SAFETY DATA SHEET

Valve Regulated Lead Acid Battery

Page:	0
Revision nr:	1
Date:	10/12/2014
Supersedes:	

Part Numbers:

B61R-18-520C					
B6AC-18-520					

IMPORTANT: Read this SDS before handling and disposing of this product and pass this information on to employees, customers, and users of this product.

First aid service (24 h level 1 emergency) telephone number +32 (0) 3 575 11 30
For medical advise contact your doctor or nearest hospital.

Info on SDS: www.mazdasds.eu - Inquiry on SDS: SDSqueries@mazdaeur.com

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

1.1. Product identifier

Trade name/designation : Valve Regulated Lead Acid Battery

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

Specific use(s) : Starter battery

1.3. Details of the supplier of the safety data sheet

Company : Mazda Motor Logistics Europe N.V.
Blaasveldstraat 162
2830 Willebroek , BELGIUM
Telephone (+32) 3-860 14 14
Telefax: (+32) 3-860 12 08
E-mail: sdsqueries@mazdaeur.com

1.4. Emergency telephone number

Emergency telephone : +32 3 575 11 30 (This telephone number is available 24 hours per day, 7 days per week.)

IRELAND (REPUBLIC OF)
National Poisons Information Centre
Beaumont Hospital +353 18 37 99 64/+353 1 809 21 66

UNITED KINGDOM
National Poisons Information Service
(Newcastle Centre) 0844 892 0111 (UK only, Monday to Friday, 08.00 to 18.00 hours)
Regional Drugs and Therapeutics Centre,
Wolfson Unit

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

2.1.1. Classification according to Regulation (EU) 1272/2008

CLP-Classification : Article :
Not applicable

Not classified

2.1.2. Classification according to EU Directives 67/548/EEC or 1999/45/EC

Classification : Article :
Not applicable

Not classified

2.2. Label elements

2.2.1. Labelling according to Regulation (EU) 1272/2008

Not applicable.

2.2.2. Labelling according to Directives (67/548 - 1999/45)

Not relevant

2.3. Other hazards

Other hazards : This article doesn't contain dangerous substances or preparations intended to be released under normal or reasonably foreseeable conditions of use.
PBT/vPvB data :
Article :
Not applicable .

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Substance name	Product identifier	%	Classification according to Directive 67/548/EEC
Lead substance listed as REACH Candidate	(CAS No.) 7439-92-1 (EC No) 231-100-4 (EC Index) 082-001-00-6	40 - 60	Repr.Cat.1; R61 Repr.Cat.3; R62 Xn; R20/22 N; R50/53 R33
Sulphuric acid	(CAS No.) 7664-93-9 (EC No) 231-639-5 (EC Index) 016-020-00-8	25 - 45	C; R35
Lead dioxide substance listed as REACH Candidate	(CAS No.) 1309-60-0 (EC No) 215-174-5 (EC Index) 082-001-00-6	15 - 40	Repr.Cat.1; R61 Repr.Cat.3; R62 Xn; R20/22 N; R50/53 R33

Substance name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Lead substance listed as REACH Candidate	(CAS No.) 7439-92-1 (EC No) 231-100-4 (EC Index) 082-001-00-6	40 - 60	Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Inhalation), H332 Repr. 1A, H360 STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
Sulphuric acid	(CAS No.) 7664-93-9 (EC No) 231-639-5 (EC Index) 016-020-00-8	25 - 45	Skin Corr. 1A, H314
Lead dioxide substance listed as REACH Candidate	(CAS No.) 1309-60-0 (EC No) 215-174-5 (EC Index) 082-001-00-6	15 - 40	Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Inhalation:dust,mist), H332 Repr. 1A, H360Df STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410

Full text of R- and H-phrases: see section 16

Identification of the substance or mixture : Lead, lead compounds and sulfuric acid in a hard case.

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation : Keep at rest.
Provide fresh air.
If breathing is irregular or stopped, administer artificial respiration.
Get medical advice/attention.

Skin contact : Take off immediately all contaminated clothing.
Wash with plenty of water/.
Get medical advice/attention.

Eye contact : Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.
Call a physician immediately.

In case of ingestion : Rinse mouth thoroughly with water.
Rinse mouth immediately and drink plenty of water.
Get immediate medical advice/attention.
Do NOT induce vomiting.

