



SAFETY DATA SHEET

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

1.1. Product identifier

Trade name or designation of the mixture: Bel-Ray Super Clean Chain Lube
Product code: 99470
SDS number: 6436
Registration number: -
Synonyms: None.
Issue date: 16-June-2010
Version number: 4,0
Revision date: 02-June-2016
Supersedes date: 08-February-2016

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

Identified uses: Lubricant
Uses advised against: None known.

1.3. Details of the supplier of the safety data sheet

Bel-Ray Company, LLC
P.O. Box 526
Farmingdale, NJ 07727
United States of America
+1 732 938 2421
CHEMTREC: 800-424-9300 (USA)
CHEMTREC: +1 703-527-3887 (outside USA - call collect)

Bel-Ray Company, LLC Calumet Sales Company, Inc.
Pa Monument Chemical BVBA
Haven 1972, Ketenislaan 3
B-9130 Kallo (Keildrecht)
Belgium
+32 3 570 25 20
Europe Emergency: 112
customerservice@belray.com
www.belray.com/msds_search

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

The mixture has been assessed and/or tested for its physical, health and environmental hazards and the following classification applies.

Classification according to Regulation (EC) No 1272/2008 as amended

Physical hazards

Aerosols	Category 1	H222 - Extremely flammable aerosol. H229 - Pressurized container: May burst if heated.
----------	------------	---

Health hazards

Acute toxicity, oral	Category 4	H302 - Harmful if swallowed.
Skin corrosion/irritation	Category 2	H315 - Causes skin irritation.
Serious eye damage/eye irritation	Category 2	H319 - Causes serious eye irritation.
Reproductive toxicity (fertility)	Category 2	
Specific target organ toxicity - single exposure	Category 3 narcotic effects	H336 - May cause drowsiness or dizziness.

Specific target organ toxicity - repeated exposure

Category 2

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

Environmental hazards

Hazardous to the aquatic environment, long-term aquatic hazard

Category 3

H412 - Harmful to aquatic life with long lasting effects.

Hazard summary

WARNING

FLAMMABLE LIQUID AND VAPOR.
CONTENTS UNDER PRESSURE.

Aerosol Pressurised container may explode when exposed to heat or flame. Harmful if swallowed. Causes skin irritation. Causes serious eye irritation. May cause drowsiness and dizziness. Possible reproductive hazard. May cause damage to organs through prolonged or repeated exposure. Dangerous for the environment if discharged into watercourses. This is a consumer care product that is safe for consumers when used according to the label directions. Like many consumer products, a small number of individuals may experience reactions such as redness, rash and / or swelling upon prolonged or repeated skin contact or eye contact.

2.2. Label elements

Label according to Regulation (EC) No. 1272/2008 as amended

Contains: 2-methylpentane, 3-Methylpentane, n-Hexane, Solvent Naphtha, Petroleum, Medium Aliphatic

Hazard pictograms



Signal word

Danger

Hazard statements

H222	Extremely flammable aerosol.
H229	Pressurized container: May burst if heated.
H302	Harmful if swallowed.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.
H373	May cause damage to organs through prolonged or repeated exposure.
H412	Harmful to aquatic life with long lasting effects.

Precautionary statements

Prevention

P102	Keep out of reach of children.
P103	Read label before use.
P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P211	Do not spray on an open flame or other ignition source.
P251	Do not pierce or burn, even after use.
P260	Do not breathe mist or vapour.
P264	Wash thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P271	Use only outdoors or in a well-ventilated area.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.

Response

P101	If medical advice is needed, have product container or label at hand.
P301 + P312	IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.
P330	Rinse mouth.
P302 + P352	IF ON SKIN: Wash with plenty of water.
P304 + P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308 + P313	IF exposed or concerned: Get medical advice/attention.
P312	Call a POISON CENTER/doctor if you feel unwell.
P321	Specific treatment (see this label).
P332 + P313	If skin irritation occurs: Get medical advice/attention.
P337 + P313	If eye irritation persists: Get medical advice/attention.
P362 + P364	Take off contaminated clothing and wash it before reuse.

Storage

P403 + P233	Store in a well-ventilated place. Keep container tightly closed.
P405	Store locked up.
P410 + P412	Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.

Disposal

P501	Dispose of contents/container in accordance with local/regional/national/international regulations.
------	---

Supplemental label information

None.

2.3. Other hazards

None known.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

General information

Chemical name	%	CAS-No. / EC No.	REACH Registration No.	INDEX No.	Notes
n-Hexane	20 - < 30	110-54-3 269-792-5	01-2119474209-33-0000	601-037-00-0	#
Classification:	Flam. Liq. 2;H225, Acute Tox. 4;H302, Asp. Tox. 1;H304, Skin Irrit. 2;H315, STOT SE 3;H336, STOT RE 2;H373, Aquatic Chronic 2;H411				
3-Methylpentane	5 - < 10	96-14-0 202-481-4	-	601-007-00-7	
Classification:	Flam. Liq. 2;H225, Asp. Tox. 1;H304, Skin Irrit. 2;H315, STOT SE 3;H336, Aquatic Chronic 2;H411				
Solvent Naphtha, Petroleum, Medium Aliphatic	5 - < 10	64742-88-7 265-191-7	-	649-405-00-X	
Classification:	-				
Zinc oxide	3 - < 5	1314-13-2 215-222-5	-	030-013-00-7	
Classification:	Aquatic Acute 1;H400, Aquatic Chronic 1;H410				
2-methylpentane	1 - < 3	107-83-5 203-523-4	-	601-007-00-7	
Classification:	Flam. Liq. 2;H225, Asp. Tox. 1;H304, Skin Irrit. 2;H315, STOT SE 3;H336, Aquatic Chronic 2;H411				

Other components below reportable levels 50 - < 60

List of abbreviations and symbols that may be used above

CLP: Regulation No. 1272/2008.

DSD: Directive 67/548/EEC.

M: M-factor

vPvB: very persistent and very bioaccumulative substance.

PBT: persistent, bioaccumulative and toxic substance.

#: This substance has been assigned Community workplace exposure limit(s).

Composition comments

The full text for all R- and H-phrases is displayed in section 16.

SECTION 4: First aid measures

General information

IF exposed or concerned: Get medical advice/attention. If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance.

4.1. Description of first aid measures

Inhalation

Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTRE or doctor/physician if you feel unwell.

Skin contact

Remove contaminated clothing. Rinse skin with water/shower. If skin irritation occurs: Get medical advice/attention. Wash contaminated clothing before reuse.

Eye contact

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

Ingestion

Rinse mouth. Do not induce vomiting. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. Get medical advice/attention if you feel unwell. Never give liquid to an unconscious person.

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

May cause drowsiness and dizziness. Headache. Nausea, vomiting. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Irritation of nose and throat. Skin irritation. May cause redness and pain. Prolonged exposure may cause chronic effects.

