

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

Initial preparation date: 06.28.2016

Revision date: 02.05.2018

B Compound

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

1.1 Product identifier
 Product Name: B Compound
 Product code: 858B, 859B
 Additional information: Rev 1.0

1.2 Relevant identified uses of the substance or mixture and uses advised against Relevant identified uses: Rubber Filler

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:	Supplier:
North America	United Kingdom
Tech International	Tech International Europe
200 East Coshocton Street	15 Ballinderry Road
Johnstown, OH 43031	Lisburn, BT28 2SA, UK
1-740-967-9015	0044 2892 665721
	info@techeurope.co.uk

1.4 Emergency telephone number:

European Union

CHEMTREC

UK (London) +(44)-870-8200418 Poland (Warsaw) +(48)-223988029 Sweden (Stockholm) +(46)-852503403

SECTION 2: Hazard(s) identification

2.1 Classification of the substance or mixture:

Classification according to Regulation (EC) No1278/2008 (CLP):

Flammable liquids, category 2 Skin irritation, category 2 Skin sensitization, category 1 Aspiration hazard, category 1 Specific target organ toxicity - single exposure, category 3, central nervous system Specific target organ toxicity - repeated exposure, category 2 Reproductive toxicity, category 2 Chronic aquatic hazard, category 3 Hazard-determining components of labeling: 2,2' Dibenzamido diphenyl disulphide Toluene Zinc oxide Phenol, 4-Methyl-, Reaction Products With Dicyclopentadiene And Isobutylene Hydrotreated Light Naphthenic Distillates Sulfur Hydrotreated Heavy Paraffinic Distillates

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Distillates, Petroleum, Solvent-Dewaxed Heavy Paraffinic Insoluble sulfur Distillates (petroleum), hydrotreated heavy naphthenic Hydrotreated Heavy Naphthenic Distillates

2.2 Label elements

Hazard pictograms:



Signal word: Danger

Hazard statements:

H225 Highly flammable liquid and vapor.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H304 May be fatal if swallowed and enters airways.

H336 May cause drowsiness or dizziness.

H373 May cause damage to organs through prolonged or repeated exposure.

H361 Suspected of damaging fertility or the unborn child.

H412 Harmful to aquatic life with long lasting effects.

Precautionary statements:

P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.

P202 Do not handle until all safety precautions have been read and understood.

P264 Wash skin thoroughly after handling.

P260 Do not breathe dust/fume/gas/mist/vapors/spray.

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

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

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.

P273 Avoid release to the environment.

P243 Take precautionary measures against static discharge.

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

P201 Obtain special instructions before use.

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

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

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

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

P331 Do NOT induce vomiting.

P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor/physician.

P308+P313 IF exposed or concerned: Get medical advice/attention.

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

P304+P340+P312 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor/physician if you feel unwell.

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

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.

P501 Dispose of contents/container as instructed in Section 13.

2.3 Other hazards: None known

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SECTION 3: Composition/information on ingredients

3.1 Substance: Not applicable.

3.2 Mixture:

Identification	Name	Classification according to Regulation (EC) No1278/2008 (CLP)	Weight %
CAS number: 9003-31-0 EC number: 618-362-9	Natural Rubber	Not classified	33-43
CAS number: 1333-86-4 EC number: 215-609-9	Carbon Black	Not classified	15-20
CAS number: 68610-51-5 EC number: 271-867-2	Phenol, 4-Methyl-, Reaction Products With Dicyclopentadiene And Isobutylene	Repr. 2; H361 Aquatic Chronic 4; H413	0.2-0.6
CAS number: 8042-47-5 EC number: 232-455-8	Mineral Oil	Not classified	0.5-1
CAS number: 108-88-3 EC number: 203-625-9	Toluene	Asp. Tox. 1; H304 Skin Irrit. 2 ; H315 Stot SE 3; H336 Stot RE 2; H373 Repr. 2; H361 Flam. Liq. 2; H225	30-40
CAS number: 7704-34-9 EC number: 231-722-6	Sulfur	Skin Irrit. 2 ; H315	0.1-0.5
CAS number: 135-57-9 EC number: 205-201-9	2,2' Dibenzamido diphenyl disulphide	Skin Sens. 1; H317 Aquatic Chronic 4; H413	<0.25
CAS number: 57-11-4 EC number: 200-313-4	Stearic acid	Not classified	0.25-0.5
CAS number: 64742-65-0 EC number: 265-169-7	Distillates, Petroleum, Solvent- Dewaxed Heavy Paraffinic	Not classified	0.1-0.2
CAS number: 9035-99-8	Insoluble sulfur	Eye Irrit. 2; H319	1.5-2

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CAS number: 64742-52-5 EC number: 265-155-0	Hydrotreated Heavy Naphthenic Distillates	Not classified	0.1-0.2
CAS number: 64742-54-7 EC number: 265-157-1	Hydrotreated Heavy Paraffinic Distillates	Not classified	0.1-0.2
CAS number: 1314-13-2 EC number: 215-222-5	Zinc oxide	Aquatic Acute 1; H400 Aquatic Chronic 1; H410	1.75-2.25
CAS number: 64742-53-6 EC number: 265-156-6	Hydrotreated Light Naphthenic Distillates	Not classified	0.1-0.2

Additional information:

Carbon black is classified as a carcinogen only in its respirable form. Since the carbon black in this product is not respirable, the product itself is not classified as a carcinogen in the form presented.

According to Note L of the European Directive 67/548/CEE, the "distillates (petroleum)" substances should not be classified as "carcinogenic" ingredients, because it has been shown that the substances contain less than 3% DMSO extract as measured by IP 346.

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:

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:

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Not determined or not available.

Notes for the doctor:

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:

Do not use a water stream as an extinguisher.

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.

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.

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7.2 Conditions for safe storage, including any incompatibilities:

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
Bulgaria	Hydrotreated Heavy Naphthenic Distillates	64742-52-5	TWA: 5.0 mg/m ³
	Zinc oxide	1314-13-2	TWA: 5.0 mg/m ³
	Zinc oxide	1314-13-2	15-minute STEL: 10.0 mg/m ³
	Hydrotreated Light Naphthenic Distillates	64742-53-6	TWA: 5.0 mg/m ³
	Toluene	108-88-3	TWA: 192.0 mg/m ³ (50 ppm)
	Toluene	108-88-3	15-minute STEL: 384.0 mg/m ³ (100 ppm)
	Mineral Oil	8042-47-5	TWA: 5.0 mg/m ³ (petroleum)
	Distillates, Petroleum, Solvent-Dewaxed Heavy Paraffinic	64742-65-0	TWA: 5.0 mg/m ³ (Oil - mineral, petroleum)
	Distillates (petroleum), hydrotreated heavy naphthenic	64742-52-5	TWA: 5.0 mg/m ³
	Hydrotreated Heavy Paraffinic Distillates	64742-54-7	TWA: 5.0 mg/m ³ (Oil - Mineral, petroleum)
	Mineral Oil	8042-47-5	TWA: 5.0 mg/m ³ (petroleum)
Czech Republic	Hydrotreated Heavy Naphthenic Distillates	64742-52-5	8-hour TWA: 5 mg/m³ (Mineral oils, aerosol)
	Hydrotreated Heavy Naphthenic Distillates	64742-52-5	8-hour TWA: 200 mg/m³ (Solvent naphtha)
	Hydrotreated Heavy Naphthenic Distillates	64742-52-5	Ceiling limit (NPK-P): 10 mg/m ³ (Mineral oils, aerosol)
	Hydrotreated Heavy Naphthenic Distillates	64742-52-5	Ceiling limit (NPK-P): 1000 mg/m ³ (Solvent naphtha)
	Zinc oxide	1314-13-2	8-hour TWA: 2 mg/m ³ (as Zn)
	Zinc oxide	1314-13-2	Ceiling limit (NPK-P): 5 mg/m ³ (Fumes)
	Hydrotreated Light Naphthenic Distillates	64742-53-6	8-hour TWA: 5 mg/m³ (Mineral oils, aerosol)
	Hydrotreated Light Naphthenic Distillates	64742-53-6	Ceiling limit (NPK-P): 10 mg/m ³ (Mineral oils, aerosol)

