

# 2020 MOTOR OIL SAVER 300ML

### Liqui Moly GmbH

Chemwatch: **47-8469** Version No: **5.1.1.1** 

Safety Data Sheet according to OSHA HazCom Standard (2012) requirements

#### Chemwatch Hazard Alert Code: 3

Issue Date: **09/04/2018** Print Date: **09/04/2018** S.GHS.USA.EN

### **SECTION 1 IDENTIFICATION**

#### **Product Identifier**

Product name	2020 MOTOR OIL SAVER 300ML
Synonyms	Item No. 2020
Other means of identification	Not Available

#### Recommended use of the chemical and restrictions on use

Relevant identified uses Additiv

### Name, address, and telephone number of the chemical manufacturer, importer, or other responsible party

Registered company name	Liqui Moly GmbH	
Address	rg-Wieland-Strasse 4 Ulm D-89081 Germany	
Telephone	+49 731 1420 0	
Fax	+49 731 1420 82	
Website	Not Available	
Email	Not Available	

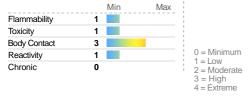
#### **Emergency phone number**

	••	
Association / Organisation	INFOTRAC	
Emergency telephone numbers	+1800 535 5053 (US & Canada)	
Other emergency telephone numbers	+1 352 323 3500 (International)	

## **SECTION 2 HAZARD(S) IDENTIFICATION**

### Classification of the substance or mixture

#### CHEMWATCH HAZARD RATINGS





Note: The hazard category numbers found in GHS classification in section 2 of this SDSs are NOT to be used to fill in the NFPA 704 diamond. Blue = Health Red = Fire Yellow = Reactivity White = Special (Oxidizer or water reactive substances)

Classification

Serious Eye Damage Category 1

# Label elements

Hazard pictogram(s)



SIGNAL WORD

DANGER

#### Hazard statement(s)

H318

Causes serious eye damage.

### Hazard(s) not otherwise specified

Not Applicable

### Precautionary statement(s) Prevention

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

#### Precautionary statement(s) Response

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.	
P310	Immediately call a POISON CENTER or doctor/physician.

### Precautionary statement(s) Storage

Not Applicable

#### Precautionary statement(s) Disposal

Not Applicable

#### **SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS**

#### Substances

See section below for composition of Mixtures

#### Mixtures

CAS No	%[weight]	Name	
112-07-2	1-10	ethylene glycol monobutyl ether acetate	
69011-36-5	3-<5	tridecanol, branched, ethoxylated	

#### **SECTION 4 FIRST-AID MEASURES**

### Description of first aid measures

Eye Contact	If this product comes in contact with the eyes:  Immediately hold eyelids apart and flush the eye continuously with running water.  Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids.  Continue flushing until advised to stop by the Poisons Information Centre or a doctor, or for at least 15 minutes.  Transport to hospital or doctor without delay.  Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.
Skin Contact	If skin or hair contact occurs:  ▶ Flush skin and hair with running water (and soap if available).  ▶ Seek medical attention in event of irritation.
Inhalation	<ul> <li>If furnes, aerosols or combustion products are inhaled remove from contaminated area.</li> <li>Other measures are usually unnecessary.</li> </ul>
Ingestion	<ul> <li>If swallowed do NOT induce vomiting.</li> <li>If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain open airway and prevent aspiration.</li> <li>Observe the patient carefully.</li> <li>Never give liquid to a person showing signs of being sleepy or with reduced awareness; i.e. becoming unconscious.</li> <li>Give water to rinse out mouth, then provide liquid slowly and as much as casualty can comfortably drink.</li> <li>Seek medical advice.</li> </ul>

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

See Section 11

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

Treat symptomatically.

# **SECTION 5 FIRE-FIGHTING MEASURES**

#### **Extinguishing media**

- ► Foam.
- Dry chemical powder.
- ▶ BCF (where regulations permit).
- Carbon dioxide.