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

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

SECTION 5: Firefighting measures

General fire hazards

Extremely flammable aerosol.

5.1. Extinguishing media

Suitable extinguishing media

Water fog. Foam. Dry chemical powder. Carbon dioxide (CO₂).

Unsuitable extinguishing media

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

5.2. Special hazards arising from the substance or mixture

Contents under pressure. Pressurised container may explode when exposed to heat or flame. During fire, gases hazardous to health may be formed.

5.3. Advice for firefighters

Special protective equipment for firefighters

Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.

Special fire fighting procedures

Move containers from fire area if you can do so without risk. Containers should be cooled with water to prevent vapor pressure build up. For massive fire in cargo area, use unmanned hose holder or monitor nozzles, if possible. If not, withdraw and let fire burn out.

Specific methods

Use standard firefighting procedures and consider the hazards of other involved materials. Move containers from fire area if you can do so without risk. In the event of fire and/or explosion do not breathe fumes.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep out of low areas. Wear appropriate protective equipment and clothing during clean-up. Do not breathe mist or vapour. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8.

For emergency responders

Keep unnecessary personnel away. Use personal protection recommended in Section 8 of the SDS.

6.2. Environmental precautions

Avoid release to the environment. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground. Inform appropriate managerial or supervisory personnel of all environmental releases.

6.3. Methods and material for containment and cleaning up

Refer to attached safety data sheets and/or instructions for use. Keep combustibles (wood, paper, oil etc) away from spilled material. Stop leak if you can do so without risk. Move the cylinder to a safe and open area if the leak is irreparable. Cover with plastic sheet to prevent spreading. Absorb in vermiculite, dry sand or earth and place into containers. Prevent product from entering drains. Following product recovery, flush area with water.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

6.4. Reference to other sections

For personal protection, see section 8. For waste disposal, see section 13 of the SDS.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Pressurised container: Do not pierce or burn, even after use. Do not use if spray button is missing or defective. Do not spray on a naked flame or any other incandescent material. Do not smoke while using or until sprayed surface is thoroughly dry. Do not cut, weld, solder, drill, grind, or expose containers to heat, flame, sparks, or other sources of ignition. All equipment used when handling the product must be grounded. Do not re-use empty containers. Do not breathe mist or vapour. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. Do not taste or swallow. When using, do not eat, drink or smoke. Pregnant or breastfeeding women must not handle this product. Should be handled in closed systems, if possible. Use only in area provided with appropriate exhaust ventilation. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Avoid release to the environment. Observe good industrial hygiene practices.

7.2. Conditions for safe storage, including any incompatibilities

Level 1 Aerosol.

Store locked up. Pressurized container. Protect from sunlight and do not expose to temperatures exceeding 50°C. Do not puncture, incinerate or crush. Do not handle or store near an open flame, heat or other sources of ignition. This material can accumulate static charge which may cause spark and become an ignition source. Store in a well-ventilated place. Refrigeration recommended. Keep out of the reach of children. Store away from incompatible materials (see Section 10 of the SDS).

7.3. Specific end use(s)

Not available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits

Austria. MAK List, OEL Ordinance (GwV), BGBl. II, no. 184/2001

Components	Type	Value
2-methylpentane (CAS 107-83-5)	MAK	715 mg/m3
	STEL	200 ppm 2860 mg/m3 800 ppm
3-Methylpentane (CAS 96-14-0)	MAK	715 mg/m3
	STEL	200 ppm 2860 mg/m3 800 ppm
Butane (CAS 106-97-8)	Ceiling	3800 mg/m3 1600 ppm
	MAK	1900 mg/m3 800 ppm
Isobutane (CAS 75-28-5)	Ceiling	3800 mg/m3 1600 ppm
	MAK	1900 mg/m3 800 ppm
n-Hexane (CAS 110-54-3)	MAK	72 mg/m3 20 ppm
	STEL	288 mg/m3 80 ppm
Propane (CAS 74-98-6)	Ceiling	3600 mg/m3 2000 ppm
	MAK	1800 mg/m3 1000 ppm

Belgium. Exposure Limit Values

Components	Type	Value
Butane (CAS 106-97-8)	TWA	1000 ppm
Isobutane (CAS 75-28-5)	TWA	1000 ppm
Propane (CAS 74-98-6)	TWA	1000 ppm

Belgium. Exposure Limit Values.

Components	Type	Value	Form
2-methylpentane (CAS 107-83-5)	STEL	3551 mg/m3	
		1000 ppm	

Belgium. Exposure Limit Values.

Components	Type	Value	Form
3-Methylpentane (CAS 96-14-0)	TWA	1786 mg/m3 500 ppm	
	STEL	3551 mg/m3	
Calcium carbonate (CAS 471-34-1)	TWA	1000 ppm 1786 mg/m3	
	TWA	500 ppm 10 mg/m3	
Distillates (petroleum), solvent-refined heavy paraffinic (CAS 64741-88-4)	STEL	10 mg/m3	Mist.
Limestone (CAS 1317-65-3) n-Hexane (CAS 110-54-3)	TWA	5 mg/m3	Mist.
	TWA	10 mg/m3	
	TWA	72 mg/m3 20 ppm	
Petrolatum (CAS 8009-03-8)	STEL	10 mg/m3	Mist.
	TWA	5 mg/m3	Mist.
Residual Oils (petroleum), Solvent-refined (CAS 64742-01-4)	STEL	10 mg/m3	Mist.
	TWA	5 mg/m3	Mist.
Solvent Naphtha, Petroleum, Medium Aliphatic (CAS 64742-88-7)	TWA	200 mg/m3	Vapor.
	TWA	200 mg/m3	

Bulgaria. OELs. Regulation No 13 on protection of workers against risks of exposure to chemical agents at work

Components	Type	Value	Form
Butane (CAS 106-97-8)	TWA	1800 mg/m3	
Calcium carbonate (CAS 471-34-1)	TWA	1 fibers/cm3	Respirable fraction.
		10 mg/m3	
Distillates (petroleum), solvent-refined heavy paraffinic (CAS 64741-88-4)	TWA	10 mg/m3	Inhalable fraction.
		5 mg/m3	
Limestone (CAS 1317-65-3)	TWA	1 fibers/cm3	Respirable fraction.
		10 mg/m3	
n-Hexane (CAS 110-54-3)	TWA	10 mg/m3	Inhalable fraction.
		72 mg/m3 20 ppm	
Petrolatum (CAS 8009-03-8)	TWA	5 mg/m3	
Propane (CAS 74-98-6)	TWA	1800 mg/m3	
Residual Oils (petroleum), Solvent-refined (CAS 64742-01-4)	TWA	5 mg/m3	
Solvent Naphtha, Petroleum, Medium Aliphatic (CAS 64742-88-7)	TWA	300 mg/m3	

Croatia. Dangerous Substance Exposure Limit Values in the Workplace (ELVs), Annexes 1 and 2, Narodne Novine, 13/09

Components	Type	Value	Form
Butane (CAS 106-97-8)	MAC	1450 mg/m3 10 ppm	
	STEL	1810 mg/m3 750 ppm	
Calcium carbonate (CAS 471-34-1)	MAC	4 mg/m3	Respirable dust.
		10 mg/m3	Total dust.
Limestone (CAS 1317-65-3)	MAC	4 mg/m3	Respirable dust.
		10 mg/m3	Total dust.
n-Hexane (CAS 110-54-3)	MAC	72 mg/m3 20 ppm	

Cyprus. OELs. Control of factory atmosphere and dangerous substances in factories regulation, PI 311/73, as amended.