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Country (Legal Basis)	Substance	Identifier	Permissible concentration
	Hydrotreated Light Naphthenic Distillates	64742-53-6	8-hour TWA: 200 mg/m³ (Solvent naphtha)
	Hydrotreated Light Naphthenic Distillates	64742-53-6	Ceiling limit (NPK-P): 1000 mg/m ³ (Solvent naphtha)
	Toluene	108-88-3	8-hour TWA: 200 mg/m ³
	Toluene	108-88-3	Ceiling limit (NPK-P): 500 mg/m ³
	Carbon Black	1333-86-4	Government Decree 361/2007 Sb.: TWA 2.0 mg/m ³ (8 hr)
	Mineral Oil	8042-47-5	8-hour TWA: 5 mg/m ³ (aerosol)
	Mineral Oil	8042-47-5	Ceiling limit (NPK-P): 10 mg/m ³ (aerosol)
	Distillates, Petroleum, Solvent-Dewaxed Heavy Paraffinic	64742-65-0	8-hour TWA: 5 mg/m³ (Mineral oils, aerosol)
	Distillates, Petroleum, Solvent-Dewaxed Heavy Paraffinic	64742-65-0	Ceiling limit (NPK-P): 10 mg/m ³ (Mineral oils, aerosol)
	Distillates, Petroleum, Solvent-Dewaxed Heavy Paraffinic	64742-65-0	8-hour TWA: 200 mg/m³ (Solvent naphtha)
	Distillates, Petroleum, Solvent-Dewaxed Heavy Paraffinic	64742-65-0	The ceiling limit (NPK-P): 1000 mg/m ³ (Solvent naphtha)
	Distillates (petroleum), hydrotreated heavy naphthenic	64742-52-5	8-hour TWA: 5 mg/m³ (Mineral oils, aerosol)
	Distillates (petroleum), hydrotreated heavy naphthenic	64742-52-5	8-hour TWA: 200 mg/m³ (Solvent naphtha)
	Distillates (petroleum), hydrotreated heavy naphthenic	64742-52-5	Ceiling limit (NPK-P): 10 mg/m ³ (Mineral oils, aerosol)
	Distillates (petroleum), hydrotreated heavy naphthenic	64742-52-5	Ceiling limit (NPK-P): 1000 mg/m ³ (Solvent naphtha)
	Hydrotreated Heavy Paraffinic Distillates	64742-54-7	The ceiling limit (NPK-P): 10 mg/m ³ (Mineral oils, aerosol)
	Hydrotreated Heavy Paraffinic Distillates	64742-54-7	8-hour TWA: 5 mg/m ³ (Mineral oils, aerosol)
	Mineral Oil	8042-47-5	8-hour TWA: 5 mg/m ³ (aerosol)
	Mineral Oil	8042-47-5	Ceiling limit (NPK-P): 10 mg/m ³ (aerosol)
Hungary	Hydrotreated Heavy Naphthenic Distillates	64742-52-5	Ceiling Limit (MK Value): 5 mg/m³ [Oil smog (mineral oil)]
	Zinc oxide	1314-13-2	8-hour TWA (ÁK Value): 5 mg/m ³ (Respirable)
	Zinc oxide	1314-13-2	60-minute STEL (CK Value): 20 mg/m ³ (Respirable)
	Hydrotreated Light Naphthenic Distillates	64742-53-6	Ceiling Limit (MK Value): 5 mg/m³ [Oil smog (mineral oil)]
	Toluene	108-88-3	8-hour TWA (ÁK Value): 190 mg/m ³
	Toluene	108-88-3	60-minute STEL (CK Value): 380 mg/m³
	Mineral Oil	8042-47-5	Ceiling Limit (MK Value): 5 mg/m³ [Oil smog (mineral oil)]
	Distillates, Petroleum, Solvent-Dewaxed Heavy Paraffinic	64742-65-0	The Ceiling Limit (MK Value): 5 mg/m³ (Oil smog, mineral oil)

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Country (Legal Basis)	Substance	Identifier	Permissible concentration
	Distillates (petroleum), hydrotreated heavy naphthenic	64742-52-5	Ceiling Limit (MK Value): 5 mg/m ³ [Oil smog (mineral oil)]
	Hydrotreated Heavy Paraffinic Distillates	64742-54-7	Ceiling Limit (MK Value): 5 mg/m ³ (Oil smog, mineral oil)
Lithuania	Hydrotreated Heavy Naphthenic Distillates	64742-52-5	8-hour TWA: 1 mg/m ³ (Oil mist, including smoke)
	Hydrotreated Heavy Naphthenic Distillates	64742-52-5	15-minute STEL: 3 mg/m ³ (Oil mist, including smoke)
	Zinc oxide	1314-13-2	8-hour TWA: 5 mg/m³
	Hydrotreated Light Naphthenic Distillates	64742-53-6	8-hour TWA: 1 mg/m ³ (Oil mist, including smoke)
	Hydrotreated Light Naphthenic Distillates	64742-53-6	15-minute STEL: 3 mg/m³ (Oil mist, including smoke)
	Toluene	108-88-3	8-hour TWA: 192 mg/m ³ (50 ppm)
	Toluene	108-88-3	15-minute STEL: 384 mg/m ³ (10 ppm)
	Sulfur	7704-34-9	8-hour TWA: 6 mg/m ³
	Mineral Oil	8042-47-5	8-hour TWA: 1 mg/m ³ (Oil mist, including smoke)
	Mineral Oil	8042-47-5	15-minute STEL: 3 mg/m ³ (Oil mist, including smoke)
	Distillates, Petroleum, Solvent-Dewaxed Heavy Paraffinic	64742-65-0	15-minute STEL: 3 mg/m ³ (Oil mist, including smoke)
	Distillates (petroleum), hydrotreated heavy naphthenic	64742-52-5	8-hour TWA: 1 mg/m ³ (Oil mist, including smoke)
	Distillates (petroleum), hydrotreated heavy naphthenic	64742-52-5	15-minute STEL: 3 mg/m ³ (Oil mist, including smoke)
	Stearic acid	57-11-4	8-hour TWA: 5 mg/m ³
	Hydrotreated Heavy Paraffinic Distillates	64742-54-7	8-hour TWA: 1 mg/m ³ (Oil mist, including smoke)
	Hydrotreated Heavy Paraffinic Distillates	64742-54-7	15-minute STEL: 3 mg/m ³ (Oil mist, including smoke)
	Distillates, Petroleum, Solvent-Dewaxed Heavy Paraffinic	64742-65-0	8-hour TWA: 1 mg/m ³ (Oil mist, including smoke)
Poland	Hydrotreated Heavy Naphthenic Distillates	64742-52-5	8-hour TWA (NDS): 5 mg/m ³ (Highly refined mineral oils with the exception of cutting fluids, Inhalable fraction)
	Zinc oxide	1314-13-2	8-hour TWA (NDS): 5 mg/m³ (Inhalable fraction, as Zn)
	Zinc oxide	1314-13-2	15-minute STEL (NDSCh): 10 mg/m ³ (Inhalable fraction, as Zn
	Hydrotreated Light Naphthenic Distillates	64742-53-6	8-hour TWA (NDS): 5 mg/m ³ (Highly refined mineral oils with the exception of cutting fluids, Inhalable fraction)
	Toluene	108-88-3	8-hour TWA (NDS): 100 mg/m ³
	Toluene	108-88-3	15-minute STEL (NDSCh): 200 mg/m ³