Additional advice : First aider: Pay attention to self-protection!
See also section 8 .
Never give anything by mouth to an unconscious person or a person with cramps.
Show this safety data sheet to the doctor in attendance.
Treat symptomatically.
When in doubt or if symptoms are observed, get medical advice.

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

Inhalation : Health injuries are not known or expected under normal use. Inhalation of vapours is irritating to the respiratory system, may cause throat pain and cough.

Skin contact : Health injuries are not known or expected under normal use. Content : Causes severe burns. The following symptoms may occur: Blistering, erythema (redness) .

Eye contact : Health injuries are not known or expected under normal use. Content : Causes severe burns.

Ingestion : Health injuries are not known or expected under normal use. Lead : The product causes cramps. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea.

Other adverse effects : Pb- Toxicity : Most important symptoms : Headache . Abdominal pain . Fatigue . Weakness . Irritability . Nausea . Loss of appetite .

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

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

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Carbon dioxide, Dry extinguishing powder, Foam .

Extinguishing media which must not be used for safety reasons : Water .

5.2. Special hazards arising from the substance or mixture

Fire hazard : Container may explode if heated.

Specific hazards : An explosive mixture of hydrogen and oxygen is given off during charging.
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
Heating can release vapours which can be ignited.
Risk of explosion.
Heating or fire can release toxic gas.
/ fumes (Pb).
Do not allow run-off from fire-fighting to enter drains or water courses.
Dispose according to legislation.

5.3. Advice for firefighters

Advice for firefighters : Special protective equipment for firefighters. .
Use water spray jet to protect personnel and to cool endangered containers.
In case of fire: Wear self-contained breathing apparatus.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel : Evacuate area.
Use personal protective equipment as required.
Personal protection equipment: see section 8
Avoid contact with skin, eyes and clothes.
Do not breathe vapour/spray.
Keep away from sources of ignition. - No smoking.

For emergency responders : Ensure procedures and training for emergency decontamination and disposal are in place.
Personal protection equipment: see section 8 .

6.2. Environmental precautions

Environmental precautions : Do not allow to enter into surface water or drains.
Do not allow run-off from fire-fighting to enter drains or water courses.
Dispose according to legislation.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Stop leak if safe to do so.
Neutralize with lime milk or soda and flush with plenty of water.
Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents).
Sweep up or vacuum up spillage and collect in suitable container for disposal.

6.4. Reference to other sections

Personal protection equipment: see section 8 .
Disposal: see section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Handling : Provide adequate ventilation.
Restricted to professional users.
Disconnect the battery before working on or near any disposed part of the vehicle electrical system.
An explosive mixture of hydrogen and oxygen is given off during charging.
Keep away from heat, hot surfaces, sparks, open flames and other

ignition sources. No smoking.
Avoid shock and friction.
Do not allow to enter into surface water or drains.

Advices on general occupational hygiene : Keep good industrial hygiene.
Wash hands and face before breaks and immediately after handling of the product.
When using do not eat, drink or smoke.
Keep work clothes separately.
Take off contaminated clothing.

7.2. Conditions for safe storage, including any incompatibilities

Storage : Store in upright position only.
Keep in a dry, cool and well-ventilated place.
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
Do not store near or with any of the incompatible materials listed in section 10.
VCI Storage class (LGK): 8B.

7.3 Specific end use(s)

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limit values :

Sulphuric acid (7664-93-9)		
EU	IOELV TWA (mg/m³)	0,05 mg/m³ (When selecting an appropriate exposure monitoring method, account should be taken of potential limitations and interferences that may arise in the presence of other sulphur compounds.)
Austria	MAK (mg/m³)	0,1 mg/m³ (corresponds to 0.05 mg/m3 Thoracic-inhalable fraction)
Austria	MAK Short time value (mg/m³)	0,2 mg/m³ (inhalable fraction)
Belgium	Limit value (mg/m³)	0,2 mg/m³
Bulgaria	OEL TWA (mg/m³)	0,05 mg/m³ (When choosing a suitable method for monitoring exposure should take into account potential constraints and interactions that may occur in the presence of other sulfur compounds-respirable fraction)
Croatia	GVI (granična vrijednost izloženosti) (mg/m³)	0,05 mg/m³
Cyprus	OEL TWA (mg/m³)	0,05 mg/m³ (vapor)
France	VLE (mg/m³)	3 mg/m³
France	VME (mg/m³)	0,05 mg/m³
Germany	TRGS 900 Occupational exposure limit value (mg/m³)	0,1 mg/m³ (The risk of damage to the embryo or fetus can be excluded when AGW and BGW values are observed-inhalable fraction)