### Special hazards arising from the substrate or mixture

Fire Incompatibility ▶ Avoid contamination with oxidising agents i.e. nitrates, oxidising acids, chlorine bleaches, pool chlorine etc. as ignition may result

#### Special protective equipment and precautions for fire-fighters

#### ▶ Alert Fire Brigade and tell them location and nature of hazard. ▶ Wear full body protective clothing with breathing apparatus. Fire Fighting Prevent, by any means available, spillage from entering drains or water course. ▶ Slight fire hazard when exposed to heat or flame. Heating may cause expansion or decomposition leading to violent rupture of containers. ▶ On combustion, may emit toxic fumes of carbon monoxide (CO). Fire/Explosion Hazard Combustion products include:

carbon dioxide (CO2)

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phosphorus oxides (POx)

sulfur oxides (SOx)

other pyrolysis products typical of burning organic material.

May emit poisonous fumes.

May emit corrosive fumes.

### **SECTION 6 ACCIDENTAL RELEASE MEASURES**

### Personal precautions, protective equipment and emergency procedures

See section 8

### **Environmental precautions**

See section 12

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

Minor Spills  Major Spills		<ul> <li>Remove all ignition sources.</li> <li>Clean up all spills immediately.</li> <li>Avoid breathing vapours and contact with skin and eyes.</li> <li>Control personal contact with the substance, by using protective</li> </ul>	
		Moderate hazard.  ► Clear area of personnel and move upwind.  ► Alort Fire Pricade and tall them leading and patters of bazard.	

- Wear breathing apparatus plus protective gloves.

Personal Protective Equipment advice is contained in Section 8 of the SDS.

#### **SECTION 7 HANDLING AND STORAGE**

#### Precautions for safe handling

Safe handling	<ul> <li>Avoid all personal contact, including inhalation.</li> <li>Wear protective clothing when risk of exposure or</li> <li>Use in a well-ventilated area.</li> <li>Prevent concentration in hollows and sumps.</li> </ul>		
Other information	<ul> <li>Store in original containers.</li> <li>Keep containers securely sealed.</li> <li>No smoking, naked lights or ignition sources.</li> <li>Store in a cool, dry, well-ventilated area.</li> </ul>		

### Conditions for safe storage, including any incompatibilities

<ul> <li>▶ Metal can or drum</li> <li>▶ Packaging as recommended by manufacturer.</li> <li>▶ Check all containers are clearly labelled and free from leaks.</li> </ul>	
Storage incompatibility	Avoid reaction with oxidising agents

equipment.

### **SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION**

### **Control parameters**

### OCCUPATIONAL EXPOSURE LIMITS (OEL)

#### INGREDIENT DATA

Source	Ingredient	Material name	TWA	STEL	Peak	Notes
US NIOSH Recommended Exposure Limits (RELs)	ethylene glycol monobutyl ether acetate	Butoxyethyl acetate, Butyl Cellosolve® acetate, Butyl glycol acetate, EGBEA, Ektasolve EB® acetate, Ethylene glycol monobutyl ether acetate	33 mg/m3 /5 ppm	Not Available	Not Available	Not Available
US ACGIH Threshold Limit Values (TLV)	ethylene glycol monobutyl ether acetate	2-Buloxyethyl acetate	20 ppm	Not Available	Not Available	TLV® Basis: Hemolysis

### **EMERGENCY LIMITS**

Ingredient	Material name	TEEL-1	TEEL-2	TEEL-3
ethylene glycol monobutyl ether	Butoxyethanol acetate, 2-; (Ethylene glycol monobutyl ether acetate)	15 ppm	35 ppm	210 ppm

Ingredient	Original IDLH	Revised IDLH
ethylene glycol monobutyl ether acetate	Not Available	Not Available
tridecanol, branched, ethoxylated	Not Available	Not Available

### **Exposure controls**

Appropriate engineering

Engineering controls are used to remove a hazard or place a barrier between the worker and the hazard. Well-designed engineering controls can be