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	Carbon Black	1333-86-4	Dz.U.Poz. 817/2014, Annex 1: TWA (NDS) 4.0 mg/m ³ (8 hr)
	Mineral Oil	8042-47-5	8-hour TWA (NDS): 5 mg/m ³ (Highly refined mineral oils with the exception of cutting fluids, Inhalable fraction)
	Distillates, Petroleum, Solvent-Dewaxed Heavy Paraffinic	64742-65-0	8-hour TWA (NDS): 5 mg/m ³ (Highly refined mineral oils with the exception of cutting fluids, inhalable fraction)
	Distillates (petroleum), hydrotreated heavy naphthenic	64742-52-5	8-hour TWA (NDS): 5 mg/m ³ (Highly refined mineral oils with the exception of cutting fluids, Inhalable fraction)
	Hydrotreated Heavy Paraffinic Distillates	64742-54-7	8-hour TWA (NDS): 5 mg/m ³ (Highly refined mineral oils with the exception of cutting fluids, inhalable fraction)
Romania	Hydrotreated Heavy Naphthenic Distillates	64742-52-5	8-hour TWA: 5 mg/m ³ (Mineral oils)
	Hydrotreated Heavy Naphthenic Distillates	64742-52-5	15-minute STEL: 10 mg/m ³ (Mineral oils)
	Zinc oxide	1314-13-2	8-hour TWA: 5 mg/m ³ (Fumes)
	Zinc oxide	1314-13-2	15-minute STEL: 10 mg/m ³ (Fumes)
	Hydrotreated Light Naphthenic Distillates	64742-53-6	8-hour TWA: 5 mg/m ³ (Mineral oils)
	Hydrotreated Light Naphthenic Distillates	64742-53-6	15-minute STEL: 10 mg/m ³ (Mineral oils)
	Toluene	108-88-3	8-hour TWA: 192 mg/m ³ (50 ppm)
	Toluene	108-88-3	15-minute STEL: 384 mg/m ³ (100 ppm)
	Sulfur	7704-34-9	15-min STEL: 6 mg/m ³
	Mineral Oil	8042-47-5	8-hour TWA: 5 mg/m ³ (Mineral oils)
	Mineral Oil	8042-47-5	15-minute STEL: 10 mg/m ³ (Mineral oils)
	Distillates, Petroleum, Solvent-Dewaxed Heavy Paraffinic	64742-65-0	8-Hour TWA: 5 mg/m ³ (Mineral oils)
	Distillates, Petroleum, Solvent-Dewaxed Heavy Paraffinic	64742-65-0	15-minute STEL: 10 mg/m ³ (Mineral oils)
	Distillates (petroleum), hydrotreated heavy naphthenic	64742-52-5	8-hour TWA: 5 mg/m³ (Mineral oils)
	Distillates (petroleum), hydrotreated heavy naphthenic	64742-52-5	15-minute STEL: 10 mg/m ³ (Mineral oils)
	Hydrotreated Heavy Paraffinic Distillates	64742-54-7	8-Hour TWA: 5 mg/m³ (Mineral oils)
	Hydrotreated Heavy Paraffinic Distillates	64742-54-7	15-minute STEL: 10 mg/m ³ (Mineral oils)
	Mineral Oil	8042-47-5	15-minute STEL: 10 mg/m ³ (Mineral oils)

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Slovakia	Hydrotreated Heavy Naphthenic Distillates	64742-52-5	8-hour TWA (NPEL): 5 ppm (1 mg/m³) [Liquid mineral oil mist, fumes]
	Hydrotreated Heavy Naphthenic Distillates	64742-52-5	15-minute STEL (NPEL): 15 ppm (3 mg/m³) [Liquid mineral oil mist, fumes]
	Zinc oxide	1314-13-2	8-hour TWA (NPEL): 1 mg/m ³ [Fumes (Respirable fraction)]
	Zinc oxide	1314-13-2	15-minute STEL (NPEL): 1 mg/m ³ [Fumes (Respirable fraction)]
	Zinc oxide	1314-13-2	8-hour TWA (NPEL): 0.1 mg/m ³ [Zinc and its inorganic compounds (Respirable fraction)]
	Zinc oxide	1314-13-2	8-hour TWA (NPEL): 2 mg/m ³ [Zinc and its inorganic compounds (Inhalable fraction)]
	Hydrotreated Light Naphthenic Distillates	64742-53-6	8-hour TWA (NPEL): 5 ppm (1 mg/m³) [Liquid mineral oil mist, fumes]
	Hydrotreated Light Naphthenic Distillates	64742-53-6	15-minute STEL (NPEL): 15 ppm (3 mg/m ³) [Liquid mineral oil mist, fumes]
	Toluene	108-88-3	8-hour TWA (NPEL): 50 ppm (192 mg/m ³)
	Toluene	108-88-3	15-minute STEL (NPEL): 100 ppm (384 mg/m ³)
	Carbon Black	1333-86-4	Regulation No. 355.2006 concerning protection of workers exposed to chemical agents, Annex 1: TWA (NPEL) 2.0 mg/m ³
	Mineral Oil	8042-47-5	8-hour TWA (NPEL): 5 ppm (1 mg/m³) [Liquid mineral oil mist, fumes]
	Mineral Oil	8042-47-5	15-minute STEL (NPEL): 15 ppm (3 mg/m ³) [Liquid mineral oil mist, fumes]
	Distillates, Petroleum, Solvent-Dewaxed Heavy Paraffinic	64742-65-0	8-hour TWA (NPEL): 5 ppm (Liquid mineral oil mist, fumes)
	Distillates, Petroleum, Solvent-Dewaxed Heavy Paraffinic	64742-65-0	8-hour TWA (NPEL): 1 mg/m ³ (Liquid mineral oil mist, fumes)
	Distillates, Petroleum, Solvent-Dewaxed Heavy Paraffinic	64742-65-0	15-minute STEL (NPEL): 3 mg/m ³ (Liquid mineral oil mist, fumes)
	Distillates, Petroleum, Solvent-Dewaxed Heavy Paraffinic	64742-65-0	15-minute STEL (NPEL): 15 ppm (Liquid mineral oil mist, fumes)
	Distillates (petroleum), hydrotreated heavy naphthenic	64742-52-5	8-hour TWA (NPEL): 5 ppm (1 mg/m³) [Liquid mineral oil mist, fumes]
	Distillates (petroleum), hydrotreated heavy naphthenic	64742-52-5	15-minute STEL (NPEL): 15 ppm (3 mg/m ³) [Liquid mineral oil mist, fumes]
	Hydrotreated Heavy Paraffinic Distillates	64742-54-7	8-hour TWA (NPEL): 5 ppm (Liquid mineral oil mist, fumes)
	Hydrotreated Heavy Paraffinic Distillates	64742-54-7	8-hour TWA (NPEL): 1 mg/m ³ (Liquid mineral oil mist, fumes)