Gibraltar	OEL TWA (mg/m³)	0,05 mg/m³ (when selecting an appropriate exposure monitoring method, account should be taken of potential limitations and interferences that may arise in the presence of other sulphur compounds-thoracic fraction)
Greece	OEL TWA (mg/m³)	0,05 mg/m³ (mist)
Italy - Portugal - USA ACGIH	ACGIH TWA (mg/m³)	0,2 mg/m³ (thoracic fraction)
Italy	OEL TWA (mg/m³)	0,05 mg/m³ (When choosing a suitable method for monitoring exposure should take into account potential constraints and interactions that may occur in the presence of other sulfur compounds, respirable fraction-thoracic fraction, mist)
Latvia	OEL TWA (mg/m³)	0,05 mg/m³ (choosing an appropriate exposure monitoring method, there should be taken into account the possible limitations and the impact that may result from the presence of other sulfur components-fog, which is defined as the thoracic fraction)
Spain	VLA-ED (mg/m³)	0,05 mg/m³ (indicative limit value; it is prohibited the partial or complete commercialization or use of this substance as a phytosanitary or biocide compound; limitations and interferences can arise from other Sulfur compounds-mist)
Switzerland	VLE (mg/m³)	0,1 mg/m³ (inhalable)
Switzerland	VME (mg/m³)	0,1 mg/m³ (inhalable)
Netherlands	Grenswaarde TGG 8H (mg/m³)	0,05 mg/m³ (defined as thoracic fraction-mist)
United Kingdom	WEL TWA (mg/m³)	0,05 mg/m³ (mist)
Czech Republic	Expoziční limity (PEL) (mg/m³)	1 mg/m³ 0,05 mg/m³ (concentrated-mist)
Denmark	Grænseværdie (langvarig) (mg/m³)	0,05 mg/m³ (thoracic fraction-mist)
Finland	HTP-arvo (8h) (mg/m³)	0,05 mg/m³
Finland	HTP-arvo (15 min)	0,1 mg/m³
Hungary	AK-érték	0,05 mg/m³
Ireland	OEL (8 hours ref) (ppm)	0,05 ppm
Ireland	OEL (15 min ref) (ppm)	0,15 ppm (calculated)
Lithuania	IPRV (mg/m³)	0,05 mg/m³ (vapor)
Lithuania	TPRV (mg/m³)	3 mg/m³ (vapor)
Malta	OEL TWA (mg/m³)	0,05 mg/m³ (mist)
Norway	Gjennomsnittsverdier (AN) (mg/m³)	0,1 mg/m³ (inhalable fraction)
Norway	Gjennomsnittsverdier (Korttidsverdi) (mg/m3)	0,3 mg/m³ (inhalable fraction)
Poland	NDS (mg/m³)	1 mg/m³ (mist) 0,05 mg/m³ (inhalable fraction)
Poland	NDSCh (mg/m³)	3 mg/m³ (mist)
Romania	OEL TWA (mg/m³)	0,05 mg/m³
Slovakia	NPHV (priemerná) (mg/m³)	0,1 mg/m³

