Substance data:

Name	Result
Zinc bis(dibutyldithiocarbamate)	Sensitization possible through skin contact.

#### Carcinogenicity

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

**Product data:** No data available.

**Substance data:** No data available.

### International Agency for Research on Cancer (IARC):

Name	Classification
Natural Rubber	Group 3 - Not classifiable as to its carcinogenicity to humans

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

### Germ cell mutagenicity

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

**Product data:** No data available.

**Substance data:** No data available.

### Reproductive Toxicity

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

**Product data:**

No data available.

**Substance data:** No data available.

### Specific target organ toxicity (single exposure)

**Assessment:**

May cause drowsiness or dizziness

**Product data:**

No data available.

**Substance data:**

Name	Result
Zinc bis(dibutyldithiocarbamate)	Component affects the respiratory system.
Heptane, branched, cyclic and linear	May cause drowsiness or dizziness.
Heptane	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, branched, cyclic and linear	May be fatal if swallowed and enters airways.
Heptane	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:

No data available.

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### Other information:

No data available.

## SECTION 12: Ecological information

### 12.1 Toxicity

#### Acute (short-term) toxicity

##### Assessment:

Toxic to aquatic life

**Product data:** No data available.

##### Substance data:

Name	Result
Zinc bis(dibutyldithiocarbamate)	EC50 - Daphnia magna - 0.74 mg/L - 48 hr
	NOEC - Daphnia magna - 0.0032 mg/L - 21 d
Heptane	LC50 - Carassius auratus (goldfish) - 4 mg/l - 24.0 h
	EC50 - Daphnia magna - 82.5 mg/L - 96 h

#### Chronic (long-term) toxicity

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

**Product data:** No data available.

**Substance data:** No data available.

### 12.2 Persistence and degradability

**Product data:** No data available.

##### Substance data:

Name	Result
Heptane	Readily biodegradable in water.

### 12.3 Bioaccumulative potential

**Product data:** No data available.

##### Substance data:

Name	Result
Heptane	Calculated BCF: 552 (Not expected to bioaccumulate).

### 12.4 Mobility in soil

**Product data:** No data available.

##### Substance data:

Name	Result
Heptane	Moderately Mobile (log Koc: 2.38)

### 12.5 Results of PBT and vPvB assessment

#### PBT assessment:

Heptane	This substance is not PBT.
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#### vPvB assessment:

Heptane	This substance is not vPvB.
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### 12.6 Other adverse effects: No data available.

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

#### Relevant information:

It is the responsibility of the waste generator to properly characterize all waste materials according to

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applicable regulatory entities

### SECTION 14: Transport information



#### International Carriage of Dangerous Goods by Road/Rail (ADR/RID)

UN number	UN1133
UN proper shipping name	Adhesives
UN transport hazard class(es)	3  
Packing group	II
Environmental hazards	Marine Pollutant (Heptane, Zinc Bis(dibutyldithiocarbamate))
Special precautions for user	None



#### International Carriage of Dangerous Goods by Inland Waterways (ADN)

UN number	UN1133
UN proper shipping name	Adhesives
UN transport hazard class(es)	3  
Packing group	II
Environmental hazards	Marine Pollutant (Heptane, Zinc Bis(dibutyldithiocarbamate))
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, Zinc Bis(dibutyldithiocarbamate))
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, Zinc Bis(dibutyldithiocarbamate))
Special precautions for user	None

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### 14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code

<b>Bulk Name</b>	None
<b>Ship type</b>	None
<b>Pollution category</b>	None

## SECTION 15: Regulatory information

### 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture.

#### European regulations

##### Inventory listing (EINECS):

426260-76-6	Heptane, branched, cyclic and linear	Not Listed
5459-93-8	N-Ethylcyclohexylamine	Listed
9003-31-0	Natural Rubber	Not Listed
142-82-5	Heptane	Listed
136-23-2	Zinc bis(dibutyldithiocarbamate)	Listed