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	Hydrotreated Heavy Paraffinic Distillates	64742-54-7	15-minute STEL (NPEL): 15 ppm (Liquid mineral oil mist, fumes)
	Hydrotreated Heavy Paraffinic Distillates	64742-54-7	15-minute STEL (NPEL): 3 mg/m ³ (Liquid mineral oil mist, fumes)
	Mineral Oil	8042-47-5	8-hour TWA (NPEL): 5 ppm (1 mg/m³) [Liquid mineral oil mist, fumes]
	Mineral Oil	8042-47-5	15-minute STEL (NPEL): 15 ppm (3 mg/m ³) [Liquid mineral oil mist, fumes]
European Union	Hydrotreated Heavy Naphthenic Distillates	64742-52-5	8-Hour TWA: 5 mg/m ³
	Hydrotreated Light Naphthenic Distillates	64742-53-6	8-hour TWA: 5 mg/m ³ (Severely Refined Oils, inhalable)
	Toluene	108-88-3	Threshold limit: 192 mg/m ³ (50 ppm)
	Toluene	108-88-3	STEL: 384 mg/m ³ (100 ppm)
	Mineral Oil	8042-47-5	SCOEL 8-hour TWA: 5 mg/m ³ (severely refined mineral oils, inhalable)
	Distillates, Petroleum, Solvent-Dewaxed Heavy Paraffinic	64742-65-0	8-Hour TWA: 5 mg/m ³ (Severely Refined Mineral Oils, inhalable)
	Distillates (petroleum), hydrotreated heavy naphthenic	64742-52-5	8-Hour TWA: 5 mg/m ³
	Hydrotreated Heavy Paraffinic Distillates	64742-54-7	8-Hour TWA: 5 mg/m ³ (Severely Refined Mineral Oils, inhalable)
	Mineral Oil	8042-47-5	SCOEL 8-hour TWA: 5 mg/m ³ (severely refined mineral oils, inhalable)
Belgium	Hydrotreated Heavy Naphthenic Distillates	64742-52-5	8-hour TWA: 5 mg/m ³
	Hydrotreated Heavy Naphthenic Distillates	64742-52-5	15-minute STEL: 10 mg/m ³
	Zinc oxide	1314-13-2	8-hour TWA: 5 mg/m ³ (Fumes)
	Zinc oxide	1314-13-2	15-minute STEL: 10 mg/m ³ (Fumes)
	Zinc oxide	1314-13-2	8-hour TWA: 10 mg/m ³ (Dusts)
	Hydrotreated Light Naphthenic Distillates	64742-53-6	8-hour TWA: 5 mg/m ³ [Mineral oils (mist)]
	Hydrotreated Light Naphthenic Distillates	64742-53-6	15-minute STEL: 10 mg/m ³ [Mineral oils (mist)]
	Toluene	108-88-3	8-hour TWA: 20 ppm (77 mg/m ³
	Toluene	108-88-3	15-minute STEL: 100 ppm (384 mg/m ³)
	Carbon Black	1333-86-4	Exposure Limit Value: TWA 3.5 mg/m ³ (8 hr)
	Mineral Oil	8042-47-5	8-hour TWA: 5 mg/m ³ [Mineral oils (mist)]
	Mineral Oil	8042-47-5	15-minute STEL: 10 mg/m ³ [Mineral oils (mist)]
	Distillates, Petroleum, Solvent-Dewaxed Heavy Paraffinic	64742-65-0	8-Hour TWA: 5 mg/m ³ (Mineral oils, mist)

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	Distillates, Petroleum, Solvent-Dewaxed Heavy Paraffinic	64742-65-0	15-minute STEL: 10 mg/m ³ (Mineral oils, mist)
	Distillates (petroleum), hydrotreated heavy naphthenic	64742-52-5	8-hour TWA: 5 mg/m³
	Distillates (petroleum), hydrotreated heavy naphthenic	64742-52-5	15-minute STEL: 10 mg/m ³
	Stearic acid	57-11-4	8-hour TWA: 10 mg/m ³ (as stearates)
	Hydrotreated Heavy Paraffinic Distillates	64742-54-7	8-Hour TWA: 5 mg/m ³ (Mineral oils, mist)
	Hydrotreated Heavy Paraffinic Distillates	64742-54-7	15-minute STEL: 10 mg/m ³ (Mineral oils, mist)
	Mineral Oil	8042-47-5	8-hour TWA: 5 mg/m³ [Mineral oils (mist)]
	Mineral Oil	8042-47-5	15-minute STEL: 10 mg/m ³ [Mineral oils (mist)]
Denmark	Hydrotreated Heavy Naphthenic Distillates	64742-52-5	TWA: 1 mg/m ³
	Zinc oxide	1314-13-2	TWA: 4 mg/m ³
	Hydrotreated Light Naphthenic Distillates	64742-53-6	TWA: 1 mg/m ³
	Toluene	108-88-3	TWA: 25 ppm (94 mg/m ³)
	Carbon Black	1333-86-4	Exposure Limits for Substances Materials: TWA 3.5 mg/m ³
	Mineral Oil	8042-47-5	TWA: 1 mg/m ³
	Distillates, Petroleum, Solvent-Dewaxed Heavy Paraffinic	64742-65-0	TWA: 1 mg/m ³
	Distillates (petroleum), hydrotreated heavy naphthenic	64742-52-5	TWA: 1 mg/m ³
	Hydrotreated Heavy Paraffinic Distillates	64742-54-7	TWA: 1 mg/m ³
	Mineral Oil	8042-47-5	TWA: 1 mg/m ³
Finland	Hydrotreated Heavy Naphthenic Distillates	64742-52-5	8-hour limit: 5 mg/m³
	Zinc oxide	1314-13-2	8-hour limit: 2 mg/m ³
	Zinc oxide	1314-13-2	15-minute limit: 10 mg/m ³
	Hydrotreated Light Naphthenic Distillates	64742-53-6	8-hour limit: 5 mg/m³
	Toluene	108-88-3	8-hour limit: 25 ppm (81 mg/m ³
	Toluene	108-88-3	15-minute limit: 100 ppm (380 mg/m³)
	Carbon Black	1333-86-4	Workplace Exposure Limits: 3.5 mg/m ³ (8 hr); 7.0 mg/m ³ (15 mir
	Mineral Oil	8042-47-5	8-hour limit: 5 mg/m³
	Distillates, Petroleum, Solvent-Dewaxed Heavy Paraffinic	64742-65-0	8-hour limit: 5 mg/m³
	Distillates (petroleum), hydrotreated heavy naphthenic	64742-52-5	8-hour limit: 5 mg/m³
	Hydrotreated Heavy Paraffinic Distillates	64742-54-7	8-hour limit: 5 mg/m³
	Mineral Oil	8042-47-5	8-hour limit: 5 mg/m³
Greece	Hydrotreated Heavy Naphthenic Distillates	64742-52-5	8-hour TWA: 5 mg/m³ [Paraffin c (Mist)]
	Zinc oxide	1314-13-2	8-hour TWA: 5 mg/m³ (Fumes)