Components	Type	Value	
Calcium carbonate (CAS 471-34-1)	TWA	10 mg/m3	
Czech Republic. OELs. Government Decree 361			
Components	Type	Value	Form
2-methylpentane (CAS 107-83-5)	Ceiling	2000 mg/m3	
	TWA	1000 mg/m3	
3-Methylpentane (CAS 96-14-0)	Ceiling	2000 mg/m3	
	TWA	1000 mg/m3	
Calcium carbonate (CAS 471-34-1)	TWA	10 mg/m3	Dust.
Limestone (CAS 1317-65-3)	TWA	10 mg/m3	Dust.
n-Hexane (CAS 110-54-3)	Ceiling	200 mg/m3	
	TWA	70 mg/m3	
Petrolatum (CAS 8009-03-8)	Ceiling	10 mg/m3	Aerosol
	TWA	5 mg/m3	Aerosol
Residual Oils (petroleum), Solvent-refined (CAS 64742-01-4)	Ceiling	10 mg/m3	Aerosol
	TWA	5 mg/m3	Aerosol
Denmark. Exposure Limit Values			
Components	Type	Value	Form
2-methylpentane (CAS 107-83-5)	TLV	700 mg/m3	
		200 ppm	
3-Methylpentane (CAS 96-14-0)	TLV	700 mg/m3	
		200 ppm	
Butane (CAS 106-97-8)	TLV	1200 mg/m3	
		500 ppm	
Distillates (petroleum), solvent-refined heavy paraffinic (CAS 64741-88-4)	TLV	1 mg/m3	Mist.
n-Hexane (CAS 110-54-3)	TLV	72 mg/m3	
		20 ppm	
Petrolatum (CAS 8009-03-8)	TLV	1 mg/m3	Mist.
Propane (CAS 74-98-6)	TLV	1800 mg/m3	
		1000 ppm	
Residual Oils (petroleum), Solvent-refined (CAS 64742-01-4)	TLV	1 mg/m3	Mist.
Estonia. OELs. Occupational Exposure Limits of Hazardous Substances. (Annex of Regulation No. 293 of 18 September 2001)			
Components	Type	Value	Form
2-methylpentane (CAS 107-83-5)	STEL	1100 mg/m3	
	TWA	300 ppm	
		700 mg/m3	
		200 ppm	
3-Methylpentane (CAS 96-14-0)	STEL	1100 mg/m3	
	TWA	300 ppm	
		700 mg/m3	
		200 ppm	
Butane (CAS 106-97-8)	TWA	1500 mg/m3	
		800 ppm	
Calcium carbonate (CAS 471-34-1)	TWA	5 mg/m3	Respirable dust.
		10 mg/m3	
Isobutane (CAS 75-28-5)	TWA	1900 mg/m3	

Estonia. OELs. Occupational Exposure Limits of Hazardous Substances. (Annex of Regulation No. 293 of 18 September 2001)

Components	Type	Value	Form
Limestone (CAS 1317-65-3)	TWA	800 ppm	Respirable dust.
		5 mg/m ³	
n-Hexane (CAS 110-54-3)	TWA	10 mg/m ³	
		72 mg/m ³	
Propane (CAS 74-98-6)	TWA	20 ppm	
		1800 mg/m ³	
		1000 ppm	

Finland. Workplace Exposure Limits

Components	Type	Value	Form
2-methylpentane (CAS 107-83-5)	STEL	2300 mg/m ³	
	TWA	630 ppm 1800 mg/m ³ 500 ppm	
3-Methylpentane (CAS 96-14-0)	STEL	2300 mg/m ³	
	TWA	630 ppm 1800 mg/m ³ 500 ppm	
Butane (CAS 106-97-8)	STEL	2400 mg/m ³ 1000 ppm	
	TWA	1900 mg/m ³ 800 ppm	
Calcium carbonate (CAS 471-34-1)	TWA	10 mg/m ³	Dust.
Isobutane (CAS 75-28-5)	STEL	2400 mg/m ³ 1000 ppm	
	TWA	1900 mg/m ³ 800 ppm	
Limestone (CAS 1317-65-3)	TWA	10 mg/m ³	Dust.
n-Hexane (CAS 110-54-3)	STEL	2300 mg/m ³ 630 ppm	
	TWA	72 mg/m ³ 20 ppm	
Propane (CAS 74-98-6)	STEL	2000 mg/m ³ 1100 ppm	
	TWA	1500 mg/m ³ 800 ppm	
Residual Oils (petroleum), Solvent-refined (CAS 64742-01-4)	TWA	5 mg/m ³	Mist.

France. Threshold Limit Values (VLEP) for Occupational Exposure to Chemicals in France, INRS ED 984

Components	Type	Value	Form
2-methylpentane (CAS 107-83-5)	VLE	1500 mg/m ³	Vapor.
	VME	1800 mg/m ³ 1000 mg/m ³ 500 ppm	Vapor.
3-Methylpentane (CAS 96-14-0)	VLE	1500 mg/m ³	Vapor.
	VME	1800 mg/m ³ 1000 mg/m ³ 500 ppm	Vapor.
Butane (CAS 106-97-8)	VME	1900 mg/m ³ 800 ppm	
Calcium carbonate (CAS 471-34-1)	VME	10 mg/m ³	
Limestone (CAS 1317-65-3)	VME	10 mg/m ³	
n-Hexane (CAS 110-54-3)	VLE	1500 mg/m ³	Vapor.
	VME	72 mg/m ³	

France. Threshold Limit Values (VLEP) for Occupational Exposure to Chemicals in France, INRS ED 984

Components	Type	Value	Form
		1000 mg/m ³ 20 ppm	Vapor.

