

Revision date:
14.02.2017**Multicor LH 3 Extra****Article No.: 24680**

Page 1 of 9

SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1. Product identifier**

24680 Multicor LH 3 Extra

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

Corrosion protection agent

1.3. Details of the supplier of the safety data sheet

Company name:	Zeller+Gmelin GmbH & Co. KG	
Street:	Schlossstr. 20	
Place:	D-73054 Eislingen	
Telephone:	+49 (0) 7161 / 802-0	Telefax: +49 (0) 7161 / 802-290
e-mail:	info@zeller-gmelin.de	
Contact person:	Uwe Allmendinger	Telephone: +49 (0) 7161 / 802-297
e-mail:	produktsicherheit@zeller-gmelin.de	
Internet:	www.zeller-gmelin.de	
Responsible Department:	Produktsicherheit / Product Safety	

1.4. Emergency telephone number:

Germany: +49 (0) 7161 / 802-400
In England and Wales: NHS Direct: 0845 4647 or 111 In Scotland: NHS 24 - 08454 24 24 24 In Republic of Ireland: 01 809 2166

SECTION 2: Hazards identification**2.1. Classification of the substance or mixture****Regulation (EC) No. 1272/2008**

Hazard categories:

Aspiration hazard: Asp. Tox. 1

Hazard Statements:

May be fatal if swallowed and enters airways.

2.2. Label elements**Regulation (EC) No. 1272/2008****Hazard components for labelling**

hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, <2% aromatics

distillates (petroleum), hydrotreated light paraffinic

hydrocarbons, C14-C18, n-alkanes, isoalkanes, cyclics, aromatics (2-30%)

distillates (petroleum), hydrotreated heavy naphthenic

Signal word: Danger**Pictograms:****Hazard statements**

H304 May be fatal if swallowed and enters airways.

Precautionary statements

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

P331 Do NOT induce vomiting.

Special labelling of certain mixtures

EUH066 Repeated exposure may cause skin dryness or cracking.

2.3. Other hazards

Results of PBT and vPvB assessment: not applicable.

SECTION 3: Composition/information on ingredients

Revision date:
14.02.2017

Multicor LH 3 Extra
Article No.: 24680

Page 2 of 9

3.2. Mixtures
Chemical characterization

Hydrocarbon-based mixture.

Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	GHS Classification			
	hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, <2% aromatics			25 - <= 100 %
	918-481-9		01-2119457273-39	
	Asp. Tox. 1; H304 EUH066			
64742-55-8	distillates (petroleum), hydrotreated light paraffinic			10 - < 20 %
	265-158-7	649-468-00-3	01-2119487077-29	
	Asp. Tox. 1; H304			
	hydrocarbons, C14-C18, n-alkanes, isoalkanes, cyclics, aromatics (2-30%)			10 - < 20 %
	920-360-0		01-2119448343-41	
	Asp. Tox. 1; H304 EUH066			
1474044-79-5	calcium bis(dinonylnaphthalenesulphonate)			5 - < 10 %
	939-717-7		01-2119980985-16	
	Skin Irrit. 2, Eye Irrit. 2; H315 H319			
111-76-2	2-Butoxy-ethanol			2.5 - < 5 %
	203-905-0	603-014-00-0	01-2119475108-36	
	Acute Tox. 4, Acute Tox. 4, Acute Tox. 4, Skin Irrit. 2, Eye Irrit. 2; H332 H312 H302 H315 H319			

Full text of H and EUH statements: see section 16.

SECTION 4: First aid measures
4.1. Description of first aid measures
General information

When in doubt or if symptoms are observed, get medical advice. If unconscious place in recovery position and seek medical advice. Remove contaminated, saturated clothing immediately.

After inhalation

Remove casualty to fresh air and keep warm and at rest.

After contact with skin

After contact with skin, wash immediately with plenty of water and soap.

After contact with eyes

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately.

After ingestion

If swallowed, rinse mouth with water (only if the person is conscious). Let water be drunken in little sips (dilution effect). Call a physician immediately. Do NOT induce vomiting.

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

When in doubt or if symptoms are observed, get medical advice.

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

No information available.

SECTION 5: Firefighting measures
5.1. Extinguishing media
Suitable extinguishing media

 alcohol resistant foam, Extinguishing powder, Carbon dioxide (CO₂).