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	Zinc oxide	1314-13-2	15-minute STEL: 10 mg/m³ (Fumes)
	Hydrotreated Light Naphthenic Distillates	64742-53-6	8-hour TWA: 5 mg/m ³ [Paraffin o (Mist)]
	Toluene	108-88-3	8-hour TWA: 50 ppm (192 mg/m ³)
	Toluene	108-88-3	15-minute limit: 100 ppm (384 mg/m ³)
	Carbon Black	1333-86-4	Decree 307/1986: TWA 3.5mg/m (8 hr); STEL 7.0 mg/m³ (15 min)
	Mineral Oil	8042-47-5	8-hour TWA: 5 mg/m³ [Paraffin c (Mist)]
	Distillates, Petroleum, Solvent-Dewaxed Heavy Paraffinic	64742-65-0	8-hour TWA: 5 mg/m³ (Paraffin oil, mist)
	Distillates (petroleum), hydrotreated heavy naphthenic	64742-52-5	8-hour TWA: 5 mg/m³ [Paraffin c (Mist)]
	Hydrotreated Heavy Paraffinic Distillates	64742-54-7	8-hour TWA: 5 mg/m³ (Paraffin oil, mist)
	Mineral Oil	8042-47-5	8-hour TWA: 5 mg/m³ [Paraffin c (Mist)]
Ireland	Hydrotreated Heavy Naphthenic Distillates	64742-52-5	8-hour OEL (TWA): 5 mg/m ³ (Mineral oil, pure, highly and severely refined; Inhalable fraction)
	Hydrotreated Light Naphthenic Distillates	64742-53-6	8-hour OEL (TWA): 5 mg/m ³ (Mineral oil, pure, highly and severely refined; Inhalable fraction)
	Toluene	108-88-3	8-hour OEL (TWA): 50 ppm (192 mg/m ³)
	Toluene	108-88-3	15-minute OEL (STEL): 100 ppm (384 mg/m ³)
	Carbon Black	1333-86-4	2016 Code of Practice for Chemical Agents Regulations 2001: TWA 3.0 mg/m ³ (8 hr) OE
	Mineral Oil	8042-47-5	8-hour OEL (TWA): 5 mg/m ³ (Mineral oil, pure, highly and severely refined; Inhalable fraction)
	Mineral Oil	8042-47-5	8-hour OEL (TWA): 5 mg/m ³ (Mineral oil, pure, highly and severely refined; Inhalable fraction)
	Distillates, Petroleum, Solvent-Dewaxed Heavy Paraffinic	64742-65-0	Irish 8-hour OEL (TWA): 5 mg/m (Mineral oil, pure, highly & severely refined, Inhalable fraction)
	Distillates (petroleum), hydrotreated heavy naphthenic	64742-52-5	8-hour OEL (TWA): 5 mg/m ³ (Mineral oil, pure, highly and severely refined; Inhalable fraction)
	Stearic acid	57-11-4	8-hour TWA: 10 mg/m ³ (as stearates, except lead stearates)

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	Hydrotreated Heavy Paraffinic Distillates	64742-54-7	8-hour OEL (TWA) is: 5 mg/m ³ (Mineral oil, pure, highly and severely refined; Inhalable fraction)
	Mineral Oil	8042-47-5	8-hour OEL (TWA): 5 mg/m ³ (Mineral oil, pure, highly and severely refined; Inhalable fraction)
Italy	Hydrotreated Heavy Naphthenic Distillates	64742-52-5	8-hour TWA: 5 mg/m ³ (Mineral oil, excluding metal working fluids, pure, highly and severely refined; Inhalable fraction)
	Zinc oxide	1314-13-2	8-hour TWA: 2 mg/m ³ (Respirable fraction)
	Zinc oxide	1314-13-2	15-minute STEL: 10 mg/m ³ (Respirable fraction)
	Hydrotreated Light Naphthenic Distillates	64742-53-6	8-hour TWA: 5 mg/m ³ (Mineral oil, excluding metal working fluids, pure, highly and severely refined; Inhalable fraction)
	Toluene	108-88-3	8-hour TWA: 50 ppm (192 mg/m ³)
	Carbon Black	1333-86-4	Legislative Decree n.81: TWA 3.0 mg/m ³ (8 hr)
	Mineral Oil	8042-47-5	8-hour TWA: 5 mg/m ³ (Mineral oil, excluding metal working fluids, pure, highly and severely refined; Inhalable fraction)
	Distillates, Petroleum, Solvent-Dewaxed Heavy Paraffinic	64742-65-0	8-hour TWA: 5 mg/m ³ (Mineral oil, excluding heavy metal, working fluids, pure, highly & severely refined, Inhalable fraction)
	Distillates (petroleum), hydrotreated heavy naphthenic	64742-52-5	8-hour TWA: 5 mg/m ³ (Mineral oil, excluding metal working fluids, pure, highly and severely refined; Inhalable fraction)
	Stearic acid	57-11-4	8-hour TWA: 3 mg/m ³ [Stearates (except stearates of toxic metals), Respirable fraction]
	Stearic acid	57-11-4	8-hour TWA: 10 mg/m ³ [Stearates (except stearates of toxic metals), Inhalable fraction]
	Hydrotreated Heavy Paraffinic Distillates	64742-54-7	8-hour TWA: 5 mg/m ³ (Mineral oil, excluding metal working fluids, pure, highly and severely refined; Inhalable fraction)
	Mineral Oil	8042-47-5	8-hour TWA: 5 mg/m ³ (Mineral oil, excluding metal working fluids, pure, highly and severely refined; Inhalable fraction)
Netherlands	Hydrotreated Heavy Naphthenic Distillates	64742-52-5	Binding 8-hour TWA: 5 mg/m³ [Oil mist (Mineral oil)]
	Hydrotreated Light Naphthenic Distillates	64742-53-6	Binding 8-hour TWA: 5 mg/m³ [Oil mist (Mineral oil)]

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	Toluene	108-88-3	Binding 8-hour TWA: 150 mg/m ³
	Toluene	108-88-3	Binding STEL: 384 mg/m ³ (STEL time period is 15 minutes)
	Mineral Oil	8042-47-5	Binding 8-hour TWA: 5 mg/m ³ [Oil mist (Mineral oil)]
	Distillates, Petroleum, Solvent-Dewaxed Heavy Paraffinic	64742-65-0	8-Hour TWA: 5 mg/m³ (Mineral oils, mist)
	Distillates (petroleum), hydrotreated heavy naphthenic	64742-52-5	Binding 8-hour TWA: 5 mg/m ³ [Oil mist (Mineral oil)]
	Hydrotreated Heavy Paraffinic Distillates	64742-54-7	8-Hour TWA: 5 mg/m ³ (Mineral oils, mist)
	Mineral Oil	8042-47-5	Binding 8-hour TWA: 5 mg/m ³ [Oil mist (Mineral oil)]
Portugal	Hydrotreated Heavy Naphthenic Distillates	64742-52-5	8-hour exposure limit: 5 mg/m ³
	Hydrotreated Heavy Naphthenic Distillates	64742-52-5	Short-term exposure limit: 10 mg/m ³
	Zinc oxide	1314-13-2	8-hour exposure limit: 2 mg/m ³
	Zinc oxide	1314-13-2	Short-term exposure limit: 10 mg/m ³
	Hydrotreated Light Naphthenic Distillates	64742-53-6	8-hour exposure limit: 5 mg/m ³
	Hydrotreated Light Naphthenic Distillates	64742-53-6	Short-term exposure limit: 10 mg/m ³
	Toluene	108-88-3	8-hour TWA: 50 ppm (192 mg/m³)
	Toluene	108-88-3	15-minute STEL: 100 ppm (384 mg/m ³)
	Carbon Black	1333-86-4	VLE: 3.5 mg/m ³ (8 hr)
	Mineral Oil	8042-47-5	NP 1796-2007 8-hour exposure limit: 5 mg/m ³
	Mineral Oil	8042-47-5	NP 1796-2007 Short-term exposure limit: 10 mg/m ³
	Distillates, Petroleum, Solvent-Dewaxed Heavy Paraffinic	64742-65-0	8-hour exposure limit: 5 mg/m ³
	Distillates, Petroleum, Solvent-Dewaxed Heavy Paraffinic	64742-65-0	Short-term exposure limit: 10 mg/m ³
	Distillates (petroleum), hydrotreated heavy naphthenic	64742-52-5	8-hour exposure limit: 5 mg/m ³
	Distillates (petroleum), hydrotreated heavy naphthenic	64742-52-5	Short-term exposure limit: 10 mg/m ³
	Stearic acid	57-11-4	8-hour Exposure Limit: 10 mg/m (as stearates)
	Hydrotreated Heavy Paraffinic Distillates	64742-54-7	8-hour exposure limit: 5 mg/m ³
	Hydrotreated Heavy Paraffinic Distillates	64742-54-7	Short-term exposure limit: 10 mg/m ³
	Mineral Oil	8042-47-5	NP 1796-2007 8-hour exposure limit: 5 mg/m ³
	Mineral Oil	8042-47-5	NP 1796-2007 Short-term exposure limit: 10 mg/m ³
Spain	Hydrotreated Heavy Naphthenic Distillates	64742-52-5	8-hour daily exposure limit (VLA_ED): 5 mg/m³