**REACH SVHC candidate list:** None of the ingredients are listed.

**REACH SVHC Authorizations:** None of the ingredients are listed.

**REACH Restriction:** None of the ingredients are listed.

**Water hazard class (WGK) (Product):** Water hazard class 3: highly hazardous to water

**Water hazard class (WGK) (Substance):**

Ingredient Name	CAS	Class
Zinc bis(dibutyldithiocarbamate)	136-23-2	2
Heptane, branched, cyclic and linear	426260-76-6	Not applicable.
Heptane	142-82-5	2
N-Ethylcyclohexylamine	5459-93-8	Not applicable.
Natural Rubber	9003-31-0	Not applicable.

#### Other regulations

**Germany TA Luft:** Not applicable.

**Germany MAK:** Zinc bis(dibutyldithiocarbamate): 8-hour TWA: 0.1 mg/m<sup>3</sup> (respirable fraction), Zinc bis(dibutyldithiocarbamate): 8-hour TWA: 2 mg/m<sup>3</sup> (inhalable fraction), Heptane: 8-hour TWA: 500 ppm (2100 mg/m<sup>3</sup>)

### 15.2 Chemical Safety Assessment

No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

## SECTION 16: Other information

#### Indication of changes:

March 26, 2019: Composition change, consequently changing the occupational exposure limits and resulting in a classification change

**Abbreviations and Acronyms:** None

**Classification procedure:**

# Safety Data Sheet

According to Regulation (EC) No. 1272/2008 (CLP) and (EC) No. 1907/2006 (REACH)

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## Flow Seal Vulcanizing Fluid

Classification according to Regulation (EC) No. 1272/2008 (CLP)	Method Used
Flammable liquids, category 2	Calculation method
Skin irritation, category 2	Calculation method
Skin sensitization, category 1	Calculation method
Specific target organ toxicity - single exposure, category 3, central nervous system	Calculation method
Chronic aquatic hazard, category 2	Calculation method

### Summary of classification in section 3:

Asp. Tox. 1; H304	Aspiration hazard, category 1
Aquatic Chronic 2; H411	Chronic aquatic hazard, category 2
Flam. Liq. 2; H225	Flammable liquids, category 2
Stot SE 3; H336	Specific target organ toxicity - single exposure, category 3, central nervous system
Skin Irrit. 2 ; H315	Skin irritation, category 2
Skin Sens. 1; H317	Skin sensitization, category 1
Stot SE 3; H335	Specific target organ toxicity - single exposure, category 3, respiratory irritation
Aquatic Acute 1; H400	Acute aquatic hazard, category 1
Aquatic Chronic 1; H410	Chronic aquatic hazard, category 1
Eye Irrit. 2; H319	Eye irritation, category 2A
Acute Tox. 4; H302	Acute toxicity (oral), category 4
Acute Tox. 3; H311	Acute toxicity (dermal), category 3
Acute Tox. 4; H332	Acute toxicity (inhalation), category 4
Skin Corr. 1A; H314	Skin corrosion, category 1A
Flam. Liq. 3; H226	Flammable liquids, category 3

### Summary of hazard statements in section 3:

H304	May be fatal if swallowed and enters airways
H411	Toxic to aquatic life with long lasting effects
H225	Highly flammable liquid and vapour
H336	May cause drowsiness or dizziness
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H335	May cause respiratory irritation
H400	Very toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects
H319	Causes serious eye irritation
H302	Harmful if swallowed
H311	Toxic in contact with skin
H332	Harmful if inhaled
H314	Causes severe skin burns and eye damage
H226	Flammable liquid and vapour

### Disclaimer:

This product has been classified in accordance with EC No. 1272/2008 (CLP) and EC No. 1907/2006 (REACH). 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.

## Safety Data Sheet

According to Regulation (EC) No. 1272/2008 (CLP) and (EC) No. 1907/2006 (REACH)

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**End of Safety Data Sheet**