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highly effective in protecting workers and will typically be independent of worker interactions to provide this high level of protection. The basic types of engineering controls are: controls Process controls which involve changing the way a job activity or process is done to reduce the risk. Enclosure and/or isolation of emission source which keeps a selected hazard "physically" away from the worker and ventilation that strategically "adds" and "removes" air in the work environment. Personal protection ▶ Safety glasses with side shields Chemical goggles Eve and face protection Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. A written policy document, describing the wearing of lenses or restrictions on use, should be created for each workplace or task. Skin protection See Hand protection below Personal hygiene is a key element of effective hand care. Hands/feet protection ▶ Wear chemical protective gloves, e.g. PVC. ▶ Wear safety footwear or safety gumboots, e.g. Rubber **Body protection** See Other protection below Overalls. Other protection ▶ P.V.C. apron. ▶ Barrier cream. Thermal hazards Not Available

#### Recommended material(s)

#### GLOVE SELECTION INDEX

Glove selection is based on a modified presentation of the:

"Forsberg Clothing Performance Index".

The effect(s) of the following substance(s) are taken into account in the *computer-generated* selection:

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Material	CPI
NAT+NEOPR+NITRILE	С

<sup>\*</sup> CPI - Chemwatch Performance Index

A: Best Selection

B: Satisfactory; may degrade after 4 hours continuous immersion

C: Poor to Dangerous Choice for other than short term immersion

**NOTE**: As a series of factors will influence the actual performance of the glove, a final selection must be based on detailed observation. -

#### Respiratory protection

Type A-P Filter of sufficient capacity. (AS/NZS 1716 & 1715, EN 143:2000 & 149:2001, ANSI Z88 or national equivalent)

Where the concentration of gas/particulates in the breathing zone, approaches or exceeds the "Exposure Standard" (or ES), respiratory protection is required.

Degree of protection varies with both face-piece and Class of filter; the nature of protection varies with Type of filter.

Required Minimum Protection Factor	Half-Face Respirator	Full-Face Respirator	Powered Air Respirator
up to 10 x ES	A-AUS P2	-	A-PAPR-AUS / Class 1 P2
up to 50 x ES	-	A-AUS / Class 1 P2	-
up to 100 x ES	-	A-2 P2	A-PAPR-2 P2 ^

#### ^ - Full-face

 $A(All\ classes) = Organic\ vapours,\ B\ AUS\ or\ B1 = Acid\ gasses,\ B2 = Acid\ gas\ or\ hydrogen\ cyanide(HCN),\ E = Sulfur\ dioxide(SO2),\ G = Agricultural\ chemicals,\ K = Ammonia(NH3),\ Hg = Mercury,\ NO = Oxides\ of\ nitrogen,\ MB = Methyl\ bromide,\ AX = Low\ boiling\ point\ organic\ compounds(below\ 65\ degC)$ 

Cartridge respirators should never be used for emergency ingress or in areas of unknown vapour concentrations or oxygen content. The wearer must be warned to leave the contaminated area immediately on detecting any odours through the respirator. The odour may indicate that the mask is not functioning properly, that the vapour concentration is too high, or that the mask is not properly fitted. Because of these limitations, only restricted use of cartridge respirators is considered appropriate.

### **SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES**

#### Information on basic physical and chemical properties

Appearance	Clear yellow liquid with characteristic odour; not miscible with water.		
Physical state	Liquid	Relative density (Water = 1)	0.896
Odour	Not Available	Partition coefficient n-octanol / water	Not Available
Odour threshold	Not Available	Auto-ignition temperature (°C)	Not Available
pH (as supplied)	Not Applicable	Decomposition temperature	Not Available
Melting point / freezing point (°C)	Not Available	Viscosity (cSt)	1299
Initial boiling point and boiling range (°C)	Not Available	Molecular weight (g/mol)	Not Applicable
Flash point (°C)	>100	Taste	Not Available
Evaporation rate	Not Available	Explosive properties	Not Available
Flammability	Not Applicable	Oxidising properties	Not Available
Upper Explosive Limit (%)	Not Available	Surface Tension (dyn/cm or mN/m)	Not Available
Lower Explosive Limit (%)	Not Available	Volatile Component (%vol)	Not Available

<sup>\*</sup> Where the glove is to be used on a short term, casual or infrequent basis, factors such as "feel" or convenience (e.g. disposability), may dictate a choice of gloves which might otherwise be unsuitable following long-term or frequent use. A qualified practitioner should be consulted.