Germany. DFG MAK List (advisory OELs). Commission for the Investigation of Health Hazards of Chemical Compounds in the Work Area (DFG)

Components	Type	Value
2-methylpentane (CAS 107-83-5)	TWA	1800 mg/m ³
3-Methylpentane (CAS 96-14-0)	TWA	500 ppm 1800 mg/m ³
Butane (CAS 106-97-8)	TWA	500 ppm 2400 mg/m ³ 1000 ppm
Isobutane (CAS 75-28-5)	TWA	2400 mg/m ³ 1000 ppm
Methylcyclopentane (CAS 96-37-7)	TWA	1800 mg/m ³
n-Hexane (CAS 110-54-3)	TWA	500 ppm 180 mg/m ³ 50 ppm
Propane (CAS 74-98-6)	TWA	1800 mg/m ³ 1000 ppm

Germany. TRGS 900, Limit Values in the Ambient Air at the Workplace

Components	Type	Value
2-methylpentane (CAS 107-83-5)	AGW	1800 mg/m ³
3-Methylpentane (CAS 96-14-0)	AGW	500 ppm 1800 mg/m ³
Butane (CAS 106-97-8)	AGW	500 ppm 2400 mg/m ³ 1000 ppm
Isobutane (CAS 75-28-5)	AGW	2400 mg/m ³ 1000 ppm
Methylcyclopentane (CAS 96-37-7)	AGW	1800 mg/m ³
n-Hexane (CAS 110-54-3)	AGW	500 ppm 180 mg/m ³ 50 ppm
Propane (CAS 74-98-6)	AGW	1800 mg/m ³ 1000 ppm

Greece. OELs (Decree No. 90/1999, as amended)

Components	Type	Value	Form
2-methylpentane (CAS 107-83-5)	STEL	3600 mg/m ³	
	TWA	1000 ppm 1800 mg/m ³ 500 ppm	
3-Methylpentane (CAS 96-14-0)	STEL	3600 mg/m ³	
	TWA	1000 ppm 1800 mg/m ³ 500 ppm	
Butane (CAS 106-97-8)	TWA	2350 mg/m ³ 1000 ppm	
Calcium carbonate (CAS 471-34-1)	TWA	5 mg/m ³	Respirable.
Distillates (petroleum), solvent-refined heavy paraffinic (CAS 64741-88-4)	TWA	10 mg/m ³ 5 mg/m ³	Inhalable Mist.

Greece. OELs (Decree No. 90/1999, as amended)

Components	Type	Value	Form
Limestone (CAS 1317-65-3)	TWA	5 mg/m ³ 10 mg/m ³	Respirable. Inhalable
n-Hexane (CAS 110-54-3)	TWA	72 mg/m ³ 20 ppm	
Petrolatum (CAS 8009-03-8)	TWA	5 mg/m ³	Mist.
Propane (CAS 74-98-6)	TWA	1800 mg/m ³ 1000 ppm	
Residual Oils (petroleum), Solvent-refined (CAS 64742-01-4)	TWA	5 mg/m ³	Mist.

Hungary. OELs. Joint Decree on Chemical Safety of Workplaces

Components	Type	Value	Form
Butane (CAS 106-97-8)	STEL TWA	9400 mg/m ³ 2350 mg/m ³	
Calcium carbonate (CAS 471-34-1)	TWA	10 mg/m ³	
Distillates (petroleum), solvent-refined heavy paraffinic (CAS 64741-88-4)	Ceiling	5 mg/m ³	Mist.
Limestone (CAS 1317-65-3)	TWA	10 mg/m ³	
n-Hexane (CAS 110-54-3)	TWA	72 mg/m ³	
Petrolatum (CAS 8009-03-8)	Ceiling	5 mg/m ³	Mist.
Residual Oils (petroleum), Solvent-refined (CAS 64742-01-4)	Ceiling	5 mg/m ³	Mist.

Iceland. OELs. Regulation 154/1999 on occupational exposure limits

Components	Type	Value	Form
2-methylpentane (CAS 107-83-5)	TWA	700 mg/m ³ 200 ppm	
3-Methylpentane (CAS 96-14-0)	TWA	700 mg/m ³ 200 ppm	
Butane (CAS 106-97-8)	TWA	1200 mg/m ³ 500 ppm	
Distillates (petroleum), solvent-refined heavy paraffinic (CAS 64741-88-4)	TWA	1 mg/m ³	Mist.
n-Hexane (CAS 110-54-3)	TWA	90 mg/m ³ 25 ppm	
Petrolatum (CAS 8009-03-8)	TWA	1 mg/m ³	Mist.
Propane (CAS 74-98-6)	TWA	1800 mg/m ³ 1000 ppm	
Residual Oils (petroleum), Solvent-refined (CAS 64742-01-4)	TWA	1 mg/m ³	Mist.

Ireland. Occupational Exposure Limits

Components	Type	Value	Form
2-methylpentane (CAS 107-83-5)	STEL	3600 mg/m ³	
	TWA	1000 ppm 1800 mg/m ³ 500 ppm	
3-Methylpentane (CAS 96-14-0)	STEL	3600 mg/m ³	
	TWA	1000 ppm 1800 mg/m ³ 500 ppm	
Butane (CAS 106-97-8)	TWA	1000 ppm	
Calcium carbonate (CAS 471-34-1)	TWA	4 mg/m ³	Respirable dust.

Ireland. Occupational Exposure Limits Components

Components	Type	Value	Form
Distillates (petroleum), solvent-refined heavy paraffinic (CAS 64741-88-4)	TWA	10 mg/m3	Total inhalable dust.
		5 mg/m3	
Limestone (CAS 1317-65-3)	TWA	4 mg/m3	Respirable dust.
		10 mg/m3	
n-Hexane (CAS 110-54-3)	TWA	72 mg/m3	
		20 ppm	
Propane (CAS 74-98-6)	TWA	1000 ppm	
Residual Oils (petroleum), Solvent-refined (CAS 64742-01-4)	TWA	5 mg/m3	Inhalable fraction.

Italy. Occupational Exposure Limits Components

Components	Type	Value	Form
2-methylpentane (CAS 107-83-5)	TWA	1000 ppm	
		500 ppm	
3-Methylpentane (CAS 96-14-0)	TWA	1000 ppm	
		500 ppm	
Butane (CAS 106-97-8)	TWA	1000 ppm	Inhalable fraction.
		5 mg/m3	
Distillates (petroleum), solvent-refined heavy paraffinic (CAS 64741-88-4)	TWA	1000 ppm	
		72 mg/m3	
Isobutane (CAS 75-28-5)	TWA	20 ppm	
		5 mg/m3	
n-Hexane (CAS 110-54-3)	TWA	5 mg/m3	Inhalable fraction.
		5 mg/m3	
Petrolatum (CAS 8009-03-8)	TWA	5 mg/m3	Inhalable fraction.
Residual Oils (petroleum), Solvent-refined (CAS 64742-01-4)	TWA	5 mg/m3	Inhalable fraction.
Solvent Naphtha, Petroleum, Medium Aliphatic (CAS 64742-88-7)	TWA	200 mg/m3	Non-aerosol.