Sweden	nivågränsvärde (NVG) (mg/m³)	0,1 mg/m³
Sweden	kortidsvärde (KTV) (mg/m³)	0,2 mg/m³
Lead (7439-92-1)		
Austria	MAK (mg/m³)	0,1 mg/m³ (inhalable fraction)
Austria	MAK Short time value (mg/m³)	0,4 mg/m³ (inhalable fraction)
Bulgaria	OEL TWA (mg/m³)	0,05 mg/m³
Croatia	GVI (granična vrijednost izloženosti) (mg/m³)	0,15 mg/m³
Cyprus	OEL TWA (mg/m³)	0,15 mg/m³
France	VME (mg/m³)	0,1 mg/m³ (restrictive limit)
Germany	TRGS 903 (BGW)	300 µg/l (Medium: whole blood - Time: no restriction - Parameter: Lead (women age below 45 years) 400 µg/l (Medium: whole blood - Time: no restriction - Parameter: Lead (women 45 years and older)
Gibraltar	OEL TWA (mg/m³)	0,15 mg/m³
Greece	OEL TWA (mg/m³)	0,15 mg/m³
Italy - Portugal - USA ACGIH	ACGIH TWA (mg/m³)	0,05 mg/m³
Italy	OEL TWA (mg/m³)	0,075 mg/m³
Latvia	OEL TWA (mg/m³)	0,005 mg/m³
Spain	VLA-ED (mg/m³)	0,15 mg/m³
Switzerland	VLE (mg/m³)	0,8 mg/m³ (inhalable)
Switzerland	VME (mg/m³)	0,1 mg/m³ (inhalable)
United Kingdom	WEL TWA (mg/m³)	0,15 mg/m³
United Kingdom	WEL STEL (mg/m³)	0,45 mg/m³ (calculated)
Czech Republic	Expoziční limity (PEL) (mg/m³)	0,05 mg/m³
Denmark	Grænseværdie (langvarig) (mg/m³)	0,05 mg/m³ (dust, fume and powder)
Finland	HTP-arvo (8h) (mg/m³)	0,1 mg/m³ (all works)
Hungary	AK-érték	0,15 mg/m³
Ireland	OEL (8 hours ref) (mg/m³)	0,15 mg/m³
Ireland	OEL (15 min ref) (mg/m3)	0,45 mg/m³ (calculated)
Lithuania	IPRV (mg/m³)	0,15 mg/m³ (inhalable fraction) 0,07 mg/m³ (respirable fraction)
Lithuania	TPRV (mg/m³)	0,2 mg/m³
Norway	Gjennomsnittsverdier (AN) (mg/m³)	0,05 mg/m³ (dust and fume)
Norway	Gjennomsnittsverdier (Korttidsverdi) (mg/m3)	0,15 mg/m³ (dust and fume)
Poland	NDS (mg/m³)	0,05 mg/m³
Romania	OEL TWA (mg/m³)	0,05 mg/m³
Romania	OEL STEL (mg/m³)	0,10 mg/m³
Slovakia	NPHV (priemerná) (mg/m³)	0,15 mg/m³
Sweden	nivågränsvärde (NVG) (mg/m³)	0,1 mg/m³ (total inhalable dust) 0,05 mg/m³ (total respirable dust)

Recommended monitoring procedures : Concentration measurement in air
Personal air monitoring

8.2. Exposure controls

Personal protection equipment	:	The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.
Respiratory protection	:	In case of insufficient ventilation, wear suitable respiratory equipment. Full face mask (EN 136) (EN136). Half-face mask (DIN EN 140) (EN140). Filter type: B. (EN141)
Hand protection	:	Acid-resistant protective gloves.,Protective gloves complying with EN 374.,Neoprene gloves,,Long-term exposure : >8h /,Thickness of the glove material: : >0,3mm.,The selection of specific gloves for a specific application and time of use in a working area, should also take into account other factors on the working space, such as (but not limited to): other chemicals that are possibly used, physical requirements (protection against cutting/drilling, skill, thermal protection), and the instructions/specification of the supplier of gloves.,Butyl caoutchouc (butyl rubber),NR (natural rubber, natural latex),
Eye protection	:	Wear eye glasses with side protection according to EN 166. Tightly fitting safety goggles . Face protection shield .
Body protection	:	Wear chemical resistant apron. / acid-resistant protective clothing & Boots
Engineering control measures	:	Provide adequate ventilation. A washing facility/water for eye and skin cleaning purposes should be present. Eye wash bottle with pure water . Take precautionary measures against static discharge. Organisational measures to prevent /limit releases, dispersion and exposure : Reference to other sections: 7.
Environmental exposure controls	:	Do not allow to enter into surface water or drains. Comply with applicable Community environmental protection legislation.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	:	Article,(Box +,liquid),Pb : silvery,solid
Colour	:	transparent, (Electrolyte)
Odour	:	No data available
Odour threshold	:	No data available
Odour threshold	:	No data available
pH	:	No data available
Melting point/freezing point	:	≤ -40 °C Electrolyte 327 °C Lead
Freezing point	:	-56,4 °C
Initial boiling point and boiling range	:	≈ 112 °C Electrolyte 1740 °C Lead
Flash point	:	Not applicable
Evaporation rate	:	Not applicable
Upper/lower flammability or explosive limits	:	Not applicable

Vapour pressure	:	3,17 kPa Electrolyte ≤ 0,1 Pa Lead
Vapour density	:	Not applicable
Relative density	:	@ 20°C 1,28 - 1,32 Electrolyte (Pb : 11,3)
Water solubility	:	100 % sulphuric acid ... %
Solubility in different media	:	No data available
Partition coefficient n-octanol/water	:	No data available
Auto-ignition temperature	:	No data available
Decomposition temperature	:	No data available
Viscosity	:	No data available
Explosive properties	:	Not applicable The study does not need to be conducted because there are no chemical groups associated with explosive properties present in the molecule.
Oxidising properties	:	Not applicable The classification procedure needs not to be applied because there are no chemical groups present in the molecule which are associated with oxidising properties.