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Vapour pressure (kPa)	Not Available	Gas group	Not Available
Solubility in water (g/L)	Immiscible	pH as a solution (1%)	Not Available
Vapour density (Air = 1)	Not Available	VOC g/L	Not Available

### **SECTION 10 STABILITY AND REACTIVITY**

Reactivity	See section 7
Chemical stability	<ul> <li>Unstable in the presence of incompatible materials.</li> <li>Product is considered stable.</li> <li>Hazardous polymerisation will not occur.</li> </ul>
Possibility of hazardous reactions	See section 7
Conditions to avoid	See section 7
Incompatible materials	See section 7
Hazardous decomposition products	See section 5

### **SECTION 11 TOXICOLOGICAL INFORMATION**

#### Information on toxicological effects

Inhaled	The material is not thought to produce either adverse health effects or irritation of the respiratory tract following inhalation (as classified by EC Directives using animal models). Nevertheless, adverse systemic effects have been produced following exposure of animals by at least one other route and good hygiene practice requires that exposure be kept to a minimum and that suitable control measures be used in an occupational setting.		
Ingestion	Accidental ingestion of the material may be damaging to the	health of the individual.	
Skin Contact	The liquid may be able to be mixed with fats or oils and may degrease the skin, producing a skin reaction described as non-allergic contact dermatitis. The material is unlikely to produce an irritant dermatitis as described in EC Directives.  Open cuts, abraded or irritated skin should not be exposed to this material  Entry into the blood-stream, through, for example, cuts, abrasions or lesions, may produce systemic injury with harmful effects. Examine the skin prior to the use of the material and ensure that any external damage is suitably protected.		
Eye	If applied to the eyes, this material causes severe eye dama	ge.	
Chronic	Substance accumulation, in the human body, may occur and	may cause some concern following repeated or long-term occupational exposure.	
2020 MOTOR OIL SAVER 300ML	TOXICITY	IRRITATION	
	Not Available	Not Available	
	TOXICITY	IRRITATION	
ethylene glycol monobutyl ether acetate	Dermal (rabbit) LD50: 1500 mg/kg <sup>[2]</sup>	Eye (rabbit): 500 mg/24hr - mild	
acciaic	Oral (rat) LD50: 1600 mg/kg <sup>[1]</sup>	Skin (rabbit): 500 mg - mild	
	TOXICITY	IRRITATION	
tridecanol, branched, ethoxylated	Oral (rat) LD50: 1080 mg/kg <sup>[2]</sup>	Eye (rabbit): irritant *	
olioxylatou		Skin (rabbit): non-irritating *	
Legend:	Value obtained from Europe ECHA Registered Substanc data extracted from RTECS - Register of Toxic Effect of che	es - Acute toxicity 2.* Value obtained from manufacturer's SDS. Unless otherwise specified	

#### TRIDECANOL, BRANCHED, **ETHOXYLATED**

Humans have regular contact with alcohol ethoxylates through a variety of industrial and consumer products such as soaps, detergents and other cleaning products. Exposure to these chemicals can occur through swallowing, inhalation, or contact with the skin or eyes. Studies of acute toxicity show that relatively high volumes would have to occur to produce any toxic response. No death due to poisoning with alcohol ethoxylates has ever been reported. Both laboratory and animal testing has shown that there is no evidence for alcohol ethoxylates (AEs) causing genetic damage, mutations or cancer. No adverse reproductive or developmental effects were observed.