Latvia. OELs. Occupational exposure limit values of chemical substances in work environment Components

Components	Type	Value
2-methylpentane (CAS 107-83-5)	TWA	300 mg/m3
		100 mg/m3
3-Methylpentane (CAS 96-14-0)	TWA	300 mg/m3
		100 mg/m3
Butane (CAS 106-97-8)	TWA	300 mg/m3
		300 mg/m3
Calcium carbonate (CAS 471-34-1)	TWA	6 mg/m3
Isobutane (CAS 75-28-5)	TWA	300 mg/m3
		100 mg/m3
n-Hexane (CAS 110-54-3)	TWA	300 mg/m3
		72 mg/m3
Petrolatum (CAS 8009-03-8)	TWA	20 ppm
		5 mg/m3
Propane (CAS 74-98-6)	TWA	300 mg/m3
		1800 mg/m3
Residual Oils (petroleum), Solvent-refined (CAS 64742-01-4)	TWA	1000 ppm
		5 mg/m3

Lithuania. OELs. Limit Values for Chemical Substances, General Requirements Components

Components	Type	Value	Form
2-methylpentane (CAS 107-83-5)	STEL	1100 mg/m3	

Lithuania. OELs. Limit Values for Chemical Substances, General Requirements

Components	Type	Value	Form
3-Methylpentane (CAS 96-14-0)	TWA	300 ppm 700 mg/m3	
	STEL	200 ppm 1100 mg/m3	
Distillates (petroleum), solvent-refined heavy paraffinic (CAS 64741-88-4)	TWA	300 ppm 700 mg/m3	
	STEL	200 ppm 3 mg/m3	Fume and mist.
n-Hexane (CAS 110-54-3)	TWA	1 mg/m3	Fume and mist.
	TWA	72 mg/m3	
Petrolatum (CAS 8009-03-8)	STEL	20 ppm 3 mg/m3	Fume and mist.
	TWA	1 mg/m3	Fume and mist.
Residual Oils (petroleum), Solvent-refined (CAS 64742-01-4)	STEL	3 mg/m3	Fume and mist.
	TWA	1 mg/m3	Fume and mist.
Solvent Naphtha, Petroleum, Medium Aliphatic (CAS 64742-88-7)	STEL	600 mg/m3	
	TWA	100 ppm 300 mg/m3 50 ppm	

Luxembourg. Binding Occupational exposure limit values (Annex I), Memorial A

Components	Type	Value
n-Hexane (CAS 110-54-3)	TWA	72 mg/m3 20 ppm

Malta. OELs. Occupational Exposure Limit Values (L.N. 227. of Occupational Health and Safety Authority Act (CAP. 424), Schedules I and V)

Components	Type	Value
n-Hexane (CAS 110-54-3)	TWA	72 mg/m3 20 ppm

Netherlands. OELs (binding)

Components	Type	Value	Form
Distillates (petroleum), solvent-refined heavy paraffinic (CAS 64741-88-4)	TWA	5 mg/m3	Mist.
n-Hexane (CAS 110-54-3)	STEL	144 mg/m3	
	TWA	72 mg/m3	
Petrolatum (CAS 8009-03-8)	TWA	5 mg/m3	Mist.
Residual Oils (petroleum), Solvent-refined (CAS 64742-01-4)	TWA	5 mg/m3	Mist.

Norway. Administrative Norms for Contaminants in the Workplace

Components	Type	Value	Form
2-methylpentane (CAS 107-83-5)	TLV	1050 mg/m3	
3-Methylpentane (CAS 96-14-0)	TLV	250 ppm	
		1050 mg/m3	
Butane (CAS 106-97-8)	TLV	250 ppm	
		600 mg/m3	
Distillates (petroleum), solvent-refined heavy paraffinic (CAS 64741-88-4)	TLV	250 ppm	
		1 mg/m3	Mist.
n-Hexane (CAS 110-54-3)	TLV	72 mg/m3 20 ppm	

Norway. Administrative Norms for Contaminants in the Workplace

Components	Type	Value	Form
Petrolatum (CAS 8009-03-8)	TLV	1 mg/m ³	Mist.
Propane (CAS 74-98-6)	TLV	900 mg/m ³ 500 ppm	
Residual Oils (petroleum), Solvent-refined (CAS 64742-01-4)	TLV	1 mg/m ³	Mist.

Poland. MACs. Minister of Labour and Social Policy Regarding Maximum Allowable Concentrations and Intensities in Working Environment

Components	Type	Value	Form
2-methylpentane (CAS 107-83-5)	STEL	1200 mg/m ³	
	TWA	400 mg/m ³	
3-Methylpentane (CAS 96-14-0)	STEL	1200 mg/m ³	
	TWA	400 mg/m ³	
Butane (CAS 106-97-8)	STEL	3000 mg/m ³	
	TWA	1900 mg/m ³	
Calcium carbonate (CAS 471-34-1)	TWA	10 mg/m ³	Inhalable fraction.
n-Hexane (CAS 110-54-3)	TWA	72 mg/m ³	
Petrolatum (CAS 8009-03-8)	TWA	5 mg/m ³	Inhalable fraction.
Propane (CAS 74-98-6)	TWA	1800 mg/m ³	
Solvent Naphtha, Petroleum, Medium Aliphatic (CAS 64742-88-7)	STEL	300 mg/m ³	
	TWA	100 mg/m ³	

Portugal. OELs. Decree-Law n. 290/2001 (Journal of the Republic - 1 Series A, n.266)

Components	Type	Value
n-Hexane (CAS 110-54-3)	TWA	72 mg/m ³ 20 ppm

Portugal. VLEs. Norm on occupational exposure to chemical agents (NP 1796)

Components	Type	Value	Form
2-methylpentane (CAS 107-83-5)	STEL	1000 ppm	
	TWA	500 ppm	
3-Methylpentane (CAS 96-14-0)	STEL	1000 ppm	
	TWA	500 ppm	
Butane (CAS 106-97-8)	TWA	1000 ppm	
Calcium carbonate (CAS 471-34-1)	TWA	10 mg/m ³	
Distillates (petroleum), solvent-refined heavy paraffinic (CAS 64741-88-4)	STEL	10 mg/m ³	Aerosol
	TWA	5 mg/m ³	Aerosol
Isobutane (CAS 75-28-5)	TWA	1000 ppm	
n-Hexane (CAS 110-54-3)	TWA	50 ppm	
Petrolatum (CAS 8009-03-8)	STEL	10 mg/m ³	Aerosol
	TWA	5 mg/m ³	Aerosol
Propane (CAS 74-98-6)	TWA	2500 ppm	
Residual Oils (petroleum), Solvent-refined (CAS 64742-01-4)	STEL	10 mg/m ³	Aerosol
	TWA	5 mg/m ³	Aerosol
Solvent Naphtha, Petroleum, Medium Aliphatic (CAS 64742-88-7)	TWA	200 mg/m ³	Non-aerosol.