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	Hydrotreated Heavy Naphthenic Distillates	64742-52-5	15-minute STEL (VLA-EC): 10 mg/m ³
	Zinc oxide	1314-13-2	8-hour daily exposure limit (VLA_ED): 2 mg/m ³
	Zinc oxide	1314-13-2	15-minute STEL (VLA-EC): 10 mg/m ³
	Hydrotreated Light Naphthenic Distillates	64742-53-6	8-hour daily exposure limit (VLA_ED): 5 mg/m ³
	Hydrotreated Light Naphthenic Distillates	64742-53-6	15-minute STEL (VLA-EC): 10 mg/m ³
	Toluene	108-88-3	8-hour daily exposure limit (VLA- ED): 50 ppm (192 mg/m ³)
	Toluene	108-88-3	15-minute STEL (VLA-EC): 100 ppm (384 mg/m ³)
	Carbon Black	1333-86-4	VLA: VLA_ED 3.5 mg/m ³ (8 hr)
	Mineral Oil	8042-47-5	8-hour daily exposure limit (VLA_ED): 5 mg/m ³
	Mineral Oil	8042-47-5	15-minute STEL (VLA-EC): 10 mg/m ³
	Distillates, Petroleum, Solvent-Dewaxed Heavy Paraffinic	64742-65-0	The 8-hour daily exposure limit (VLA_ED): 5 mg/m ³ (This value is applied to refined mineral oil and not to potential additives in its formulation)
	Distillates, Petroleum, Solvent-Dewaxed Heavy Paraffinic	64742-65-0	The 15-minute STEL (VLA-EC): 10 mg/m ³ (This value is applied to refined mineral oil and not to potential additives in its formulation)
	Distillates (petroleum), hydrotreated heavy naphthenic	64742-52-5	8-hour daily exposure limit (VLA_ED): 5 mg/m ³
	Distillates (petroleum), hydrotreated heavy naphthenic	64742-52-5	15-minute STEL (VLA-EC): 10 mg/m ³
	Stearic acid	57-11-4	8-hour daily exposure limit (VLA_ED): 10 mg/m ³ [Stearates (except stearates of toxic metals)]
	Hydrotreated Heavy Paraffinic Distillates	64742-54-7	8-hour daily exposure limit (VLA_ED): 5 mg/m ³
	Hydrotreated Heavy Paraffinic Distillates	64742-54-7	15-minute STEL (VLA-EC): 10 mg/m ³
	Mineral Oil	8042-47-5	8-hour daily exposure limit (VLA_ED): 5 mg/m ³
	Mineral Oil	8042-47-5	15-minute STEL (VLA-EC): 10 mg/m ³
Sweden	Hydrotreated Heavy Naphthenic Distillates	64742-52-5	Level Limit Value (NGV): 1 mg/m ³ (Oil mist including oil fume)
	Hydrotreated Heavy Naphthenic Distillates	64742-52-5	Short Term Limit (KTV): 3 mg/m ³ (Oil mist including oil fume)
	Zinc oxide	1314-13-2	Level Limit Value (NGV): 5 mg/m ³ (Total dust)
	Hydrotreated Light Naphthenic Distillates	64742-53-6	Level Limit Value (NGV): 1 mg/m ³ (Oil mist including oil fume)

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	Hydrotreated Light Naphthenic Distillates	64742-53-6	Short Term Limit (KTV): 3 mg/m ³ (Oil mist including oil fume)
	Toluene	108-88-3	Level Limit Value (NGV): 50 ppm (192 mg/m ³)
	Toluene	108-88-3	Ceiling Limit Value (TGV): 100 ppm (384 mg/m ³)
	Mineral Oil	8042-47-5	Level Limit Value (NGV): 1 mg/m (Oil mist including oil fume)
	Mineral Oil	8042-47-5	Short Term Limit (KTV): 3 mg/m ³ (Oil mist including oil fume)
	Distillates, Petroleum, Solvent-Dewaxed Heavy Paraffinic	64742-65-0	Level Limit Value (NGV): 1 mg/m (Oil mist including oil fume)
	Distillates, Petroleum, Solvent-Dewaxed Heavy Paraffinic	64742-65-0	Short Term Limit (KTV): 3 mg/m (Oil mist including oil fume)
	Distillates (petroleum), hydrotreated heavy naphthenic	64742-52-5	Level Limit Value (NGV): 1 mg/n (Oil mist including oil fume)
	Distillates (petroleum), hydrotreated heavy naphthenic	64742-52-5	Short Term Limit (KTV): 3 mg/m (Oil mist including oil fume)
	Stearic acid	57-11-4	Level Limit Value (NGV): 5 mg/n (as stearates, total dust)
	Hydrotreated Heavy Paraffinic Distillates	64742-54-7	Level Limit Value (NGV): 1 mg/n (Oil mist including oil fume)
	Hydrotreated Heavy Paraffinic Distillates	64742-54-7	Short Term Limit (KTV): 3 mg/m (Oil mist including oil fume)
	Mineral Oil	8042-47-5	Level Limit Value (NGV): 1 mg/n (Oil mist including oil fume)
	Mineral Oil	8042-47-5	Short Term Limit (KTV): 3 mg/m (Oil mist including oil fume)
Croatia	Zinc oxide	1314-13-2	Maximum (8 hr) allowable concentration: 5 mg/m ³
	Zinc oxide	1314-13-2	Short-term (15 min) allowable concentration: 10 mg/m ³
	Toluene	108-88-3	Maximum (8 hr) allowable concentration: 50 ppm (192 mg/m ³)
	Toluene	108-88-3	Short-term (15 min) allowable concentration: 100 ppm (384 mg/m ³)
	Carbon Black	1333-86-4	Dangerous Substances Exposure Limit Values in the Workplace: 3.5 mg/m ³ (8hr); 7.0 mg/m ³ (15 min)
Cyprus	Zinc oxide	1314-13-2	8-hour TWA: 5.0 mg/m ³ (Fumes)
	Carbon Black	1333-86-4	Control of factory atmosphere and dangerous substances in factories regulation: TWA 3.5 mg/m ³ (8 hr)
Estonia	Zinc oxide	1314-13-2	8-hour TWA: 5 mg/m ³
	Toluene	108-88-3	8-hour TWA: 50 ppm (192 mg/m ³)
	Toluene	108-88-3	STEL: 100 ppm (384 mg/m ³)
Latvia	Zinc oxide	1314-13-2	8-hour TWA: 0.5 mg/m ³