Revision date:
14.02.2017

Multicor LH 3 Extra
Article No.: 24680

Page 3 of 9

Unsuitable extinguishing media

Full water jet.

5.2. Special hazards arising from the substance or mixture

 Hazardous decomposition products: Carbon monoxide Carbon dioxide (CO₂). Do not inhale explosion and combustion gases.

5.3. Advice for firefighters

In case of fire: Wear self-contained breathing apparatus.

Additional information

Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water. Do not allow to enter into soil/subsoil.

SECTION 6: Accidental release measures
6.1. Personal precautions, protective equipment and emergency procedures

See protective measures under point 7 and 8.

6.2. Environmental precautions

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil. Clean contaminated articles and floor according to the environmental legislation.

6.3. Methods and material for containment and cleaning up

Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents). Treat the recovered material as prescribed in the section on waste disposal.

6.4. Reference to other sections

See protective measures under point 7 and 8.

SECTION 7: Handling and storage
7.1. Precautions for safe handling
Advice on safe handling

Use personal protection equipment. Do not eat, drink or smoke when using this product. Provide fresh air. Handle and open container with care. Conditions to avoid: generation/formation of aerosols.

Advice on protection against fire and explosion

No special measures are necessary.

7.2. Conditions for safe storage, including any incompatibilities
Requirements for storage rooms and vessels

Protect against: Frost. Keep away from heat. Protect against direct sunlight. Keep container tightly closed in a cool, well-ventilated place.

7.3. Specific end use(s)

Observe technical data sheet.

SECTION 8: Exposure controls/personal protection
8.1. Control parameters
Exposure limits (EH40)

CAS No	Substance	ppm	mg/m ³	fibres/ml	Category	Origin
111-76-2	2-Butoxyethanol	25	123		TWA (8 h)	WEL
		50	246		STEL (15 min)	WEL

Biological Monitoring Guidance Values (EH40)

CAS No	Substance	Parameter	Value	Test material	Sampling time
111-76-2	2-Butoxyethanol	butoxyacetic acid (creatinine)	240 mmol/mol	urine	Post shift

Revision date:
14.02.2017

Multicor LH 3 Extra
Article No.: 24680

Page 4 of 9

DNEL/DMEL values

CAS No	Substance	Exposure route	Effect	Value
111-76-2	2-Butoxy-ethanol			
Consumer DNEL, long-term		oral	systemic	3,2 mg/kg bw/day
Consumer DNEL, acute		dermal	systemic	44,5 mg/kg bw/day
Worker DNEL, acute		dermal	systemic	89 mg/kg bw/day
Consumer DNEL, long-term		dermal	systemic	38 mg/kg bw/day
Worker DNEL, long-term		dermal	systemic	75 mg/kg bw/day
Consumer DNEL, acute		inhalation	local	123 mg/m ³
Worker DNEL, acute		inhalation	local	246 mg/m ³
Consumer DNEL, acute		inhalation	systemic	426 mg/m ³
Worker DNEL, acute		inhalation	systemic	663 mg/m ³
Consumer DNEL, long-term		inhalation	systemic	49 mg/m ³
Worker DNEL, long-term		inhalation	systemic	98 mg/m ³

PNEC values

CAS No	Substance	Value
111-76-2	2-Butoxy-ethanol	
Freshwater		8,8 mg/l
Marine water		0,88 mg/l
Freshwater sediment		34,6 mg/kg
Marine sediment		3,46 mg/kg
Micro-organisms in sewage treatment plants (STP)		463 mg/kg
Soil		3,13 mg/kg

8.2. Exposure controls
Appropriate engineering controls

See chapter 7. No additional measures necessary.

Protective and hygiene measures

When using do not eat, drink, smoke, sniff.

Eye/face protection

Eye glasses with side protection.

Hand protection

Wear suitable gloves. Recommended glove articles: DIN EN 374. Suitable material: NBR (Nitrile rubber). Breakthrough time (maximum wearing time): > 480 min (Thickness of the glove material: 0.4 mm). Breakthrough times and swelling properties of the material must be taken into consideration. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves. Barrier creams can help protecting exposed skin areas. In no case should they be used after contact.

Skin protection

Protective clothing.

Respiratory protection

With correct and proper use, and under normal conditions, breathing protection is not required. When splashes or fine mist form, a permitted breathing apparatus suitable for these purposes must be used. Suitable respiratory protection apparatus: Filtering Half-face mask (DIN EN 149), e.g. FFA P / FFP3.