Romania. OELs. Protection of workers from exposure to chemical agents at the workplace

Components	Type	Value	Form
Butane (CAS 106-97-8)	STEL	1500 mg/m ³	
	TWA	1200 mg/m ³	

Romania. OELs. Protection of workers from exposure to chemical agents at the workplace

Components	Type	Value	Form
Calcium carbonate (CAS 471-34-1)	TWA	10 mg/m3	Inhalable fraction.
Distillates (petroleum), solvent-refined heavy paraffinic (CAS 64741-88-4)	STEL	10 mg/m3	
	TWA	5 mg/m3	
Isobutane (CAS 75-28-5)	STEL	1500 mg/m3	
	TWA	1200 mg/m3	
Limestone (CAS 1317-65-3)	TWA	10 mg/m3	Inhalable fraction.
	TWA	72 mg/m3	
Petrolatum (CAS 8009-03-8)	TWA	20 ppm	
	STEL	10 mg/m3	
	TWA	5 mg/m3	
Propane (CAS 74-98-6)	STEL	1800 mg/m3	
	TWA	1000 ppm	
	TWA	1400 mg/m3	
Residual Oils (petroleum), Solvent-refined (CAS 64742-01-4)	STEL	778 ppm	
	STEL	10 mg/m3	
	TWA	5 mg/m3	

Slovakia. OELs for carcinogens and mutagens. Regulation No. 46/2002 on carcinogenic and mutagenic substances

Components	Type	Value
Butane (CAS 106-97-8)	TWA	2400 mg/m3
		1000 ppm
Isobutane (CAS 75-28-5)	TWA	2400 mg/m3
		1000 ppm

Slovakia. OELs. Regulation No. 300/2007 concerning protection of health in work with chemical agents

Components	Type	Value	Form
2-methylpentane (CAS 107-83-5)	STEL	3600 mg/m3	
	TWA	1000 ppm	
3-Methylpentane (CAS 96-14-0)	STEL	1800 mg/m3	
		500 ppm	
Calcium carbonate (CAS 471-34-1)	TWA	3600 mg/m3	
		1000 ppm	
Distillates (petroleum), solvent-refined heavy paraffinic (CAS 64741-88-4)	STEL	1800 mg/m3	Fume and mist.
		3 mg/m3	
Limestone (CAS 1317-65-3)	TWA	15 ppm	Fume and mist.
		10 mg/m3	
n-Hexane (CAS 110-54-3)	STEL	140 mg/m3	
		40 ppm	
Petrolatum (CAS 8009-03-8)	TWA	72 mg/m3	
		20 ppm	
		3 mg/m3	Fume and mist.
Residual Oils (petroleum), Solvent-refined (CAS 64742-01-4)	STEL	15 ppm	Fume and mist.
		3 mg/m3	Fume and mist.
		3 mg/m3	Fume and mist.

Slovenia. OELs. Regulations concerning protection of workers against risks due to exposure to chemicals while working (Official Gazette of the Republic of Slovenia)

Components	Type	Value
2-methylpentane (CAS 107-83-5)	TWA	720 mg/m ³ 200 ppm
3-Methylpentane (CAS 96-14-0)	TWA	720 mg/m ³ 200 ppm
Butane (CAS 106-97-8)	TWA	2400 mg/m ³ 1000 ppm
Isobutane (CAS 75-28-5)	TWA	2400 mg/m ³ 1000 ppm
n-Hexane (CAS 110-54-3)	TWA	72 mg/m ³ 20 ppm
Propane (CAS 74-98-6)	TWA	1800 mg/m ³ 1000 ppm

Spain. Occupational Exposure Limits

Components	Type	Value	Form
2-methylpentane (CAS 107-83-5)	STEL	3580 mg/m ³	
	TWA	1000 ppm 1790 mg/m ³	
3-Methylpentane (CAS 96-14-0)	STEL	500 ppm 3580 mg/m ³	
	TWA	1000 ppm 1790 mg/m ³	
Butane (CAS 106-97-8)	TWA	500 ppm 1000 ppm	
Distillates (petroleum), solvent-refined heavy paraffinic (CAS 64741-88-4)	STEL	10 mg/m ³	Mist.
	TWA	5 mg/m ³	Mist.
Isobutane (CAS 75-28-5)	TWA	1000 ppm	
n-Hexane (CAS 110-54-3)	TWA	72 mg/m ³ 20 ppm	
Petrolatum (CAS 8009-03-8)	STEL	10 mg/m ³	Mist.
	TWA	5 mg/m ³	Mist.
Propane (CAS 74-98-6)	TWA	1000 ppm	
Residual Oils (petroleum), Solvent-refined (CAS 64742-01-4)	STEL	10 mg/m ³	Mist.
	TWA	5 mg/m ³	Mist.

Sweden. Occupational Exposure Limit Values

Components	Type	Value	Form
2-methylpentane (CAS 107-83-5)	STEL	1100 mg/m ³	
	TWA	300 ppm 700 mg/m ³	
3-Methylpentane (CAS 96-14-0)	STEL	200 ppm 1100 mg/m ³	
	TWA	300 ppm 700 mg/m ³	
Distillates (petroleum), solvent-refined heavy paraffinic (CAS 64741-88-4)	STEL	200 ppm 3 mg/m ³	Mist.
	TWA	1 mg/m ³	Mist.
n-Hexane (CAS 110-54-3)	STEL	180 mg/m ³ 50 ppm	
	TWA	90 mg/m ³ 25 ppm	

Sweden. Occupational Exposure Limit Values Components

Components	Type	Value	Form
Petrolatum (CAS 8009-03-8)	STEL	3 mg/m3	Mist.
	TWA	1 mg/m3	Mist.
Residual Oils (petroleum), Solvent-refined (CAS 64742-01-4)	STEL	3 mg/m3	Mist.
	TWA	1 mg/m3	Mist.