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	Hydrotreated Light Naphthenic Distillates	64742-53-6	8-hour TWA: 5 mg/m ³ (Mineral oi
	Toluene	108-88-3	8-hour TWA: 50 mg/m ³ (14 ppm)
	Toluene	108-88-3	15-minute STEL: 150 mg/m ³ (40 ppm)
	Sulfur	7704-34-9	8-hour TWA: 6 mg/m ³
Slovenia	Zinc oxide	1314-13-2	8-hour TWA: 5 mg/m ³ [Fumes (Respirable fraction)]
	Zinc oxide	1314-13-2	STEL: 20 mg/m ³ [Fumes (Respirable fraction)]
	Toluene	108-88-3	8-hour TWA: 192 mg/m³ (50 ppm)
	Toluene	108-88-3	STEL: 384 mg/m ³ (100 ppm)
France	Zinc oxide	1314-13-2	Time weighted average (VME): 5 mg/m ³ (Fumes)
	Zinc oxide	1314-13-2	Time weighted average (VME): 10 mg/m ³ (Dusts)
	Toluene	108-88-3	Time weighted average (VME): 20 ppm (76.8 mg/m ³)
	Toluene	108-88-3	Short term exposure limit: 100 ppm (384 mg/m ³)
	Carbon Black	1333-86-4	Threshold Limit Values (VLEP): Time weighted average (VME) 3.5 mg/m ³
Malta	Toluene	108-88-3	TWA: 50 ppm (192 mg/m ³)
	Toluene	108-88-3	STEL: 100 ppm (384 mg/m ³)
Germany	Toluene	108-88-3	DFG Limit value: 50 mL/m ³ (190 mg/m ³)
	Toluene	108-88-3	DFG Short term (15 min) limit value: 200 mL/m ³ (760 mg/m ³)
	Toluene	108-88-3	AGS Limit value: 200 mg/m ³
	Toluene	108-88-3	AGS Short term (15 min) limit value: 400 mg/m ³
	Mineral Oil	8042-47-5	AGW limit value: 5 mg/m ³
	Mineral Oil	8042-47-5	AGW Short term (15 min) exposure limit: 20 mg/m ³
	Mineral Oil	8042-47-5	AGW limit value: 5 mg/m ³
	Mineral Oil	8042-47-5	AGW Short term (15 min) exposure limit: 20 mg/m ³
Luxembourg	Toluene	108-88-3	TWA: 50 ppm (192 mg/m ³)
	Toluene	108-88-3	STEL: 100 ppm (384 mg/m ³)
United Kingdom	Toluene	108-88-3	TWA: 50 ppm (191 mg/m ³)
	Toluene	108-88-3	STEL: 100 ppm (384 mg/m ³)
	Carbon Black	1333-86-4	WEL: TWA 3.5 mg/m ³ ; STEL 7.0 mg/m ³
Brazil	Mineral Oil	8042-47-5	8-Hour Exposure Limit (TLV- TWA): 5 mg/m ³ (Mineral oil, excluding metal working fluids, pure, highly and severely refined; Inhalable fraction)

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ACGIH	Mineral Oil	8042-47-5	8-Hour Exposure Limit (TLV- TWA): 5 mg/m ³ (Mineral oil, excluding metal working fluids, pure, highly and severely refined; Inhalable fraction)
	Hydrotreated Heavy Paraffinic Distillates	64742-54-7	8-Hour Exposure Limit (TLV- TWA): 5 mg/m ³ (Mineral oil, excluding metal working fluids, pure, highly and severely refined; Inhalable fraction)
NIOSH	Mineral Oil	8042-47-5	REL (for up to a 10-hour workday during a 40-hour workweek): 5 mg/m ³ [Oil mist (Mineral)]
	Mineral Oil	8042-47-5	STEL: 10 mg/m ³ [Oil mist (Mineral)]
	Mineral Oil	8042-47-5	IDLH: 2500 mg/m³ [Oil mist (Mineral)]
	Carbon Black	1333-86-4	NIOSH REL TWA 0.1 mg PAHs/m ³ [Carbon black in presence of polycyclic aromatic hydrocarbons (PAHs)]
United States (OSHA)	Mineral Oil	8042-47-5	PEL: 5 mg/m ³ [Oil mist (Mineral)]
Canada	Mineral Oil	8042-47-5	Alberta OELs - 8-Hour TWA Exposure Limit: 5 mg/m ³ (Oil mist, mineral)
	Mineral Oil	8042-47-5	British Columbia OELs - 8-Hour TWA Exposure Value: 1 mg/m ³ (Oil mist - Mineral, severely refined)
	Mineral Oil	8042-47-5	Manitoba OELs - 8-Hour Exposure Limit (TLV-TWA): 5 mg/m ³ (Mineral oil, excluding metal working fluids, pure, highly and severely refined; Inhalable fraction)
	Mineral Oil	8042-47-5	Ontario OELs - 8-Hour TWA Exposure Value: 5 mg/m ³ (Mineral oil, excluding metal working fluids, pure, highly and severely refined; Inhalable fraction)
	Mineral Oil	8042-47-5	Quebec OELs - 8-Hour TWA Exposure Value: 5 mg/m ³
	Mineral Oil	8042-47-5	Quebec OELs - 15-minute STEL: 10 mg/m ³
	Mineral Oil	8042-47-5	Saskatchewan OELs - 8 Hour Average Contamination Limit: 5 mg/m ³ (Oil mist, mineral)
	Mineral Oil	8042-47-5	Saskatchewan OELs - 15 Minute Average Contamination Limit: 10 mg/m ³ (Oil mist, mineral)

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Country (Legal Basis)	Substance	Identifier	Permissible concentration
Mexico	Mineral Oil	8042-47-5	NOM-010-STPS-2014: Time Weighted Average Exposure Limit Value (VLE-PPT): 5 mg/m ³ (Mineral oil, excluding metal working fluids, pure, highly and severely refined)

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.

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 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.

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

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

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9.1	Information on basic physical and chemical properties			
	Appearance	Black Putty		

Appearance	Black Putty
Odor	Strong Solvent
Odor threshold	Not determined or not available.
рН	Not determined or not available.
Melting point/freezing point	-95°C
Initial boiling point/range	232°F
Flash point (closed cup)	7°C (44.6°F)
Evaporation rate	2.24
Flammability (solid, gas)	Not determined or not available.
Upper flammability/explosive limit	7.1
Lower flammability/explosive limit	1.1
Vapor pressure	22 mmHg
Vapor density	Not determined or not available.
Density	Not determined or not available.
Relative density	1.03
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	Not determined or not available.
Explosive properties	Not determined or not available.
Oxidizing properties	Not determined or not available.
Other information	

9.2 Other information

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:

None known.

10.5 Incompatible materials:

None known.

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.

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Product data: No data available.

Substance data: No data available.

Skin corrosion/irritation

Assessment: Causes skin irritation

Product data:

No data available.

Substance data:

Name	Result
Toluene	Irritating to the skin.
Sulfur	Irritating to the skin.

Serious eye damage/irritation

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

Product data:

No data available.

Substance data:

Name	Result
Insoluble sulfur	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
2,2' Dibenzamido diphenyl	Sensitization possible through skin contact.
disulphide	

Carcinogenicity

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

Product data: No data available.

Substance data:

Name	Species	Result
Carbon Black	Carbon Black	The IARC carcinogenic classification and California Proposition 65 Warning only apply to airborne, unbound particles of respirable size of Carbon Black.
Hydrotreated Light Naphthenic Distillates	Distillates (petroleum), hydrotreated light naphthenic	The classification as a carcinogen need not apply if it can be shown that the substance contains less than 3 % DMSO extract as measured by IP 346.
Hydrotreated Heavy Naphthenic Distillates	Not applicable	The classification as a carcinogen need not apply if it can be shown that the substance contains less than 3 % DMSO extract as measured by IP 346.
	Distillates (petroleum), hydrotreated heavy naphthenic	The classification as a carcinogen need not apply if it can be shown that the substance contains less than 3 % DMSO extract as measured by IP 346

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

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Name	Species	Result
Hydrotreated Heavy Paraffinic Distillates	Distillates (petroleum), hydrotreated heavy paraffinic	The classification as a carcinogen need not apply if it can be shown that the substance contains less than 3 % DMSO extract as measured by IP 346.
Distillates, Petroleum, Solvent-Dewaxed Heavy Paraffinic	Distillates (petroleum), solvent-dewaxed heavy paraffinic	The classification as a carcinogen need not apply if it can be shown that the substance contains less than 3 % DMSO extract as measured by IP 346.