Environmental exposure controls

Do not allow to enter into surface water or drains.

Revision date:
14.02.2017

Multicor LH 3 Extra
Article No.: 24680

Page 5 of 9

SECTION 9: Physical and chemical properties
9.1. Information on basic physical and chemical properties

Physical state:	Liquid	
Colour:	brownish	
Odour:	characteristic	
		Test method
pH-Value:	not applicable	
Changes in the physical state		
Melting point:	not determined	
Initial boiling point and boiling range:	>170 °C	
Pour point:	not determined	
Flash point:	> 61 °C	EN ISO 2592
Lower explosion limits:	0,6 vol. %	
Upper explosion limits:	7,0 vol. %	
Ignition temperature:	not determined	
Decomposition temperature:	No information available.	
Vapour pressure: (at 20 °C)	0,50 hPa	
Density (at 15 °C):	0,86 g/cm ³	DIN EN ISO 12185
Water solubility:	insoluble	
Partition coefficient:	not determined	
Viscosity / dynamic:	not determined	
Viscosity / kinematic: (at 20 °C)	12 mm ² /s	ASTM D 7042
Flow time:	not determined	
Vapour density:	not determined	
Evaporation rate:	not determined	

9.2. Other information

No information available.

SECTION 10: Stability and reactivity
10.1. Reactivity

No information available.

10.2. Chemical stability

No information available.

10.3. Possibility of hazardous reactions

No hazardous reaction when handled and stored according to provisions.

10.4. Conditions to avoid

Heat.

10.5. Incompatible materials

No information available.

10.6. Hazardous decomposition products

No information available.

SECTION 11: Toxicological information
11.1. Information on toxicological effects

Revision date:
14.02.2017

Multicor LH 3 Extra
Article No.: 24680

Page 6 of 9

Acute toxicity

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

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
	hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, <2% aromatics				
	oral	LD50 >5000 mg/kg	Rat		
	dermal	LD50 >5000 mg/kg	Rabbit		
	inhalation (4 h) vapour	LC50 >4951 mg/l	Rat		
	hydrocarbons, C14-C18, n-alkanes, isoalkanes, cyclics, aromatics (2-30%)				
	oral	LD50 > 4150 mg/kg	Rat	ECHA Dossier	
	dermal	LD50 > 2000,0 mg/kg	Rabbit	ECHA Dossier	
	inhalation (4 h) aerosol	LC50 > 5,28 mg/l	Rat	ECHA Dossier	
111-76-2	2-Butoxy-ethanol				
	oral	LD50 470 mg/kg	Rat		
	dermal	ATE 1100 mg/kg			
	inhalation vapour	ATE 11 mg/l			
	inhalation aerosol	ATE 1,5 mg/l			

Irritation and corrosivity

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

Sensitising effects

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

Carcinogenic/mutagenic/toxic effects for reproduction

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

STOT-single exposure

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

STOT-repeated exposure

Repeated exposure may cause skin dryness or cracking.

Aspiration hazard

May be fatal if swallowed and enters airways. (hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, <2% aromatics; distillates (petroleum), hydrotreated light paraffinic; hydrocarbons, C14-C18, n-alkanes, isoalkanes, cyclics, aromatics (2-30%))

Practical experience
Other observations

Keeping to the general worker's protection rules and the industrial hygienics, there is no risk in handling this product through the personnel.

SECTION 12: Ecological information
12.1. Toxicity

There are no data available on the mixture itself.

Revision date:
14.02.2017

Multicor LH 3 Extra
Article No.: 24680

Page 7 of 9

CAS No	Chemical name					
	Aquatic toxicity	Dose	[h] [d]	Species	Source	Method
	hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, <2% aromatics					
	Acute fish toxicity	LC50 >1000 mg/l	96 h	Oncorhynchus mykiss (Rainbow trout)	OECD 203	
	Acute algae toxicity	ErC50 >1000 mg/l	72 h	Pseudokirchneriella subcapitata	OECD 201	
	Acute crustacea toxicity	EC50 >1000 mg/l	48 h	Daphnia magna (Big water flea)	OECD 202	

12.2. Persistence and degradability

There are no data available on the mixture itself.