Switzerland. SUVA Grenzwerte am Arbeitsplatz Components

Components	Type	Value	Form
2-methylpentane (CAS 107-83-5)	STEL	3600 mg/m3	
	TWA	1000 ppm 1800 mg/m3 500 ppm	
3-Methylpentane (CAS 96-14-0)	STEL	3600 mg/m3	
	TWA	1000 ppm 1800 mg/m3 500 ppm	
Butane (CAS 106-97-8)	STEL	7200 mg/m3 3200 ppm	
	TWA	1900 mg/m3 800 ppm	
Calcium carbonate (CAS 471-34-1)	TWA	3 mg/m3	Respirable dust.
Isobutane (CAS 75-28-5)	STEL	7200 mg/m3 3200 ppm	
	TWA	1900 mg/m3 800 ppm	
n-Hexane (CAS 110-54-3)	STEL	1440 mg/m3 400 ppm	
	TWA	180 mg/m3 50 ppm	
Propane (CAS 74-98-6)	STEL	7200 mg/m3 4000 ppm	
	TWA	1800 mg/m3 1000 ppm	

UK. EH40 Workplace Exposure Limits (WELs) Components

Components	Type	Value	Form
Butane (CAS 106-97-8)	STEL	1810 mg/m3 750 ppm	
	TWA	1450 mg/m3 600 ppm	
Calcium carbonate (CAS 471-34-1)	TWA	4 mg/m3	Respirable.
		4 mg/m3 10 mg/m3	Respirable dust. Inhalable
Limestone (CAS 1317-65-3)	TWA	10 mg/m3 4 mg/m3	Inhalable dust. Respirable.
		4 mg/m3 10 mg/m3	Respirable dust. Inhalable
n-Hexane (CAS 110-54-3)	TWA	10 mg/m3 72 mg/m3 20 ppm	Inhalable dust.

EU. Indicative Exposure Limit Values in Directives 91/322/EEC, 2000/39/EC, 2006/15/EC, 2009/161/EU Components

Components	Type	Value
n-Hexane (CAS 110-54-3)	TWA	72 mg/m3 20 ppm

Biological limit values

France. Biological indicators of exposure (IBE) (National Institute for Research and Security (INRS, ND 2065))

Components	Value	Determinant	Specimen	Sampling time
n-Hexane (CAS 110-54-3)	5 mg/g	2,5-Hexanedione	Creatinine in urine	*

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

Germany. TRGS 903, BAT List (Biological Limit Values)

Components	Value	Determinant	Specimen	Sampling time
n-Hexane (CAS 110-54-3)	5 mg/l	2,5-Hexandion plus 4,5-Dihydroxy-2-hexanon (nach Hydrolyse)	Urine	*

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

Hungary. Chemical Safety at Workplace Ordinance Joint Decree No. 25/2000 (Annex 2): Permissible limit values of biological exposure (effect) indices

Components	Value	Determinant	Specimen	Sampling time
n-Hexane (CAS 110-54-3)	3,5 mg/g	hexane-2,5-dion	Creatinine in urine	*
	3,5 µmol/mmol	hexane-2,5-dion	Creatinine in urine	*

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

Slovakia. BLVs (Biological Limit Value). Regulation no. 355/2006 concerning protection of workers exposed to chemical agents, Annex 2

Components	Value	Determinant	Specimen	Sampling time
n-Hexane (CAS 110-54-3)	3 mg/g	2,5-hexanedione and 4,5-dihydroxy-2-hexanone	Creatinine in urine	*
	5 mg/l	2,5-hexanedione and 4,5-dihydroxy-2-hexanone	Urine	*

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

Spain. Biological Limit Values (VLBs), Occupational Exposure Limits for Chemical Agents, Table 4

Components	Value	Determinant	Specimen	Sampling time
n-Hexane (CAS 110-54-3)	0,2 mg/l	2,5-Hexanodion a, sin hidrólisis	Urine	*

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

Switzerland. BAT-Werte (Biological Limit Values in the Workplace as per SUVA)

Components	Value	Determinant	Specimen	Sampling time
n-Hexane (CAS 110-54-3)	5 mg/l	2,5-Hexandion plus 4,5-Dihydroxy-2-hexanon	Urine	*

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

Recommended monitoring procedures Follow standard monitoring procedures.

Derived no effect levels (DNELs) Not available.

Predicted no effect concentrations (PNECs) Not available.

8.2. Exposure controls

Appropriate engineering controls Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Eye wash facilities and emergency shower must be available when handling this product.

Individual protection measures, such as personal protective equipment

General information	Use personal protective equipment as required. Personal protection equipment should be chosen according to the CEN standards and in discussion with the supplier of the personal protective equipment.
Eye/face protection	Chemical respirator with organic vapour cartridge and full facepiece.
Skin protection	
- Hand protection	Wear appropriate chemical resistant gloves.
- Other	Wear appropriate chemical resistant clothing. Use of an impervious apron is recommended.
Respiratory protection	Chemical respirator with organic vapour cartridge and full facepiece.
Thermal hazards	Wear appropriate thermal protective clothing, when necessary.
Hygiene measures	When using, do not eat, drink or smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.
Environmental exposure controls	Inform appropriate managerial or supervisory personnel of all environmental releases.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance

Physical state	Liquid.
Form	Aerosol
Colour	Not available.
Odour	Not available.
Odour threshold	Not available.
pH	Not available.
Melting point/freezing point	Not available.
Initial boiling point and boiling range	Not available.
Flash point	-104,0 °C (-155,2 °F) Pensky-Martens Closed Cup propellant
Evaporation rate	Not available.
Flammability (solid, gas)	Not available.
Upper/lower flammability or explosive limits	
Flammability limit - lower (%)	0,7 % estimated
Flammability limit - upper (%)	9,5 % estimated
Vapour pressure	Not available.
Density	1020,00 kg/m ³ concentrate
Vapour density	Not available.
Relative density	Not available.
Solubility(ies)	
Solubility (water)	Not available.
Solubility (other)	Not available.
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Not available.
Explosive properties	Not available.
Oxidising properties	Not available.
9.2. Other information	
Flash point class	Flammable IA
VOC	81 %

SECTION 10: Stability and reactivity

10.1. Reactivity	Strong oxidising agents. The product is stable and non-reactive under normal conditions of use, storage and transport.
10.2. Chemical stability	Risk of ignition.
10.3. Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
10.4. Conditions to avoid	Avoid temperatures exceeding the flash point. Contact with incompatible materials.
10.5. Incompatible materials	Strong oxidising agents. Nitrates. Fluorine. Chlorine.
10.6. Hazardous decomposition products	At thermal decomposition temperatures, carbon monoxide and carbon dioxide.

SECTION 11: Toxicological information

General information Occupational exposure to the substance or mixture may cause adverse effects.

Information on likely routes of exposure

Inhalation	May cause damage to organs through prolonged or repeated exposure by inhalation. May cause drowsiness and dizziness. Headache. Nausea, vomiting. Prolonged inhalation may be harmful.
Skin contact	Causes skin irritation.
Eye contact	Causes serious eye irritation.
Ingestion	Harmful if swallowed.
Symptoms	May cause drowsiness and dizziness. Headache. Nausea, vomiting. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Irritation of nose and throat. Skin irritation. May cause redness and pain.

11.1. Information on toxicological effects

Acute toxicity Harmful if swallowed. Narcotic effects.

