

Material Safety Data Sheet

Safety data sheet according to Regulation (EC) No. 1907/2006

Printing date : 26.01.2012
Product name : e.headlights

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

1.1 Product identifier: e.headlights

**1.2 Relevant identified uses of the substance or mixture and uses advised against
Application of the substance / the preparation Activator**

3K Paint for transparent polycarbonate

1.3 Details of the supplier of the safety data sheet

ALKEMIA SRL
VIA SACCARDO, 37
20134 MILANO ITALY

E-mail address
info.alkemia@alice.it

1.4 Emergency phone

+39.2.21872267

**SECTION 2 - Hazards Identification
Classification of the substance or mixture**

Classification according to Regulation (EC) No 1272/2008

- GHS02 flame

Flam. Liq. 3 H226 Flammable liquid and vapour.

Aquatic Chronic 3 H412 Harmful to aquatic life with long lasting effects.

Classification according to Directive 67/548/EEC or Directive 1999/45/EC

Risk Warnings

R10-52/53-66 : Flammable. Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
Repeated exposure may cause skin dryness or cracking.

Information concerning particular hazards for human and environment : The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.
At long or repeated contact with skin it may cause dermatitis due to the degreasing effect of the solvent.

Classification system : The classification is in line with current EC lists. It is expanded, however, by information from

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technical literature and by information furnished by supplier companies.

Label elements : The product has been classified and labelled in accordance with EC Directives / Ordinance on Hazardous Materials (GefStoffV).

Labelling according to EU guidelines

R10 : Flammable.

R52/53 : Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

R66 : Repeated exposure may cause skin dryness or cracking.

Labelling for Industrial Users

S23 : Do not breathe fumes.

S24 : Avoid contact with skin.

S38 : In case of insufficient ventilation, wear suitable respiratory equipment.

S61 : Avoid release to the environment. Refer to special instructions/safety data sheets.

Special labelling of certain preparations : Contains methyl 1,2,2,6,6 pentamethyl-4-piperidyl sebacate, bis-(1,2,2,6,6-pentamethyl-4-piperidiny)-sebacate. May produce an allergic reaction.

Other hazards : Results of PBT and vPvB assessment.

PBT : Not applicable.

vPvB : Not applicable.

SECTION 3 - Chemical characterization: Mixtures

Description: Mixture of the substances listed below with harmless additions.

Dangerous components		
CAS: 763-69-9 EINECS: 212-112-9	ethyl 3-ethoxypropionate R66	10-25%
CAS: 108-10-1 EINECS: 203-550-1	4-methylpentan-2-one Xn R20; Xi R36/37; F R11 R66 Flam. Liq. 2, H225; Acute Tox. 4, H332; Eye Irrit. 2, STOT SE 3, H335	1-10%
CAS: 123-86-4 EINECS: 204-658-1	n-butyl acetate R10-66-67 Flam. Liq. 3, H226; STOT SE 3, H336	1-10%
CAS: 127519-17-9 ELINCS: 407-000-3	A mixture of branched and linear C7-C9 alkyl 3-[3-(2H-benzotriazol-2-yl)-5-(1,1-dimethyl-ethyl)-4 hydroxyphenyl] propionates N R51/53 Aquatic Chronic 2, H411	1-5%
CAS: 1330-20-7 EINECS: 215-535-7	xylene, mixed isomers, pure Xn R20/21; Xi R38	<2.5%

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	R10 Flam. Liq. 3, H226; Acute Tox. 4, H312; Acute Tox. 4, H332; Skin Irrit. 2, H315	
CAS: 82919-37-7	methyl 1,2,2,6,6 pentamethyl-4-piperidyl sebacate Xi R43; N R50/53 Aquatic Acute 1, H400; Aquatic Chronic 1, H410; Skin Sens. 1, H317	<1%
CAS: 41556-26-7	bis-(1,2,2,6,6-pentamethyl-4-piperidiny)-sebacate	<1%

SECTION 4 - Description of first aid measures

General information.

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.
 Instantly remove any clothing soiled by the product.

- After inhalation : Supply fresh air and call for doctor for safety reasons.
In case of unconsciousness bring patient into stable side position for transport.
- After skin contact : Instantly wash with water and soap and rinse thoroughly.
If skin irritation continues, consult a doctor.
- After eye contact : Rinse opened eye for several minutes under running water. If symptoms persist, consult doctor.
- After swallowing : Do not induce vomiting; instantly call for medical help. Rinse out mouth and then drink plenty of water.
- Information for doctor : No further relevant information available.
- Most important symptoms and effects, both acute and delayed
- Indication of any immediate medical attention and special treatment needed : No further relevant information available.