CAS No	Chemical name			
	Method	Value	d	Source
	Evaluation			
	hydrocarbons, C14-C18, n-alkanes, isoalkanes, cyclics, aromatics (2-30%)			
	OECD 301F/ ISO 9408/ EEC 92/69/V, C.4-D	60,7%	28	ECHA Dossier
	Readily biodegradable (according to OECD criteria).			

12.3. Bioaccumulative potential

There are no data available on the mixture itself.

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
	hydrocarbons, C14-C18, n-alkanes, isoalkanes, cyclics, aromatics (2-30%)	> 3,50
111-76-2	2-Butoxy-ethanol	0,81

12.4. Mobility in soil

No data available

12.5. Results of PBT and vPvB assessment

No data available

12.6. Other adverse effects

No data available

SECTION 13: Disposal considerations
13.1. Waste treatment methods
Advice on disposal

Do not allow to enter into surface water or drains. This material and its container must be disposed of in a safe way. Waste disposal according to EC directives 75/442/EEC and 91/689/EEC in the corresponding versions, covering waste and dangerous waste.

Waste disposal number of waste from residues/unused products

070604 WASTES FROM ORGANIC CHEMICAL PROCESSES; wastes from the MFSU of fats, grease, soaps, detergents, disinfectants and cosmetics; other organic solvents, washing liquids and mother liquors; hazardous waste

Contaminated packaging

Non-contaminated packages may be recycled. Consult the appropriate local waste disposal expert about waste disposal.

SECTION 14: Transport information
Land transport (ADR/RID)

- 14.1. UN number:** No dangerous good in sense of this transport regulation.
14.2. UN proper shipping name: No dangerous good in sense of this transport regulation.
14.3. Transport hazard class(es): No dangerous good in sense of this transport regulation.
14.4. Packing group: No dangerous good in sense of this transport regulation.

Revision date:
14.02.2017**Multicor LH 3 Extra**
Article No.: 24680

Page 8 of 9

Marine transport (IMDG)

14.1. UN number:	No dangerous good in sense of this transport regulation.
14.2. UN proper shipping name:	No dangerous good in sense of this transport regulation.
14.3. Transport hazard class(es):	No dangerous good in sense of this transport regulation.
14.4. Packing group:	No dangerous good in sense of this transport regulation.
Marine pollutant:	NO

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number:	No dangerous good in sense of this transport regulation.
14.2. UN proper shipping name:	No dangerous good in sense of this transport regulation.
14.3. Transport hazard class(es):	No dangerous good in sense of this transport regulation.
14.4. Packing group:	No dangerous good in sense of this transport regulation.

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: no

14.6. Special precautions for user

No data available

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

No data available

SECTION 15: Regulatory information**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****EU regulatory information**

2010/75/EU (VOC): 39,1 % (335,8 g/l)

National regulatory information

Water contaminating class (D): 2 - clearly water contaminating

15.2. Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information**Changes**

This data sheet contains changes from the previous version in section(s): 2,9,12,14,15.

Abbreviations and acronyms

ADR: Accord européen relatif au transport international des marchandises dangereuses par route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
RID: Règlement concernant le transport international ferroviaire des marchandises dangereuses (Regulations concerning the International Carriage of Dangerous Goods by Rail)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
ICAO: International Civil Aviation Organization
CAS: Chemical Abstracts Service (a division of the American Chemical Society)
DNEL/DMEL: Derived No-Effect Level / Derived Minimal Effect Level
PNEC: Predicted No Effect Concentration
WEL (UK): Workplace Exposure Limits
TWA (EC): Time-Weighted Average
STEL (EC): Short Term Exposure Limit
ATE: Acute Toxicity Estimate
LD50: Lethal Dose, 50% (median lethal dose)
LC50: Lethal Concentration, 50% (median lethal concentration)
EC50: half maximal Effective Concentration
ErC50: EC50 in terms of reduction of growth rate
AwSV: Verordnung über Anlagen zum Umgang mit wassergefährdenden Stoffen
VwVwS: Verwaltungsvorschrift wassergefährdende Stoffe

Revision date:
14.02.2017

Multicor LH 3 Extra

Article No.: 24680

Page 9 of 9

Relevant H and EUH statements (number and full text)

H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H312	Harmful in contact with skin.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
EUH066	Repeated exposure may cause skin dryness or cracking.

Further Information

Safety Data Sheet according to COMMISSION REGULATION (EU) 2015/830 of 28 May 2015 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH).

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)