Components	Species	Test results
n-Hexane (CAS 110-54-3)		
Acute		
Inhalation		
LC50	Mouse	48000 ppm, 4 Hours
Oral		
LD50	Rat	28710 mg/kg
Zinc oxide (CAS 1314-13-2)		
Acute		
Inhalation		
LC50	Mouse	> 5,7 mg/l, 4 Hours
Oral		
LD50	Mouse	7950 mg/kg
	Rat	> 5 g/kg

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

Skin corrosion/irritation	Causes skin irritation.
Serious eye damage/eye irritation	Causes serious eye irritation.
Respiratory sensitisation	Based on available data, the classification criteria are not met.
Skin sensitisation	Based on available data, the classification criteria are not met.
Germ cell mutagenicity	Based on available data, the classification criteria are not met.
Carcinogenicity	Based on available data, the classification criteria are not met.
Reproductive toxicity	Suspected of damaging fertility.
Specific target organ toxicity - single exposure	May cause drowsiness and dizziness.
Specific target organ toxicity - repeated exposure	May cause damage to organs through prolonged or repeated exposure.
Aspiration hazard	Due to partial or complete lack of data the classification is not possible.
Mixture versus substance information	No information available.

Other information Not available.

SECTION 12: Ecological information

12.1. Toxicity Harmful to aquatic life with long lasting effects.

Components	Species	Test results
n-Hexane (CAS 110-54-3)		
Aquatic		
Fish	LC50	Fathead minnow (Pimephales promelas) 2,101 - 2,981 mg/l, 96 hours
Zinc oxide (CAS 1314-13-2)		
Aquatic		
Fish	LC50	Fathead minnow (Pimephales promelas) 2246 mg/l, 96 hours

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

12.2. Persistence and degradability No data is available on the degradability of this product.

12.3. Bioaccumulative potential No data available.

Partition coefficient
n-octanol/water (log Kow)

2-methylpentane	3,74
3-Methylpentane	3,6
n-Hexane	3,9

Bioconcentration factor (BCF) Not available.

12.4. Mobility in soil No data available.

12.5. Results of PBT and vPvB assessment Not available.

12.6. Other adverse effects No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Residual waste Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

Contaminated packaging Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied. Do not re-use empty containers.

EU waste code The Waste code should be assigned in discussion between the user, the producer and the waste disposal company.

Disposal methods/information Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Contents under pressure. Do not puncture, incinerate or crush. This material and its container must be disposed of as hazardous waste. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.

Special precautions Dispose in accordance with all applicable regulations.

SECTION 14: Transport information

ADR

14.1. UN number	UN1950
14.2. UN proper shipping name	Aerosols, flammable
14.3. Transport hazard class(es)	
Class	2.1
Subsidiary risk	-
Hazard No. (ADR)	Not available.
Tunnel restriction code	Not available.
14.4. Packing group	Not applicable.
14.5. Environmental hazards	No.

14.6. Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

RID

14.1. UN number UN1950
14.2. UN proper shipping name Aerosols, flammable
14.3. Transport hazard class(es)
Class 2.1
Subsidiary risk -
Label(s) 2.1
14.4. Packing group Not applicable.
14.5. Environmental hazards No.
14.6. Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

ADN

14.1. UN number UN1950
14.2. UN proper shipping name Aerosols, flammable
14.3. Transport hazard class(es)
Class 2.1
Subsidiary risk -
Label(s) 2.1
14.4. Packing group Not applicable.
14.5. Environmental hazards No.
14.6. Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

IATA

14.1. UN number UN1950
14.2. UN proper shipping name Environmentally hazardous substance, liquid, n.o.s.
14.3. Transport hazard class(es)
Class 9
Subsidiary risk -
14.4. Packing group III
14.5. Environmental hazards Yes
ERG Code 9L
14.6. Special precautions for user Read safety instructions, SDS and emergency procedures before handling.
Other information
Passenger and cargo aircraft Allowed with restrictions.
Cargo aircraft only Allowed with restrictions.

IMDG

14.1. UN number UN1950
14.2. UN proper shipping name AEROSOLS, flammable
14.3. Transport hazard class(es)
Class 2.1
Subsidiary risk -
14.4. Packing group Not applicable.
14.5. Environmental hazards
Marine pollutant No.
EmS Not available.
14.6. Special precautions for user Read safety instructions, SDS and emergency procedures before handling.
14.7. Transport in bulk according to Annex II of Marpol and the IBC Code Not established.

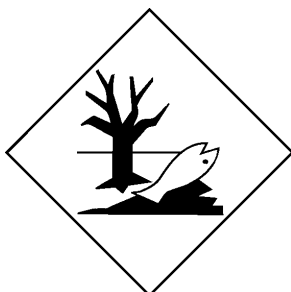
ADN; ADR; IMDG; RID



IATA



Marine pollutant



SECTION 15: Regulatory information

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

EU regulations

Authorisations

Restrictions on use

Regulation (EC) No. 1907/2006, REACH Annex XVII Substances subject to restriction on marketing and use as amended

2-methylpentane (CAS 107-83-5)

3-Methylpentane (CAS 96-14-0)

n-Hexane (CAS 110-54-3)

Other EU regulations

Directive 2012/18/EU on major accident hazards involving dangerous substances

2-methylpentane (CAS 107-83-5)

3-Methylpentane (CAS 96-14-0)

n-Hexane (CAS 110-54-3)

Zinc oxide (CAS 1314-13-2)

Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work

2-methylpentane (CAS 107-83-5)

3-Methylpentane (CAS 96-14-0)

n-Hexane (CAS 110-54-3)

Solvent Naphtha, Petroleum, Medium Aliphatic (CAS 64742-88-7)

Directive 94/33/EC on the protection of young people at work

n-Hexane (CAS 110-54-3)

Solvent Naphtha, Petroleum, Medium Aliphatic (CAS 64742-88-7)

Other regulations

The product is classified and labelled in accordance with EC directives or respective national laws
This Safety Data Sheet complies with the requirements of Regulation (EC) No 1907/2006.

National regulations

Young people under 18 years old are not allowed to work with this product according to EU Directive 94/33/EC on the protection of young people at work. Follow national regulation for work with chemical agents.

15.2. Chemical safety assessment

No Chemical Safety Assessment has been carried out.

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	No
Canada	Non-Domestic Substances List (NDSL)	Yes
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

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

SECTION 16: Other information

List of abbreviations

Not available.

References

Not available.

Information on evaluation method leading to the classification of mixture

The classification for health and environmental hazards is derived by a combination of calculator methods and test data, if available.

Full text of any H-statements not written out in full under Sections 2 to 15

H225 Highly flammable liquid and vapour.
H302 Harmful if swallowed.
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.
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.
H411 Toxic to aquatic life with long lasting effects.

Revision information

None.

Training information

Follow training instructions when handling this material.

Disclaimer

Bel-Ray Company, LLC cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release 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 or in any process, unless specified in the text.