9.2. Other information

Volatile organic compounds (VOC) content in percent by weight : Not applicable

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity : Reference to other sections: 10.5

10.2. Chemical stability

Stability : The product is stable under storage at normal ambient temperatures.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions : None under normal processing.
Hazardous polymerisation does not occur.

10.4. Conditions to avoid

Conditions to avoid : Avoid shock and friction.
Keep away from sources of heat (e.g. hot surfaces), sparks and open flames.
Reference to other sections: 7:
Handling and storage .

10.5. Incompatible materials

Incompatible materials : Contact with combustible material may cause fire., Strong oxidizing agents /, Reducing agent ., Strong bases ., Strong acids ., Organic materials ., Water ., H2SO4: Gives off hydrogen by reaction with metals. (+SO2), See also section 7 :, Handling and storage .

10.6. Hazardous decomposition products

Hazardous decomposition products : Burning produces noxious and toxic fumes. Carbon monoxide, metal oxides, Arsenic trihydride (arsine) ! Corrosive vapours : SO3, SO2, H2SO4, ... An explosive mixture of hydrogen and oxygen is given off during charging.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified (Article: Not applicable)

Sulphuric acid (7664-93-9)	
LD50/oral/rat	2140 mg/kg
LC50/inhalation/4h/rat	510 mg/m³ (2 h)
Lead (7439-92-1)	
ATE CLP (oral)	500 mg/kg bodyweight
ATE CLP (gases)	4500,000 ppmv/4h
ATE CLP (vapours)	11 mg/l/4h
ATE CLP (dust,mist)	1,5 mg/l/4h

Skin corrosion/irritation : Not classified (Article: Not applicable)
pH: No data available

Serious eye damage/eye irritation : Not classified (Article: Not applicable)
pH: No data available

Respiratory or skin sensitisation : Not classified (Article: Not applicable)

Germ cell mutagenicity : Not classified (Article: Not applicable)

Carcinogenicity : Not classified (Article: Not applicable)

Reproductive toxicity : Not classified (Article: Not applicable)

STOT-single exposure : Not classified (Article: Not applicable)

STOT-repeated exposure : Not classified (Article: Not applicable)

Aspiration hazard : Not classified (Article: Not applicable)

Other information

Symptoms related to the physical, chemical and toxicological characteristics,Reference to other sections: 4.2

SECTION 12: Ecological information

12.1. Toxicity

Toxicity : Ecological injuries are not known or expected under normal use.
Substances are only released upon destruction of the system.
Do not allow contact with soil, surface or ground water.

Sulphuric acid (7664-93-9)	
LC50 fish 1	> 42 mg/l (96 h - Gambusia affinis)
EC50 Daphnia 1	> 100 mg/l (48 h - Daphnia magna)

Lead (7439-92-1)	
LC50 fish 1	0,44 mg/l (Exposure time: 96 h - Species: Cyprinus carpio [semi-static])
EC50 Daphnia 1	600 µg/l (Exposure time: 48 h - Species: water flea)
LC50 fish 2	1,17 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [flow-through])

12.2. Persistence and degradability

Persistence and degradability : Lead
Not biodegradable

12.3. Bioaccumulative potential

Bioaccumulation : Lead
Bioaccumulative potential

Partition coefficient n-octanol/water : No data available

12.4. Mobility in soil

Mobility : No information available.

12.5. Results of PBT and vPvB assessment

PBT/vPvB data : No information available.

12.6. Other adverse effects

Other information : No information available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product waste: : Handle with care.
Safe handling: see section 7 :
Handling and storage .
Refer to manufacturer/supplier for information on recovery/recycling
Dispose according to legislation.

Contaminated packaging : Dispose according to legislation.

List of proposed waste codes/waste designations in accordance with EWC : Classified as hazardous waste according to European Union regulations.
The following Waste Codes are only suggestions:
160601 - lead batteries .
Waste codes should be assigned by the user, preferably in discussion with the waste disposal authorities.