SECTION 5 - Extinguishing media

- Suitable extinguishing agents : CO2, extinguishing powder or water haze. Fight larger fires with water haze or alcohol-resistant foam.
- For safety reasons unsuitable extinguishing agents : Water with a full water jet.
- Advice for firefighters, : Put on breathing apparatus.

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Protective equipment : Do not inhale explosion gases or combustion gases.
Wear full protective suit.
Additional information : Cool endangered containers with water spray jet.

SECTION 6 - Accidental Release Measures

Personal precautions, protective equipment and emergency procedures : Wear protective equipment. Keep unprotected persons away.
Ensure adequate ventilation
Keep away from ignition sources.
Environmental precautions : Inform respective authorities in case product reaches water or sewage system.
Do not allow to enter drainage system, surface or ground water.
Methods and material for containment and cleaning up : Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Dispose of contaminated material as waste according to item 13. Ensure adequate ventilation.
Reference to other sections
See Section 8 for information on personal protection equipment.

SECTION 7 - Handling

Precautions for safe handling : Ensure good interior ventilation, especially at floor level. (Fumes are heavier than air).
Keep away from heat and direct sunlight. Prevent formation of dust.
Information about protection against explosions and fires : Keep ignition sources away - Do not smoke.
Protect against electrostatic charges.
Conditions for safe storage, including any incompatibilities. Storage. Requirements to be met by storerooms and containers : Store in cool location.
Store only in the original container.
Information about storage in one common storage facility : Do not store together with oxidizing and acidic materials.
Do not store together with alkalis (caustic solutions).
Further information about storage conditions : Store in cool, dry conditions in well sealed containers.
Protect from heat and direct sunlight.
Specific end use(s) : No further relevant information available.

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SECTION 8 - Control parameters

Components with limit values that require monitoring at the workplace:

108-10-1 4-methylpentan-2-one	
WEL	Short-term value: 416 mg/m ³ , 100 ppm Long-term value: 208 mg/m ³ , 50 ppm Sk
123-86-4 n-butyl acetate	
WEL	Short-term value: 966 mg/m ³ , 200 ppm Long-term value: 724 mg/m ³ , 150 ppm
1330-20-7 xylene, mixed isomers, pure	
WEL	Short-term value: 441 mg/m ³ , 100 ppm Long-term value: 220 mg/m ³ , 50 ppm Sk; BMGV

- Additional information : The lists that were valid during the compilation were used as basis.
- Exposure controls. : Wash hands during breaks and at the end of the work.
- Personal protective equipment. General protective and hygienic measures : Do not inhale dust / smoke / mist.
- Breathing equipment : A1P2
In case of brief exposure or low pollution use breathing filter apparatus. In case of intensive or longer exposure use breathing apparatus that is independent of circulating air.
- Protection of hands. : The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation.
- Material of gloves : Any chemical protection glove certified according to EN 374 is suitable.
Nitrile rubber, NBR
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
- Penetration time of glove : The exact break through time has to be found out by

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material : the manufacturer of the protective gloves and has to be observed.
Eye protection: : Tightly sealed safety glasses.
Safety glasses :
Body protection : Protective work clothing.

SECTION 9 - Information on basic physical and chemical properties

General Information

Appearance Form : Fluid
Colour : Colourless
Odour : Characteristic

Change in condition

Melting point/Melting range : Not determined
Boiling point/Boiling range : 124-200°C
Flash point : 23°C
Ignition temperature : 200°C
Self-inflammability : Product is not selfigniting

Critical values for explosion

Lower : 35 g/m3
Vapour pressure at 20°C : 5 hPa
Density at 20°C : 1.023 g/cm³
Solubility in / Miscibility with Water : Not miscible or difficult to mix

Viscosity

dynamic at 20°C : >060/6 s (ISO 2431)

Solvent content

Organic solvents : 389g/l VOC
Other information : No further relevant information available.

SECTION 10 - Reactivity

Chemical stability, Thermal decomposition / conditions to be avoided : No decomposition if used according to specifications.
Possibility of hazardous : No dangerous reactions known

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reactions

Conditions to avoid : No further relevant information available.