\* [BASF Canada]

Acute Toxicity	0	Carcinogenicity	0
Skin Irritation/Corrosion	0	Reproductivity	0
Serious Eye Damage/Irritation	✓	STOT - Single Exposure	0
Respiratory or Skin sensitisation	0	STOT - Repeated Exposure	0
Mutagenicity	0	Aspiration Hazard	0

Legend:

- ★ Data available but does not fill the criteria for classification
- Data available to make classification
- O Data Not Available to make classification

# **SECTION 12 ECOLOGICAL INFORMATION**

# Toxicity

2020 MOTOR OIL SAVER 300ML	ENDPOINT TEST DURATION (HR)	SPECIES	VALUE SOURCE

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Not Available	Not Available	Not Available	Not Available	Not Available
ENDPOINT	TEST DURATION (HR)	SPECIES	VALUE	SOURCE
EC50	48	Crustacea	=37mg/L	1
EC50	72	Algae or other aquatic plants	>500mg/L	1
ENDPOINT	TEST DURATION (HR)	SPECIES	VALUE	SOURCE
Not Available	Not Available	Not Available	Not Available	Not Available
		· ·		
	Available  ENDPOINT  EC50  EC50  ENDPOINT  Not  Available  Extracted from 1	Available    Not Available	Available  Not Available  Not Available  Not Available  Not Available  ENDPOINT TEST DURATION (HR)  EC50 48  EC50 72  Algae or other aquatic plants  ENDPOINT TEST DURATION (HR)  SPECIES  Not Available  Not Available  Not Available  Not Available  Extracted from 1. IUCLID Toxicity Data 2. Europe ECHA Registered Substances - Ecotoxicological Information - A	Available         Not Available         Available           ENDPOINT         TEST DURATION (HR)         SPECIES         VALUE           EC50         48         Crustacea         =37mg/L           EC50         72         Algae or other aquatic plants         >500mg/L           ENDPOINT         TEST DURATION (HR)         SPECIES         VALUE           Not         Not Available         Not         Not

DO NOT discharge into sewer or waterways

#### Persistence and degradability

Ingredient	Persistence: Water/Soil	Persistence: Air
ethylene glycol monobutyl ether acetate	LOW	LOW

#### **Bioaccumulative potential**

Ingredient	Bioaccumulation
ethylene glycol monobutyl ether acetate	LOW (BCF = 3.2)

#### Mobility in soil

Ingredient	Mobility
ethylene glycol monobutyl ether acetate	LOW (KOC = 10)

#### **SECTION 13 DISPOSAL CONSIDERATIONS**

#### Waste treatment methods

Legislation addressing waste disposal requirements may differ by country, state and/ or territory. Each user must refer to laws operating in their area. In some areas, certain wastes must be tracked.

A Hierarchy of Controls seems to be common - the user should investigate:

- ► Reduction
- Reuse
- Recycling
- Disposal (if all else fails)

Product / Packaging disposal

This material may be recycled if unused, or if it has not been contaminated so as to make it unsuitable for its intended use.

- ▶ DO NOT allow wash water from cleaning or process equipment to enter drains.
- It may be necessary to collect all wash water for treatment before disposal.
- In all cases disposal to sewer may be subject to local laws and regulations and these should be considered first.
- ▶ Where in doubt contact the responsible authority.
- Recycle wherever possible or consult manufacturer for recycling options.
- Consult State Land Waste Authority for disposal.
- Bury or incinerate residue at an approved site
- ▶ Recycle containers if possible, or dispose of in an authorised landfill.

### **SECTION 14 TRANSPORT INFORMATION**

# **Labels Required**

Marine Pollutant

Land transport (DOT): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

Air transport (ICAO-IATA / DGR): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

Sea transport (IMDG-Code / GGVSee): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