International Agency for Research on Cancer (IARC):

Name	Classification
Natural Rubber	Group 3 - Not classifiable as to its carcinogenicity to humans
Toluene	Group 3 - Not classifiable as to its carcinogenicity to humans
Carbon Black	Group 2B - Possibly carcinogenic 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: Suspected of damaging fertility or the unborn child

Product data:

No data available.

Substance data:

Name	Result
Toluene	Suspected of damaging fertility or the unborn child.
Phenol, 4-Methyl-, Reaction Products With Dicyclopentadiene And Isobutylene	Suspected of damaging the unborn child if exposed orally.

Specific target organ toxicity (single exposure)

Assessment: May cause drowsiness or dizziness

Product data:

No data available.

Substance data:

Name	Result
Toluene	Component affects the central nervous system.

Specific target organ toxicity (repeated exposure)

Assessment: May cause damage to organs through prolonged or repeated exposure

Product data:

No data available.

Substance data: No data available.

Aspiration toxicity

Assessment: May be fatal if swallowed and enters airways

Product data:

No data available.

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Substance data: No data available.

Information on likely routes of exposure:

No data available.

Symptoms related to the physical, chemical and toxicological characteristics:

No data available.

Other information:

No data available.

SECTION 12: Ecological information

12.1 Toxicity

Acute (short-term) toxicity

Assessment: Based on available data, the classification criteria are not met. **Product data:** No data available.

Substance data:

Name	Result
Zinc oxide	Daphnia magna (Water flea) - 0.098 mg/l - 48 h
	Oncorhynchus mykiss (rainbow trout) - 1.1 mg/l - 96.0 h
Phenol, 4-Methyl-, Reaction Products With Dicyclopentadiene And Isobutylene	NOEC - Selenastrum capricornutum (green algae) - > 0.2 mg/l - 72 h

Chronic (long-term) toxicity

Product data: No data available.

Substance data: No data available.

12.2 Persistence and degradability

Product data: No data available. Substance data: No data available.

12.3 Bioaccumulative potential

Product data: No data available.

Substance data: No data available.

12.4 Mobility in soil

Product data: No data available.

Substance data: No data available.

12.5 Results of PBT and vPvB assessment

PBT assessment: This product does not contain any substances that are assessed to be a PBT. **vPvB assessment:** This product does not contain any substances that are assessed to be a vPvB.

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 applicable regulatory entities

SECTION 14: Transport information

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

UN number	1993	

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

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UN proper shipping name	Flammable Liquid, n.o.s. (Toluene)	
UN transport hazard class(es)	3	
Packing group	11	
Environmental hazards	None	
Special precautions for user	None	
Classification code	33	
Transport category	2	
Tunnel restriction code	(D/E)	
Excepted quantities	E2	
Limited quantity	1L	

International Carriage of Dangerous Goods by Inland Waterways (ADN)

UN number	1993	
UN proper shipping name	Flammable Liquid, n.o.s. (Toluene)	
UN transport hazard class(es)	3	
Packing group	II	
Environmental hazards	None	
Special precautions for user	None	
Excepted quantities	E2	
Limited quantity	1L	

International Maritime Dangerous Goods (IMDG)

UN number	1993	
UN proper shipping name	Flammable Liquid, n.o.s. (Toluene)	
UN transport hazard class(es)	3	
Packing group	11	
Environmental hazards	None	
Special precautions for user	None	
EmS number	F-E, S-E	
Excepted quantities	E2	
Limited quantity	1L	

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

UN number	1993	
UN proper shipping name	Flammable Liquid, n.o.s. (Toluene)	
UN transport hazard class(es)	3	*
Packing group	II	
Environmental hazards	None	
Special precautions for user	None	

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

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Excepted quantities	E2
Limited quantity	1L

SECTION 15: Regulatory information

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

European regulations

Inventory listing (EINECS):

9003-31-0	Natural Rubber	Not Listed
1314-13-2	Zinc oxide	Listed
64742-53-6	Hydrotreated Light Naphthenic Distillates	Listed
108-88-3	Toluene	Listed
135-57-9	2,2' Dibenzamido diphenyl disulphide	Listed
7704-34-9	Sulfur	Listed
1333-86-4	Bounded Carbon Black	Listed
9035-99-8	Insoluble sulfur	Not Listed
64742-65-0	Distillates, Petroleum, Solvent-Dewaxed Heavy Paraffinic	Listed
64742-52-5	Distillates (petroleum), hydrotreated heavy naphthenic	Listed
57-11-4	Stearic acid	Listed
64742-54-7	Hydrotreated Heavy Paraffinic Distillates	Listed
68610-51-5	Phenol, 4-Methyl-, Reaction Products With Dicyclopentadiene And Isobutylene	Listed
1333-86-4	Carbon Black	Listed
8042-47-5	Mineral Oil	Listed
64742-52-5	Hydrotreated Heavy Naphthenic Distillates	Listed

REACH SVHC candidate list: Not determined.

REACH SVHC Authorizations: Not determined.

REACH Restriction:

108-88-3	Toluene	Listed
tor bazard class ()	NGK) (Broduct): Not determined	

Water hazard class (WGK) (Product): Not determined. Water hazard class (WGK) (Substance): Not determined.

Other regulations

Germany MAK: 8-hour TWA: 0.1 mg/m³ [Zinc and its inorganic compounds (respirable fraction)], 8-hour TWA: 2 mg/m³ [Zinc and its inorganic compounds (inhalable fraction)]

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:

Not applicable. Abbreviations and Acronyms: None Classification procedure:

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Classification according to Regulation (EC) No1278/2008 (CLP)	Method Used
Flammable liquids, category 2	Calculation method
Skin irritation, category 2	Calculation method
Skin sensitization, category 1	Calculation method
Aspiration hazard, category 1	Expert judgement
Specific target organ toxicity - single exposure, category 3, central nervous system	Calculation method
Specific target organ toxicity - repeated exposure, category 2	Calculation method
Reproductive toxicity, category 2	Calculation method
Chronic aquatic hazard, category 3	Calculation method

Summary of classification in section 3:

Repr. 2; H361	Reproductive toxicity, category 2
Aquatic Chronic 4; H413	Chronic aquatic hazard, category 4
Asp. Tox. 1; H304	Aspiration hazard, category 1
Skin Irrit. 2 ; H315	Skin irritation, category 2
Stot SE 3; H336	Specific target organ toxicity - single exposure, category 3, central nervous system
Stot RE 2; H373	Specific target organ toxicity - repeated exposure, category 2
Flam. Liq. 2; H225	Flammable liquids, category 2
Skin Sens. 1; H317	Skin sensitization, category 1
Eye Irrit. 2; H319	Eye irritation, category 2A
Aquatic Acute 1; H400	Acute aquatic hazard, category 1
Aquatic Chronic 1; H410	Chronic aquatic hazard, category 1

Summary of hazard statements in section 3:

H361	Suspected of damaging fertility or the unborn child
H413	May cause long lasting harmful effects to aquatic life
H304	May be fatal if swallowed and enters airways
H315	Causes skin irritation
H336	May cause drowsiness or dizziness
H373	May cause damage to organs through prolonged or repeated exposure
H225	Highly flammable liquid and vapour
H317	May cause an allergic skin reaction
H319	Causes serious eye irritation
H400	Very toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects

Disclaimer:

This product has been classified in accordance with EC 1272/2008 (CLP) and EC 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.

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End of Safety Data Sheet