Incompatible materials : Acid
Alkali (lyes)
Oxidants

Hazardous decomposition : Formation of toxic gases is possible during heating products or in case of fire.
Carbon monoxide and carbon dioxide Nitrogen oxides (Nox)

SECTION 11 - Information on toxicological effects

11.1 Acute toxicity

LD/LC50 values that are relevant for classification:

Name of product / ingredients	Risultes	Animal	Dose	Time
108-10-1 4-methylpentan-2-one	- Oral LD50 - Dermal LD50 - Inhalative LC50	rat rabbit rat	2100 mg/kg 16000 mg/kg 8.3-16.6 mg/l	- - 4 h
123-86-4 n-butyl acetate	- Oral LD50 - Inhalative LC50	rat rat	14000 mg/kg >21.0 mg/l	- 4 h
1330-20-7 xylene, mixed isomers, pure	- Oral LD50 - Dermal LD50 - Inhalative LC50	rat rabbit rat	8700 mg/kg 2000 mg/kg 6350 mg/l	- - 4 h

11.2 Primary irritant effect

on the skin : Irritant to skin and mucous membranes.

on the eye : Irritant effect.

Sensitization : No sensitizing effect known.

Additional toxicological information : The product shows the following dangers according to the calculation method of the General EC Classification Guidelines for

Preparations as issued in the latest version:
Toxicity

SECTION 12 - Aquatic toxicity

Name of product / ingredients	Risultes	Animal	Dose	Time
1330-20-7 xylene, mixed	- CE50 - EC50	fish daphnia magna	10 mg/l 7.4 mg/l	72h 48h

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isomers, pure	- LC50	fish	3.77-13.5mg/l	96h
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Persistence and degradability : No further relevant information available.

Behaviour in environmental systems

Bioaccumulative potential : No further relevant information available.

Mobility in soil : No further relevant information available.

Additional ecological information : General notes.
Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water.
Do not allow product to reach ground water, water bodies or sewage system.
Danger to drinking water if even small quantities leak into soil.

Results of PBT and vPvB assessment

PBT : Not applicable.
vPvB : Not applicable.
Other adverse effects : No further relevant information available.

SECTION 13 - Waste treatment methods

Recommendation Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

European waste catalogue : 08 01 11* waste paint and varnish containing organic solvents or other dangerous substances

Uncleaned packagings : Recommendation. Disposal must be made according to official regulations.

SECTION 14 - Transport hazard class(es)

UN-Number : UN1263
ADR, IMDG, IATA
UN proper shipping name : 1263 PAINT, special provision 640E
ADR
IMDG, IATA : PAINT
Dangerous class : ADR
Label IMDG, IATA : 3
Class : 3 Flammable liquids.
Label : 3
Packing group ADR, IMDG, IATA : III

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Environmental hazards

Marine pollutant : no

Special precautions for user

Warning : Flammable liquids.

Kemler Number : 30

EMS Number : F-E,S-E

Transport in bulk : Not applicable.

according to Annex II of
MARPOL73/78 and the IBC
Code

Transport/Additional : ADR
information

Tunnel restriction code : D/E

UN "Model Regulation" : UN1263, PAINT, special provision 640E, 3, III

SECTION 15 - Safety, health and environmental regulations/legislation specific for the substance or mixture

National regulations

Technical instructions (air):

Class	Share in %
I	0.3
NK	37.0

Water hazard class : Water hazard class 2 (Self-assessment): hazardous for water.

Chemical safety assessment : A Chemical Safety Assessment has not been carried out.

Relevant phrases:

H225 Highly flammable liquid and vapour.
H226 Flammable liquid and vapour.
H312 Harmful in contact with skin.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.
H332 Harmful if inhaled.
H335 May cause respiratory irritation.
H336 May cause drowsiness or dizziness.
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.
R10 Flammable.

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R11 Highly flammable.
R20 Harmful by inhalation.
R20/21 Harmful by inhalation and in contact with skin.
R36/37 Irritating to eyes and respiratory system.
R38 Irritating to skin.
R43 May cause sensitisation by skin contact.
R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R66 Repeated exposure may cause skin dryness or cracking.
R67 Vapours may cause drowsiness and dizziness.

Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
ICAO: International Civil Aviation Organization
GHS: Globally Harmonized System of Classification and Labelling of Chemicals
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent

The data contained in this safety data sheet are based on our current knowledge and experience and describe the product only with regard to safety requirements. The data do not describe the product's properties (product specification). Neither should any agreed property nor the suitability of the product for any specific purpose be deduced from the data contained in the safety data sheet. It is the responsibility of the recipient of the product to ensure any proprietary rights and existing laws and legislation are observed.