Transport in bulk according to Annex II of MARPOL and the IBC code

Not Applicable

### **SECTION 15 REGULATORY INFORMATION**

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

ETHYLENE GLYCOL MONOBUTYL ETHER ACETATE(112-07-2) IS FOUND ON THE FOLLOWING REGULATORY LISTS

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US - California OEHHA/ARB - Acute Reference Exposure Levels and Target Organs (RELs)	US Clean Air Act - Hazardous Air Pollutants
US - California OEHHA/ARB - Chronic Reference Exposure Levels and Target Organs	US EPCRA Section 313 Chemical List
(CRELs)	US NIOSH Recommended Exposure Limits (RELs)
US - Pennsylvania - Hazardous Substance List	US Toxic Substances Control Act (TSCA) - Chemical Substance Inventory
US ACGIH Threshold Limit Values (TLV)	US TSCA Chemical Substance Inventory - Interim List of Active Substances
US ACGIH Threshold Limit Values (TLV) - Carcinogens	·

### TRIDECANOL, BRANCHED, ETHOXYLATED(69011-36-5) IS FOUND ON THE FOLLOWING REGULATORY LISTS

US Toxic Substances Control Act (TSCA) - Chemical Substance Inventory US TSCA Chemical Substance Inventory - Interim List of Active Substances

### **Federal Regulations**

### Superfund Amendments and Reauthorization Act of 1986 (SARA)

### SECTION 311/312 HAZARD CATEGORIES

SECTION STRUCTURE STATES STATES	
Flammable (Gases, Aerosols, Liquids, or Solids)	No
Gas under pressure	No
Explosive	No
Self-heating Self-heating	No
Pyrophoric (Liquid or Solid)	No
Pyrophoric Gas	No
Corrosive to metal	No
Oxidizer (Liquid, Solid or Gas)	No
Organic Peroxide	No
Self-reactive	No
In contact with water emits flammable gas	No
Combustible Dust	No
Carcinogenicity	No
Acute toxicity (any route of exposure)	No
Reproductive toxicity	No
Skin Corrosion or Irritation	No
Respiratory or Skin Sensitization	No
Serious eye damage or eye irritation	Yes
Specific target organ toxicity (single or repeated exposure)	No
Aspiration Hazard	No
Germ cell mutagenicity	No
Simple Asphyxiant	No

### US. EPA CERCLA HAZARDOUS SUBSTANCES AND REPORTABLE QUANTITIES (40 CFR 302.4)

None Reported

### State Regulations

### US. CALIFORNIA PROPOSITION 65

None Reported

National Inventory	Status
Australia - AICS	Y
Canada - DSL	Υ
Canada - NDSL	N (tridecanol, branched, ethoxylated; ethylene glycol monobutyl ether acetate)
China - IECSC	Υ
Europe - EINEC / ELINCS / NLP	Y
Japan - ENCS	N (tridecanol, branched, ethoxylated; ethylene glycol monobutyl ether acetate)
Korea - KECI	Υ
New Zealand - NZIoC	Y
Philippines - PICCS	Υ
USA - TSCA	Y
Legend:	Y = All ingredients are on the inventory N = Not determined or one or more ingredients are not on the inventory and are not exempt from listing(see specific ingredients in brackets)

## **SECTION 16 OTHER INFORMATION**

### Other information

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Classification of the preparation and its individual components has drawn on official and authoritative sources as well as independent review by the Chemwatch Classification committee using

The SDS is a Hazard Communication tool and should be used to assist in the Risk Assessment. Many factors determine whether the reported Hazards are Risks in the workplace or other

settings. Risks may be determined by reference to Exposures Scenarios. Scale of use, frequency of use and current or available engineering controls must be considered.

### **Definitions and abbreviations**

available literature references.

PC-TWA: Permissible Concentration-Time Weighted Average

PC-STEL: Permissible Concentration-Short Term Exposure Limit

IARC: International Agency for Research on Cancer

ACGIH: American Conference of Governmental Industrial Hygienists

STEL: Short Term Exposure Limit

TEEL: Temporary Emergency Exposure Limit。

IDLH: Immediately Dangerous to Life or Health Concentrations

OSF: Odour Safety Factor

NOAEL: No Observed Adverse Effect Level LOAEL: Lowest Observed Adverse Effect Level

TLV: Threshold Limit Value LOD: Limit Of Detection OTV: Odour Threshold Value BCF: BioConcentration Factors

BEI: Biological Exposure Index

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