SECTION 14: Transport information

14.1. UN number

UN number : 2800

14.2. UN proper shipping name

Proper Shipping Name : BATTERIES, WET, NON-SPILLABLE
Proper shipping name IATA/IMDG : BATTERIES, WET, NON-SPILLABLE

14.3. Transport hazard class(es)

14.3.1. Overland transport

Class(es) : 8 - Corrosive substances
Hazard identification number (Kemler No.) : 80

Classification code : C11
ADR/RID-Labels : 8 - Corrosive substances

14.3.2. Inland waterway transport (ADN)

Class (UN) : 8

14.3.3. Transport by sea

Class or Division : 8 - Corrosive substances

14.3.4. Air transport

Class or Division : 8 - Corrosive substances

14.4. Packing groupNo data available

14.5. Environmental hazards

Other information : No supplementary information available.

14.6 Special precautions for user

Special precautions for user : No data available.

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Code: IBC : Not applicable.

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

This product contains an ingredient according to the candidate list of Annex XIV of the REACH Regulation 1907/2006/EC. : Lead compound

Authorisations : Not applicable

Volatile organic compounds (VOC) content in percent by weight : Not applicable

15.1.2. National regulations

DE : WGK : 1
DE : German storage class (LGK) : LGK 8B - Non-combustible corrosive substances
DE : Technische Regeln für Gefahrstoffe (TRGS) : applicable
NO : Produktforskriften (FOR 2004-06-01 nr 922) : Electrical batteries and accumulators

15.2. Chemical safety assessment

Chemical Safety Assessment : Not required

SECTION 16: Other information

Full text of R-, H- and EUH-phrases:

Acute Tox. 4 (Inhalation)	:	Acute toxicity (inhal.), Category 4
Acute Tox. 4 (Inhalation:dust,mist)	:	Acute toxicity Category 4
Acute Tox. 4 (Oral)	:	Acute toxicity Category 4
Aquatic Acute 1	:	Hazardous to the aquatic environment - Aquatic Acute 1
Aquatic Chronic 1	:	Hazardous to the aquatic environment - chronic hazard category 1
Repr. 1A	:	Reproductive toxicity, Category 1A
Repr. 1A	:	Reproductive toxicity, Category 1A
Skin Corr. 1A	:	Skin corrosion/irritation, Category 1A
STOT RE 2	:	Specific target organ toxicity — Repeated exposure, Category 2
H302	:	Harmful if swallowed.
H314	:	Causes severe skin burns and eye damage.
H332	:	Harmful if inhaled.
H360	:	May damage fertility or the unborn child.
H360Df	:	May damage the unborn child. Suspected of damaging fertility.
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.
R20/22	:	Harmful by inhalation and if swallowed.
R33	:	Danger of cumulative effects.
R35	:	Causes severe burns.
R50/53	:	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R61	:	May cause harm to the unborn child.
R62	:	Possible risk of impaired fertility.
C	:	Corrosive
N	:	Dangerous for the environment
Xn	:	Harmful

Key literature references and sources for data : European Chemicals Bureau
http://esis.jrc.ec.europa.eu/
MSDS from Panasonic Storage Battery Co Ltd, Revision date 02/10/2006

Abbreviations and acronyms : ADN = Accord Européen relatif au Transport International des Marchandises Dangereuses par voie de Navigation du Rhin
ADR = Accord européen relatif au transport international des marchandises Dangereuses par Route
CLP = Classification, Labelling and Packaging Regulation according to 1272/2008/EC
IATA = International Air Transport Association
IMDG = International Maritime Dangerous Goods Code
LEL = Lower Explosive Limit/Lower Explosion Limit
UEL = Upper Explosion Limit/Upper Explosive Limit
REACH = Registration, Evaluation, Authorisation and Restriction of Chemicals
EC50 = Median Effective Concentration
LC50 = Median lethal concentration
LD50 = Median lethal dose
TLV = Threshold limits
TWA = time weighted average
STEL = Short term exposure limit
persistent, bioaccumulating and toxic (PBT).
vPvB = very persistent and very bioaccumulating
WGK = Wassergefährdungsklasse (Water Hazard Class under German Federal Water Management Act)

The contents and format of this SDS are in accordance with EEC Commission Directive 1999/45/EC, 67/548/EC, 1272/2008/EC and EEC Commission Regulation 1907/2006/EC (REACH) Annex II.

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